

CITY OF WILDOMAR PLANNING COMMISSION

SPECIAL MEETING OF AUGUST 19, 2015

BEGINNING AT 6:30 P.M.

City Council Chambers
23873 Clinton Keith Road, Suite #111



Veronica Langworthy, Chairman
Bobby L. Swann III, Vice-Chairman
Dan Bidwell, Planning Commissioner
Gary Brown, Planning Commissioner
Stan Smith, Planning Commissioner

Matthew C. Bassi
Planning Director

Erica L. Vega
Assistant City Attorney

CITY OF WILDOMAR PLANNING COMMISSION MEETING AGENDA AUGUST 19, 2015

ORDER OF BUSINESS:

The August 19, 2015 special meeting of the Planning Commission begins at 6:30 p.m.

REPORTS:

The Planning Commission agenda packet/reports are available for review at Wildomar City Hall, Planning Department located at 23873 Clinton Keith Road, Suite #201 and on the City's website, <http://www.cityofwildomar.org/planning-commission-minutes.asp>. Any writings or documents provided to a majority of the Planning Commission regarding any item on this agenda (other than writings legally exempt from public disclosure) will be made available for public inspection at City Hall during regular business hours.

PUBLIC COMMENTS:

Prior to the business portion of the agenda, the Planning Commission will receive public comments regarding any items or matters within the jurisdiction of the governing body. The Chairman will separately call for testimony at the time of each public hearing. If you wish to speak, please complete a "Public Comment Card" available at the Chamber door. The completed form is to be submitted to the Planning Commission Clerk prior to an individual being heard. Lengthy testimony should be presented to the Commission in writing (15 copies) and only pertinent points presented orally. The time limit established for public comments is three minutes per speaker.

CONSENT CALENDAR:

Consent Calendar items will be acted on by one roll call vote unless Council members, staff, or the public request the item be discussed and/or removed from the Consent Calendar for separate action.

PLEASE TURN ALL DEVICES TO VIBRATE/MUTE/OFF FOR THE DURATION OF THE MEETING. YOUR COOPERATION IS APPRECIATED.

CALL TO ORDER – SPECIAL MEETING - 6:30 P.M.

ROLL CALL

FLAG SALUTE

PUBLIC COMMENTS

This is the time when the Planning Commission receives general public comments regarding any items or matters within the jurisdiction of the Planning Commission that do not appear on the agenda. Each speaker is asked to fill out a “Public Comments Card” available at the Chamber door and submit the card to the Planning Commission Secretary. Lengthy testimony should be presented to the Commission in writing (15 copies) and only pertinent points presented orally. The time limit established for public comments is three (3) minutes per speaker. Prior to taking action on any open session agenda item, the public will be permitted to comment at the time it is considered by the Planning Commission.

APPROVAL OF THE AGENDA AS PRESENTED

The Planning Commission to approve the agenda as it is herein presented, or, if it the desire of the Planning Commission, the agenda can be reordered at this time.

1.0 CONSENT CALENDAR

All matters listed under the Consent Calendar are considered routine and will be enacted by one roll call vote. There will be no separate discussion of these items unless members of the Commission, the Public, or Staff request that specific items are removed from the Consent Calendar for separate discussion and/or action.

1.1 Minutes – July 15, 2015 – Special Planning Commission Meeting

Recommendation – Staff Recommends that the Planning Commission approve the July 15, 2015 Minutes as submitted.

2.0 PUBLIC HEARINGS

2.1 Discount Tire Conditional Use Permit (PA No. 15-0023):

Planning Commission review and consideration of a Categorical Exemption and approval of a Conditional Use Permit (CUP) to establish "Discount Tire Center" within an existing commercial building located within the Oak Creek Center Phase II development located at 23885 Clinton Keith Road, Suite #H5.

RECOMMENDATION:

The Planning Department recommends the Planning Commission take the following action:

1. Adopt a Resolution entitled:

PC RESOLUTION NO. 2015-13

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF WILDOMAR, CALIFORNIA, ADOPTING A CATEGORICAL EXEMPTION IN ACCORDANCE WITH SECTION 15301 (CLASS 1 - EXISTING FACILITIES) OF THE CEQA GUIDELINES, AND APPROVING A CONDITIONAL USE PERMIT (PLANNING APPLICATION NO. 15-0023), SUBJECT TO CONDITIONS, TO ESTABLISH "DISCOUNT TIRE CENTER" WITHIN AN EXISTING COMMERCIAL BUILDING LOCATED WITHIN THE OAK CREEK CENTER DEVELOPMENT LOCATED AT 23885 CLINTON KEITH ROAD, SUITE #H5 (APN: 380-240-046 & 380-240-017)

2.2 Elm Street Residential Project (Planning Application No. 08-0154):

Planning Commission review and recommendation to the City Council for the adoption of a Mitigation Negative Declaration and Mitigation Monitoring & Reporting Program, approval of a Change of Zone and approval of a Tentative Tract Map (TTM No. 33840) for a 4.16 acre site located at the terminus of Elm Street between Gruwell Street and Central Street (APN: 376-043-027).

RECOMMENDATION:

The Planning Department recommends the Planning Commission take the following action:

1. Adopt a Resolution entitled:

PC RESOLUTION NO. 2015-15

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF WILDOMAR, CALIFORNIA, RECOMMENDING CITY COUNCIL ADOPTION OF A MITIGATED NEGATIVE DECLARATION AND MITIGATION MONITORING & REPORTING PROGRAM IN ACCORDANCE WITH SECTION 15074 OF THE CEQA GUIDELINES FOR CHANGE OF ZONE NO. 08-0154 AND TENTATIVE TRACT MAP NO. 33840 (PLANNING APPLICATION NO. 08-0154) FOR A 4.16 ACRE PROJECT SITE LOCATED AT THE TERMINUS OF ELM STREET BETWEEN GRUWELL STREET AND CENTRAL STREET (APN: 376-043-027)

2. Adopt a Resolution entitled:

PC RESOLUTION NO. 2015-16

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF WILDOMAR, CALIFORNIA, RECOMMENDING CITY COUNCIL APPROVAL OF A CHANGE OF ZONE (PLANNING APPLICATION NO. 08-0154) FROM R-R (RURAL RESIDENTIAL) TO R-1 (ONE-FAMILY DWELLING) FOR A 4.16-ACRE SITE LOCATED AT THE TERMINUS OF ELM STREET BETWEEN GRUWELL STREET AND CENTRAL STREET (APN: 376-043-027)

3. Adopt a Resolution entitled:

PC RESOLUTION NO. 2015-17

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF WILDOMAR, CALIFORNIA, RECOMMENDING CITY COUNCIL APPROVAL OF TENTATIVE TRACT MAP NO. 33840 (PLANNING APPLICATION NO. 08-0154) FOR THE SUBDIVISION OF APPROXIMATELY 4.16 ACRES INTO 15 PARCELS, SUBJECT TO CONDITIONS, LOCATED AT THE TERMINUS OF ELM STREET BETWEEN GRUWELL STREET AND CENTRAL STREET (APN: 376-043-027)

3.0 GENERAL BUSINESS

- There are no General Business Items on the agenda.

PLANNING DIRECTOR REPORT

This item is reserved for the Planning Director to report on items not on the agenda. No action by the Planning Commission is needed.

ASSISTANT CITY ATTORNEY REPORT

This item is reserved for the Assistant City Attorney to report on items not on the agenda. No action by the Planning Commission is needed.

PLANNING COMMISSION COMMUNICATIONS

This item is reserved for the Planning Commission to make comments on items not on the agenda, request information and/or provide direction to the Planning Department staff.

FUTURE AGENDA ITEMS

ADJOURNMENT

The Planning Commission special meeting of August 19, 2015 is hereby adjourned.

RIGHT TO APPEAL:

Any decision of the Planning Commission may be appealed to the Planning Commission provided the required appeal application and the \$964 filing fee is submitted to the City Clerk within ten (10) calendar days proceeding the Planning Commission's action on any given project.

REPORTS:

All agenda items and reports are available for review at Wildomar City Hall, 23873 Clinton Keith Road, Suite 201, Wildomar, California 92595. Any writings or documents provided to a majority of the Planning Commission regarding any item on this agenda (other than writings legally exempt from public disclosure) will be made available for public inspection at City Hall during regular business hours. If you wish to be added to the REGULAR mailing list to receive a copy of the agenda, a request must be made through the Planning Department in writing or by email.

ADDITIONS/DELETIONS:

Items of business may be added to the agenda upon a motion adopted by a minimum 2/3 vote finding that there is a need to take immediate action and that the need for action came to the attention of the City subsequent to the agenda being posted. Items may be deleted from the agenda upon request of staff or upon action of the Planning Commission.

ADA COMPLIANCE:

If requested, the agenda and backup materials will be made available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans With Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and the federal rules and regulations adopted in implementation thereof. Any person who requires a disability-related modification or accommodation, including auxiliary aids or services, in order to participate in the public meeting may request such modification, accommodation, aid or service by contacting the Planning Department either in person or by telephone at (951) 667-7751, no later than 10:00 A.M. on the day preceding the scheduled meeting.

POSTING STATEMENT:

On or before August 14, 2015 a true and correct copy of this agenda was posted at three (3) designated places: 1) Wildomar City Hall, 23873 Clinton Keith Road; 2) United States Post Office, 21392 Palomar Street; and 3) Mission Trail Library, 34303 Mission Trail Road.



Matthew C. Bassi
Planning Director

AGENDA ITEM No. 1.1



CITY OF WILDOMAR OFFICIAL PLANNING COMMISSION MEETING MINUTES FOR THE SPECIAL MEETING OF JULY 15, 2015

CALL TO ORDER

The Special meeting of the Wildomar Planning Commission was called to order by Planning Commission Chairman Langworthy at 6:30 P.M. at Wildomar City Hall, Council Chambers.

ROLL CALL

Present: Veronica Langworthy Chairman, Bobby L. Swann III, Vice-Chair, Dan Bidwell, Commissioner, Stan Smith, Commissioner

Staff Present Matthew Bassi, Planning Director
Dan York, Assistant City Manager / Public Works Director
Alfredo Garcia, Assistant Planner
Erica Vega, Assistant City Attorney

Absent: Gary D. Brown, Commissioner.

FLAG SALUTE

Commissioner Smith led the flag salute.

PUBLIC COMMENT:

No public comment provided.

APPROVAL OF AGENDA AS SUBMITTED

Director Bassi asked the Commission to move item 3.1 prior to item 2.1 due to the applicants absence.

Commissioner Smith motioned to approve the agenda as amended by staff. The motion was seconded by Vice-Chairman Swann III, Motioned Carried, 4-0-1. The following vote resulted:

AYES: LANGWORTHY, SWANN III, SMITH, BIDWELL,
NOES: NONE
ABSENT: BROWN
ABSTAIN: NONE

1.0 CONSENT CALENDAR

1.1 Minutes – June 3, 2015 –Planning Commission Meeting

Recommendation – Staff Recommends that the Planning Commission approve the Minutes as submitted by staff.

A Motion was made by Vice-Chairman Swann III, and seconded by Commissioner Smith with the modification.

Motion carried 4-0-1, with the following vote resulting:

AYES: LANGWORTHY, SWANN III, BIDWELL, SMITH
NOES: NONE
ABSENT: BROWN
ABSTAIN: NONE

2.0 PUBLIC HEARINGS

2.1 Arco Freeway Sign Height Variance (Planning Application No. 15-0032):

Planning Commission consideration of the adoption of a Categorical Exemption in accordance with Section 15311 of the California Environmental Quality Act (CEQA) Guidelines, and approval of a Variance to add 16 feet to the existing 45-foot tall Arco Gas Station freeway sign located at 33986 Orange Street (APN: 366-290-010).

Assistant Planner Alfredo Garcia made a presentation to the Planning Commission.

Chairman Langworthy opened the public hearing and asked for public comments.

Eric LeVaughn, applicant representative, made a presentation to the Planning Commission.

Vice Chairman Swann III, asked the applicant questions on the Variance proposal.

Ken Mayes, resident, provided comments on the agenda item.

Joseph Morabito, resident, provided comments on the agenda item.

With no further public comments, Chairman Langworthy closed the public hearing and asked for Commission discussion on the agenda item.

Commission engaged in further discussion.

Staff asked that the Planning Commission consider adding one (1) condition regarding submittal of structural plans.

With no further Commission discussion, Chairman Langworthy asked for a motion to adopt PC Resolution No. 2015-18 with staffs conditions as read, entitled by the Planning Commission:

PC RESOLUTION NO. 2015-18

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF WILDOMAR, CALIFORNIA, ADOPTING A CATEGORICAL EXEMPTION PURSUANT TO SECTION 15311 (CLASS 11 – ON PREMISE SIGNS) OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) GUIDELINES, AND APPROVING A SIGN HEIGHT VARIANCE (PLANNING APPLICATION NO. 15-0032) FROM THE ALLOWABLE 45 FEET TO 61 FEET FOR THE ARCO GAS STATION LOCATED AT 33986 ORANGE STREET (APN: 366-290-010).

A Motion was made by Commissioner Smith and seconded by Vice Chairman Swann III.

Motion carried 4-0-1, with the following vote resulting:

AYES: LANGWORTHY, SMITH, SWANN III, BIDWELL
NOES: NONE
ABSENT: BROWN

ABSTAIN: NONE

GENERAL BUSINESS ITEMS:

3.0 City of Wildomar Local CEQA Guidelines and Procedures Manual:

Planning Commission review and recommendation to the City Council for the adoption of the City of Wildomar Local CEQA Guidelines and Procedures Manual.

Assistant City Attorney Erica Vega made a presentation to the Planning Commission.

Director Bassi provided additional comments to the Planning Commission.

Chairman Langworthy asked for public comment. No public comments were provided.

Commissioner Smith provided comments on the agenda item.

With no further Commission discussion, Chairman Langworthy asked for a motion to adopt PC Resolution No. 2015-19 entitled:

PC RESOLUTION NO. 2015-19

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF WILDOMAR, CALIFORNIA, RECOMMENDING CITY COUNCIL ADOPTION OF A RESOLUTION ESTABLISHING THE CITY OF WILDOMAR "LOCAL CEQA GUIDELINES AND PROCEDURES."

A Motion was made by Commissioners Smith and seconded by Commissioner Bidwell.

Motion carried 4-0-1, with the following vote resulting:

AYES: LANGWORTHY, SMITH, SWANN III, BIDWELL
NOES: NONE
ABSENT: BROWN
ABSTAIN: NONE

Planning Directors Report

Director Bassi informed the Commission that the August 5, 2015 Planning Commission meeting will be cancelled, but we will have a special meeting on August 19, 2015.

Director Bassi. also informed the Commission that the City Council approved the 2015 budget, but not the proposed special projects.

Assistant City Attorney's Report

No comment from Assistant City Attorney Vega.

Planning Commission Communications

Commissioner Smith communicated to staff regarding commercial design guidelines.

Commissioner Smith commented that a workshop should be performed on the area south of Baxter Road between the I-15 freeway and Porras Road.

Chairman Langworthy congratulated the City on its 7th Birthday anniversary.

With no other communications, Chairman Langworthy adjourned the July 15, 2015 Special Planning Commission at 7:20 P.M.

Matthew C. Bassi
Planning Director/Minutes Secretary



CITY OF WILDOMAR – PLANNING COMMISSION
Agenda Item #2.1
PUBLIC HEARING
Meeting Date: August 19, 2015

TO: Chairman and Members of the Planning Commission

FROM: Alfredo Garcia, Assistant Planner

SUBJECT: Discount Tire Conditional Use Permit (P.A. No. 15-0023):
Planning Commission review and consideration of a Categorical Exemption and approval of a Conditional Use Permit (CUP) to establish “Discount Tire Center” within an existing commercial building located within the Oak Creek Center development located at 23885 Clinton Keith Road, Suite #H5 (APN: 380-240-046 & 380-240-017).

STAFF RECOMMENDATION:

The Planning Department recommends the Planning Commission take the following action:

1. Adopt a Resolution entitled:

PC RESOLUTION NO. 2015-13

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF WILDOMAR, CALIFORNIA, ADOPTING A CATEGORICAL EXEMPTION IN ACCORDANCE WITH SECTION 15301 (CLASS 1 - EXISTING FACILITIES) OF THE CEQA GUIDELINES, AND APPROVING A CONDITIONAL USE PERMIT (P.A. NO. 15-0023), SUBJECT TO CONDITIONS, TO ESTABLISH “DISCOUNT TIRE CENTER” WITHIN AN EXISTING COMMERCIAL BUILDING LOCATED WITHIN THE OAK CREEK CENTER DEVELOPMENT LOCATED AT 23885 CLINTON KEITH ROAD, SUITE #H5 (APN: 380-240-046 & 380-240-017).

BACKGROUND:

The Planning Commission reviewed the proposed CUP at its June 3, 2015 meeting. During the public hearing, Mr. Larry Ferguson, owner of the Massage Envy adjacent to the project site, expressed a great deal of concern about noise impacts on his business from the operations of Discount Tire. The Commission raised similar concerns about noise impacts.

Even though the Applicant had already proposed an alternative floor plan and noise attenuation measures/improvements to reduce noise impacts, the Commission believed it was important to have a professional noise study prepared. The noise study would

establish a proper methodology to evaluate “real world” noise impacts from Discount Tires operations and compare those with the City’s noise standards. As a result, the Commission tabled the agenda item and directed the Applicant to prepare a noise study for staff’s review.

Noise Study Analysis:

The Applicant submitted a noise study on July 7, 2015 that was prepared by Urban Crossroads. This professional engineering firm has extensive experience in noise studies and has done similar work for other tire installation businesses (i.e., Mountain View Tires, Eastvale). The study was also forwarded to Mr. Larry Ferguson (Massage Envy) for his review.

The methodology used by the noise consultant is consistent with industry standards and was prepared using the sound level standards (55 dBA) outlined in the City’ Noise Ordinance (Chapter 9.48, WMC). Since the subject lease space is not built out yet, the sound testing was done at two existing Discount Tire (i.e., Lake Forest & Rancho Santa Margarita). Sound testing was also done within Massage Envy which, as noted in the study, already includes some existing noise attenuation measures inside the lease space.

The study concludes under worst case scenario that with the noise attenuation improvements already existing between Massage Envy and the future Discount Tire’s lease space, and the additional attenuation measures proposed by Discount Tires and included as proposed conditions of approval, the interior noise levels will not exceed the City’s noise standard of 55 dBA. In fact, the interior noise level within Massage Envy after Discount Tires is operational is expected to be only 29.5 dBA (page 36 of study). In regards to the exterior noise levels (page 37 of study), the study concludes that the proposed project will range from 28.0 to 45.7 dBA. The maximum level is still below the 55 dBA required by the City’s noise ordinance.

In technical terms, the noise study indicates that the noise levels being generated by Discount Tires operations, factoring in the sound attenuation measures existing in Massage Envy and proposed by the Applicant (in their lease space), are below the City’s standards.

Staff has reviewed the noise study and it is our technical opinion that the noise impacts have been adequately addressed and attenuated and the CUP can be acted on by the Commission. However, to further attenuate noise, staff has proposed one (1) additional condition as follows:

“Planning Condition No. 12:

Noise from intercom systems and/or music shall not exceed 55 dBA at the lease space walls and shall not be audible outside the proposed use.”

As part of the CUP process, the Commission can implement any conditions it feels necessary to address issues and impacts from a proposed project. Staff would recommend that the Commission support these two conditions. This new condition is included in the conditions matrix (Attachment A – Exhibit 1).

PROJECT DESCRIPTION:

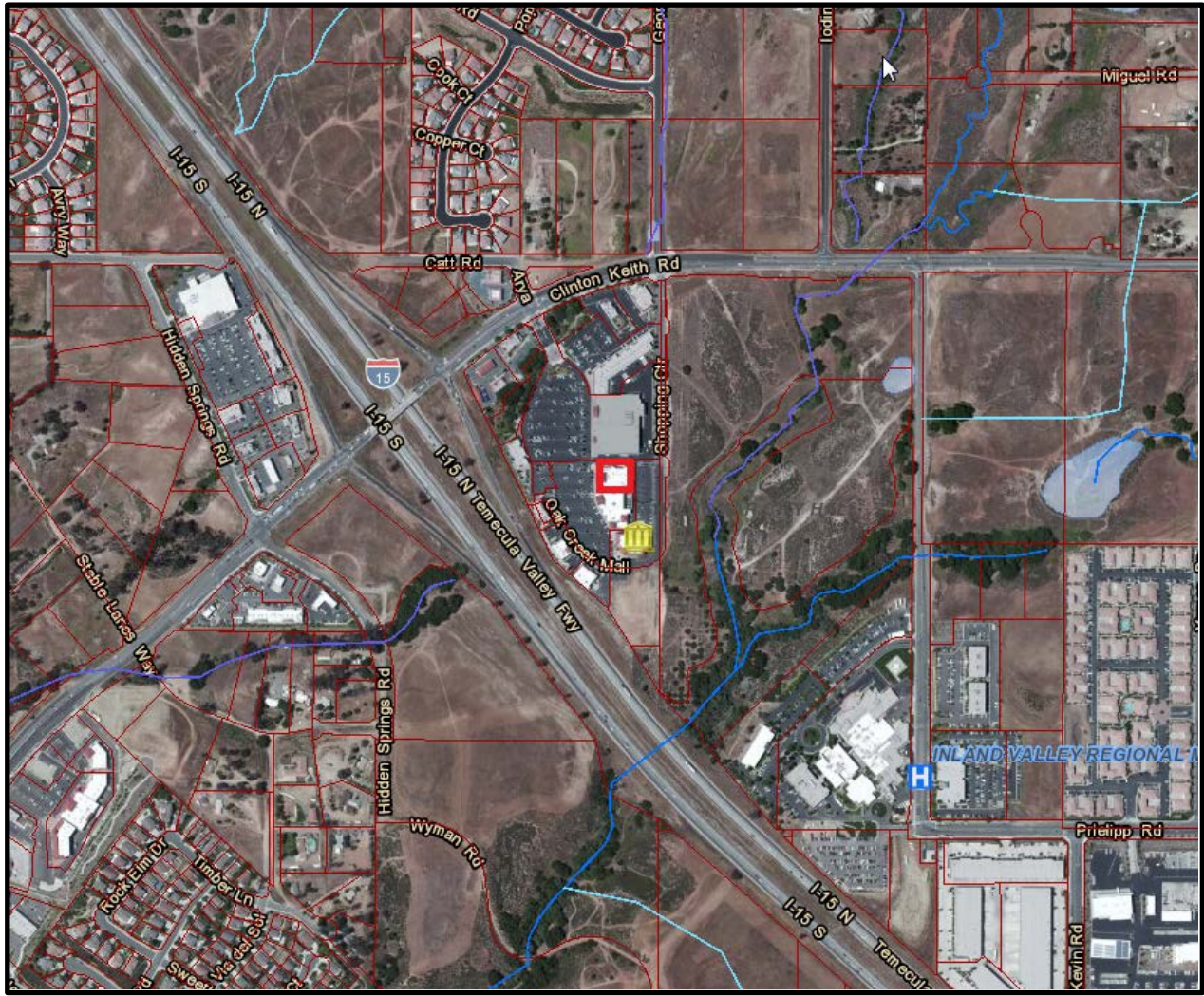
The Conditional Use Permit (CUP) proposal by Discount Tires was originally reviewed and approved by Planning Commission on July 15, 2009 (CUP No. 09-0374). The CUP was granted to allow tire sales/installation and minor auto repair. Tenant improvements and commencement of the CUP was conditioned to begin no later than July 15, 2009; however, the Applicant never moved forward with the proposal due to the economic downturn at that time. As the Applicant never applied for a time extension, the CUP expired on July 15, 2012.

The Applicant now desires to move forward with the proposal, so a new CUP has been submitted. This CUP proposal is the same as what was approved by the Planning Commission on July 15, 2009. This includes the tire sales/installation and minor auto repair. The Applicant has provided a list of the activities and tools related to the minor auto repair operations (refer to Attachment C). It is important to note that no automotive or engine repair/maintenance operation is proposed with this CUP. In fact, staff has provided a condition of approval to prohibit these heavy auto repair uses (Planning Condition No. 8). A more detailed discussion of the CUP is provided in the Analysis section of the staff report.

Project Site/Vicinity:

The location of the Discount Tire business is within the Oak Creek II shopping center located on the south side of Clinton Keith Road, east of Interstate 15 (same site retail center as city hall). The specific location of the project is noted in the exhibit below.

Vicinity Map

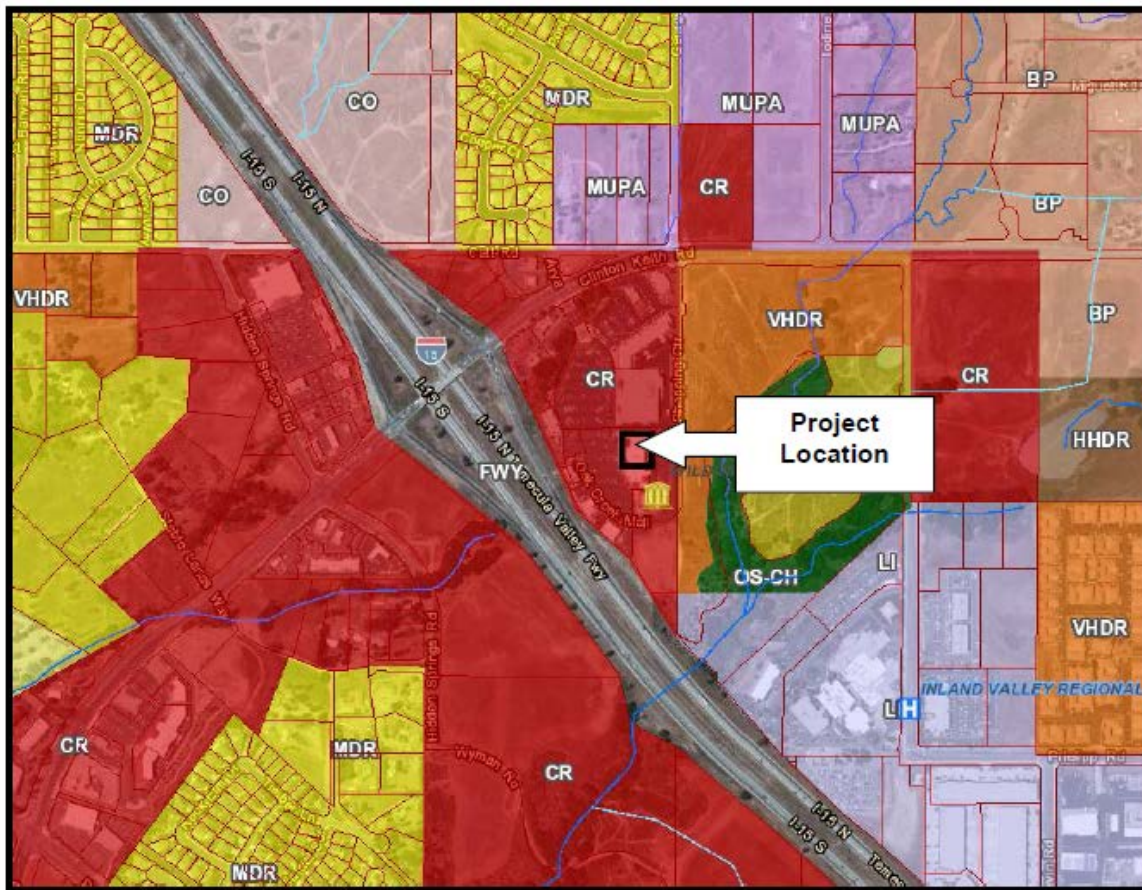


Existing and Surrounding Land Uses:

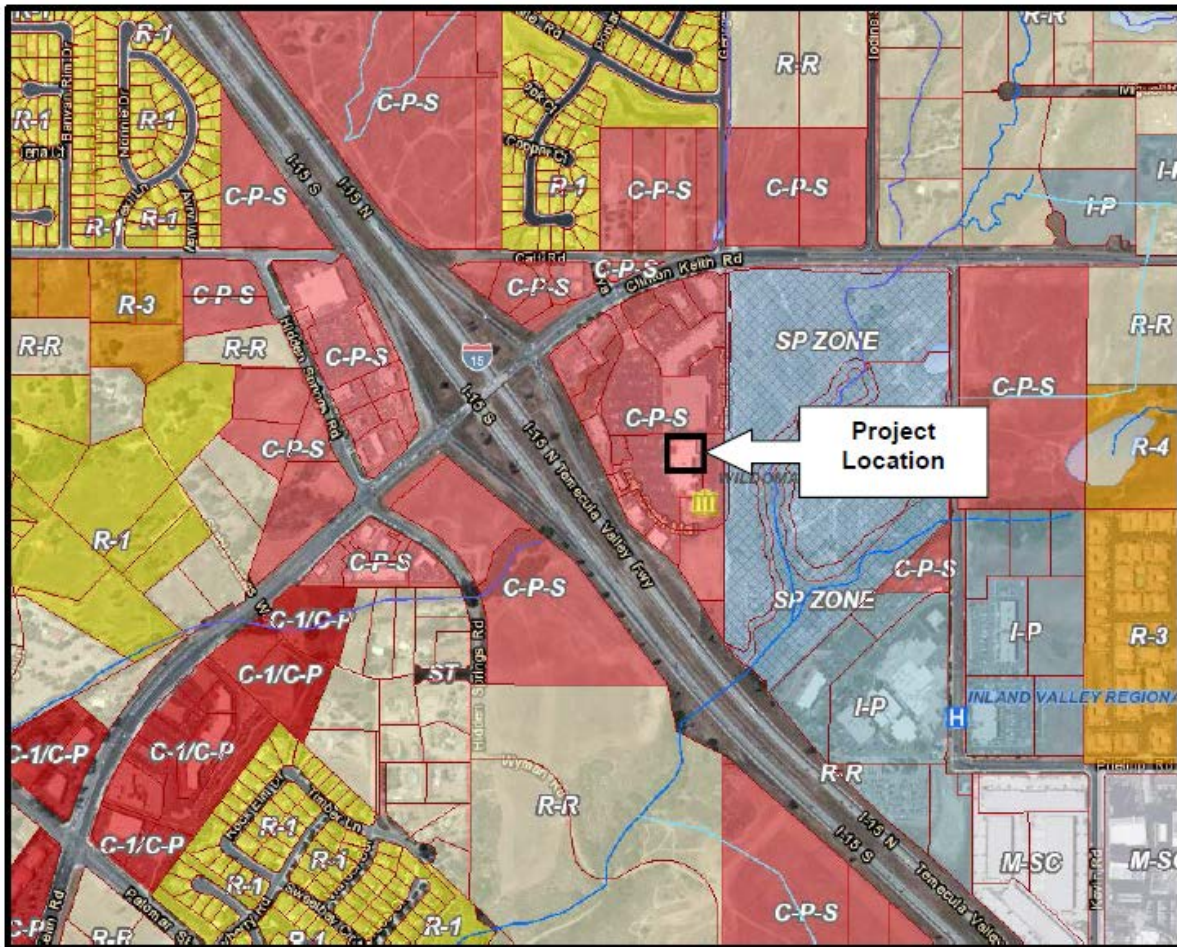
The project site is located within and surrounded by the existing Oak Creek commercial center. Table 1 on the following page summarizes the current use, general plan land use designation, and Zoning information related to the proposed project. Staff has also provided two figures (Figures 2 and 3 on the following pages) showing the General Plan land use designation and Zoning designation for the Oak Creek II center from our GIS database.

ADJACENT ZONING, LAND USE AND APPLICABLE STANDARDS			
Location	Current Use	GP Land Use Designation	Zoning Designation
Subject Property	Commercial/Retail	Commercial Retail (CR)	C-P-S (Scenic Highway Commercial)
North	Albertson's Grocery Store	Commercial Retail (CR)	C-P-S (Scenic Highway Commercial)
South	Commercial	Commercial Retail (CR)	R-R (Rural Residential)
East	Vacant	Very High Density Residential (VHDR)	S-P (Specific Plan)
West	Commercial	Commercial Retail (CR)	C-P-S (Scenic Highway Commercial)

General Plan Land Use Designation Exhibit



Zoning Designation Exhibit



PROJECT ANALYSIS (CUP):

General Plan Consistency:

The General Plan land use designation for the site is Commercial Retail. The intent of the Commercial Retail Land Use Designation is to enable the establishment and operation of community serving commercial, service, and office businesses. The project consists of a tire sales/installation and minor automotive repair within an existing developed commercial center. The design and layout of the center, the access and circulation have been configured to accommodate future development on adjacent parcels surrounding the project site. Considering all of these aspects, the project furthers the objectives and policies of the General Plan and is compatible with the general land uses as specified in the General Plan.

In addition, the proposed use also is consistent with the following General Plan policies:

LU 3.1 Accommodate land use development in accordance with the patterns and distribution of use and density depicted on the General Plan Land Use Maps (Figure LU-1) and the Area Plan Land Use Maps in accordance with the following concepts: (AI 1, 3, 9, 10)

a) Accommodate communities that provide a balanced mix of land uses, including employment, recreation, shopping, and housing.

b) Assist in and promote the development of infill and underutilized parcels which are located in Community Development areas, as identified on the General Plan Land Use Map.

LU 4.1 Require that new developments be located and designed to visually enhance, not degrade the character of the surrounding area through consideration of the following concepts: (AI 1, 3, 6, 14, 23, 24, 41, 62)

a) Compliance with the design standards of the appropriate area plan land use category.

b) Require that structures be constructed in accordance with the requirements of the City's zoning, building, and other pertinent codes and regulations.

LU 6.1 Require land uses to develop in accordance with the General Plan and area plans to ensure compatibility and minimize impacts. (AI 1,3)

LU 7.2 Promote and market the development of a variety of stable employment and business uses that provide a diversity of employment opportunities. (AI 18)

LU 7.3 Promote the development of focused employment centers rather than inefficient strip commercial development.

LU 23.1 Accommodate the development of commercial uses in areas appropriately designated by the General Plan and area plan land use maps. (AI 2, 6)

LU 23.6 Require that commercial projects abutting residential properties protect the residential use from the impacts of noise, light, fumes, odors, vehicular traffic, parking, and operational hazards. (AI 3)

LU 23.9 Require that commercial development be designed to consider their surroundings and visually enhance, not degrade, the character of the surrounding area. (AI 3)

Zoning Consistency:

The proposed tire sales/installation is a permitted use in the C-P-S (Scenic Highway Commercial) zone subject to the approval of a Conditional Use Permit (CUP). The CUP has been proposed to allow the operation of a tire sales & installation service and light auto repair services (refer to Attachment C for the list of light auto repair uses provided by the Applicant). To ensure that heavy auto repair is not conducted on the premises, staff has proposed a condition of approval (Planning Condition No. 8) to prohibit these heavy auto repair uses.

In evaluation of the proposed CUP, both tires sales/installation and light auto repair uses meet the intent of the C-P-S zone which is to provide commercial and retail services to Wildomar residents. As the use is locating in an existing building, there are no other improvements to the site that would be subject the development standards of the C-P-S zone. Thus, the proposed CUP is consistent with the C-P-S zone.

Noise Concerns/Attenuation:

The nature of the proposed tire sales/installation business will create noise that will impact adjacent businesses (i.e., Massage Envy & Ace Hardware). In an effort to be kindly to the adjacent businesses, Discount Tires will be implementing multiple sound attenuation measures to shield and reduce sound impacts emanating from the tire installation areas. Such measures proposed by the Applicant include the following:

- 1) Placing the air compressor to the far east corner of the suite (closer to the rear parking lot);
- 2) House the tank in a dry-walled insulated room to help conceal any noise and inhibit noise extending outdoors and to the adjacent suites;
- 3) Place the compressor on a thick rubber platform to absorb any vibration when in use;
- 4) The office and storage area will also have insulated walls which will provide an additional sound buffer between the installation area and the adjacent businesses/tenants;
- 5) The Applicant has rearranged their floor plan to designate the first "tire bay" for tire alignments only since this activity is a "low noise" service; and
- 6) The Applicant has also decided to use new "low noise impact guns" for all tire installations to further reduce noise impacts on the adjacent businesses.

By implementing these sound attenuation and tenant improvement measures, the Applicant is confident that noise generated from the proposed tire installation use will be minimal, and will not significantly impact adjacent businesses/tenants. Further, the Applicant has agreed to monitor noise on a regular basis and coordinate with adjacent businesses/tenant to ensure that noise will be a problem. Staff has met with the adjacent tenants to discuss the proposed use and sound attenuation efforts being taken by the Applicant. Based on these meetings and the Applicant's efforts to monitor noise on a regular basis, they support the Discount Tire Center proposal.

CEQA Analysis:

In accordance with the California Environmental Quality Act (CEQA) Guidelines, the Planning Department evaluated the proposed CUP project to determine what level of CEQA environmental review is required. Based on this review, the Planning Department has determined that approval of the proposed CUP meets the findings for a Categorical Exemption in accordance with Section 15301 (Existing Facilities) of the California Environmental Quality Act (CEQA) Guidelines. This section exempts the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination. Further, the proposed CUP will allow for a retail use located in an existing retail building, and will not involve any expansion of that structure. The existing structure is located on a site that has an existing General Plan Land Use designation of Commercial Retail (CR) which encourages retail sales, and has an existing Zoning designation of C-P-S (Scenic Highway Commercial) which allows the proposed retail use.

Therefore, based on these factors, the Planning Commission may adopt a Categorical Exemption in accordance with Section 15301 (Existing Facilities – Class 1) of CEQA.

REQUIRED PROJECT FINDINGS OF FACT:

Conditional Use Permit Findings:

In accordance with Section 17.200 of the Zoning Ordinance, the following findings are offered for Planning Commission consideration for the proposed project.

1. The proposed use is consistent with the City of Wildomar General Plan and Zoning Ordinance.

Evidence: The proposed tire sales/installation is a conditionally allowed in the C-P-S (Scenic Highway Commercial) zone subject to the approval of a conditional use permit. The project is consistent with the intent of the Zoning Ordinance since it meets and/or exceeds the minimum development standards of the C-P-S zone. The General Plan land use designation for the site is Commercial Retail. The intent of the Commercial Retail Land Use Designation is to enable the establishment and operation of community serving commercial, service, and office businesses. The project consists of a tire sales/installation service within an existing developed commercial center. The design and layout of the center, the access and circulation have been configured to accommodate future development on adjacent parcels surrounding the project site. Considering all of these aspects, the project furthers the objectives and policies of the General Plan and is compatible with the general land uses as specified in the General Plan.

In addition, the proposed use also is consistent with the following General Plan policies:

LU 3.1 Accommodate land use development in accordance with the patterns and distribution of use and density depicted on the General Plan Land Use Maps (Figure LU-1) and the Area Plan Land Use Maps in accordance with the following concepts: (AI 1, 3, 9, 10)

- a) Accommodate communities that provide a balanced mix of land uses, including employment, recreation, shopping, and housing.
- b) Assist in and promote the development of infill and underutilized parcels which are located in Community Development areas, as identified on the General Plan Land Use Map.

LU 4.1 Require that new developments be located and designed to visually enhance, not degrade the character of the surrounding area through consideration of the following concepts: (AI 1, 3, 6, 14, 23, 24, 41, 62)

- a) Compliance with the design standards of the appropriate area plan land use category.
- b) Require that structures be constructed in accordance with the requirements of the County's zoning, building, and other pertinent codes and regulations.

LU 6.1 Require land uses to develop in accordance with the General Plan and area plans to ensure compatibility and minimize impacts. (AI 1,3)

LU 7.2 Promote and market the development of a variety of stable employment and business uses that provide a diversity of employment opportunities. (AI 18)

LU 7.3 Promote the development of focused employment centers rather than inefficient strip commercial development.

LU 23.1 Accommodate the development of commercial uses in areas appropriately designated by the General Plan and area plan land use maps. (AI 2, 6)

LU 23.6 Require that commercial projects abutting residential properties protect the residential use from the impacts of noise, light, fumes, odors, vehicular traffic, parking, and operational hazards. (AI 3)

LU 23.9 Require that commercial development be designed to consider their surroundings and visually enhance, not degrade, the character of the surrounding area. (AI 3)

2. The proposed use will not be detrimental to the health, safety, or general welfare of the community.

Evidence: The site has been designed to meet all of the development standards of the Scenic Highway Commercial (C-P-S) zone as illustrated in the Development Standards section of the Staff Report relative to setbacks, lot coverage, building heights and parking such that it will not be detrimental to the public health, safety or welfare. The location of the building will not conflict with the existing parking area or with on-site circulation since the existing parking spaces and drive aisles meet the minimum standards established in the zoning ordinance. In addition, the proposed use will comply with the applicable waste collection and disposal requirements and does not contain any natural or physical hazards which would cause the project to be detrimental to the health, safety, or general welfare. The proposed use has also incorporated noise reduction measures to reduce the impact of the noise generated by the use on adjacent businesses, and a noise study was conducted confirming that the proposed use will not cause detrimental noise impacts to surrounding uses.

PUBLIC COMMUNICATION/NOTICING:

In accordance with the public noticing requirements of Section 17.192 of the Wildomar Municipal Code, the Planning Department, on August 5, 2015, the City mailed a public hearing notice to all property owners/tenants within a 600-foot radius of the building boundaries notifying them of the August 19, 2015 Planning Commission meeting for the proposed CUP. In addition, on August 7, 2015, the Planning Department published a legal notice in the Press Enterprise, a local newspaper of general circulation, notifying the general public of the August 19, 2015 Planning Commission meeting.

Respectfully Submitted,
Matthew C. Bassi
Planning Director

Reviewed By,
Erica L. Vega
Assistant City Attorney

ATTACHMENTS

- A. PC Resolution No. 2015-13 for CUP No. 15-0023
Exhibit 1 – Conditions of Approval Matrix
- B. Proposed Floor Plan Exhibit
- C. Applicant List of Activities and Tools Used for the Business
- D. Discount Tire Noise Study (dated July 7, 2015)

INCORPORATED BY REFERENCE

- A. City of Wildomar General Plan
- B. City of Wildomar Zoning Ordinance.

ATTACHMENT A

PC Resolution No. 2015-13

PC RESOLUTION NO. 2015-13

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF WILDOMAR, CALIFORNIA, ADOPTING A CATEGORICAL EXEMPTION IN ACCORDANCE WITH SECTION 15301 (CLASS 1 - EXISTING FACILITIES) OF THE CEQA GUIDELINES, AND APPROVING A CONDITIONAL USE PERMIT (P.A. NO. 15-0023), SUBJECT TO CONDITIONS, TO ESTABLISH "DISCOUNT TIRE CENTER" WITHIN AN EXISTING COMMERCIAL BUILDING LOCATED WITHIN THE OAK CREEK CENTER DEVELOPMENT LOCATED AT 23885 CLINTON KEITH ROAD, SUITE #H5 (APN: 380-240-046 & 380-240-017).

WHEREAS, an application for a Conditional Use Permit to establish "Discount Tire Center" (Planning Application No. 15-0023) has been filed by:

Applicant:	Mr. Mike Nelson, Discount Tire Center
Project Location:	23885 Clinton Keith Road, Suite H
APN:	380-240-050
Project Area:	3.73 acres

WHEREAS, the City of Wildomar Planning Commission has the authority to review the proposed Conditional Use Permit No. 15-0023 as proposed in accordance with Title 17 of the City of Wildomar Municipal Code; and

WHEREAS, the City of Wildomar Planning Department, on May 20, 2015 gave public notice by mailing a public hearing notice to all property owners/tenants within a 600-foot radius of the project boundaries notifying said property owners of the date and time of the public hearing for the Conditional Use Permit No. 15-0023 that would be considered by the City of Wildomar Planning Commission; and

WHEREAS, the City of Wildomar Planning Department, on May 22, 2015, published a legal notice in the Press Enterprise, a local newspaper of general circulation, in compliance with State law notifying the general public of the holding of a public hearing for Conditional Use Permit No. 15-0023 to be heard by the Wildomar Planning Commission; and

WHEREAS, the City of Wildomar Planning Commission conducted a public hearing on June 3, 2015 at which time interested persons had an opportunity to testify in support of, or opposition to, the proposed Conditional Use Permit No. 15-0023, and at which time the Planning Commission received public testimony concerning the proposed project, and voted to table the CUP to a future meeting; and

WHEREAS, the City of Wildomar Planning Department, on August 5, 2015 mailed a public hearing notice to all property owners/tenants within a 600-foot radius of the project boundaries notifying said property owners of the date and time of the public hearing for the Conditional Use Permit No. 15-0023 that would be considered by the City of Wildomar Planning Commission scheduled for August 19, 2015; and

WHEREAS, the City of Wildomar Planning Department, on August 7, 2015, published a legal notice in the Press Enterprise, a local newspaper of general circulation, in compliance with State law notifying the general public of the holding of a public hearing for Conditional Use Permit No. 15-0023 to be heard by the Wildomar Planning Commission scheduled for August 19, 2015; and

WHEREAS, the City of Wildomar Planning Commission conducted a public hearing on August 19, 2015 at which time interested persons had an opportunity to testify in support of, or opposition to, the proposed Conditional Use Permit No. 15-0023, and at which time the Planning Commission received public testimony concerning the proposed project.

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

SECTION 1. CEQA FINDINGS.

In accordance with the California Environmental Quality Act (CEQA) Guidelines, the Planning Department evaluated the proposed CUP project to determine what level of CEQA environmental review is required. Based on this review, the Planning Department has determined that approval of the proposed CUP meets the findings for a Categorical Exemption in accordance with Section 15301 (Existing Facilities) of the California Environmental Quality Act (CEQA) Guidelines. This section exempts the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination.

Further, the proposed CUP will allow for a retail use located in an existing retail building, and will not involve any expansion of that structure. The existing structure is located on a site that has an existing General Plan Land Use designation of Commercial Retail (CR) which encourages retail sales, and has an existing Zoning designation of C-P-S (Scenic Highway Commercial) which allows the proposed retail use. Therefore, based on these factors, the Planning Commission hereby adopts a Categorical Exemption in accordance with Section 15301 (Existing Facilities – Class 1) of CEQA.

SECTION 2. CONDITIONAL USE PERMIT FINDINGS.

In accordance with Section 17.200 of the Wildomar Municipal Code, the following findings are offered for Planning Commission consideration for the proposed conditional use permit.

1. The proposed use is consistent with the City of Wildomar General Plan and Zoning Ordinance.

Evidence: The proposed tire sales/installation is a conditionally allowed in the C-P-S (Scenic Highway Commercial) zone subject to the approval of a conditional use permit. The project is consistent with the intent of the Zoning Ordinance since it meets and/or exceeds the minimum development standards of the C-P-S zone. The General Plan land use designation for the site is Commercial Retail. The intent of the Commercial Retail Land Use Designation is to enable the establishment and operation of community serving commercial, service, and office businesses. The project consists of a tire sales/installation service within an existing developed commercial center. The design and layout of the center, the access and circulation have been configured to accommodate future development on adjacent parcels surrounding the project site. Considering all of these aspects, the project furthers the objectives and policies of the General Plan and is compatible with the general land uses as specified in the General Plan.

In addition, the proposed use also is consistent with the following General Plan policies:

LU 3.1 Accommodate land use development in accordance with the patterns and distribution of use and density depicted on the General Plan Land Use Maps (Figure LU-1) and the Area Plan Land Use Maps in accordance with the following concepts: (AI 1, 3, 9, 10)

- a) Accommodate communities that provide a balanced mix of land uses, including employment, recreation, shopping, and housing.
- b) Assist in and promote the development of infill and underutilized parcels which are located in Community Development areas, as identified on the General Plan Land Use Map.

LU 4.1 Require that new developments be located and designed to visually enhance, not degrade the character of the surrounding area through consideration of the following concepts: (AI 1, 3, 6, 14, 23, 24, 41, 62)

- a) Compliance with the design standards of the appropriate area plan land use category.
- b) Require that structures be constructed in accordance with the requirements of the County's zoning, building, and other pertinent codes and regulations.

LU 6.1 Require land uses to develop in accordance with the General Plan and area plans to ensure compatibility and minimize impacts. (AI 1,3)

LU 7.2 Promote and market the development of a variety of stable employment and business uses that provide a diversity of employment opportunities. (AI 18)

LU 7.3 Promote the development of focused employment centers rather than inefficient strip commercial development.

LU 23.1 Accommodate the development of commercial uses in areas appropriately designated by the General Plan and area plan land use maps. (AI 2, 6)

LU 23.6 Require that commercial projects abutting residential properties protect the residential use from the impacts of noise, light, fumes, odors, vehicular traffic, parking, and operational hazards. (AI 3)

LU 23.9 Require that commercial development be designed to consider their surroundings and visually enhance, not degrade, the character of the surrounding area. (AI 3)

2. The proposed use will not be detrimental to the health, safety, or general welfare of the community.

Evidence: The site has been designed to meet all of the development standards of the Scenic Highway Commercial (C-P-S) zone as illustrated in the Development Standards section of the Staff Report relative to setbacks, lot coverage, building heights and parking such that it will not be detrimental to the public health, safety or welfare. The location of the building will not conflict with the existing parking area or with on-site circulation since the existing parking spaces and drive aisles meet the minimum standards established in the zoning ordinance.

In addition, the proposed use will comply with the applicable waste collection and disposal requirements and does not contain any natural or physical hazards which would cause the project to be detrimental to the health, safety, or general welfare. The proposed use has also incorporated noise reduction measures to reduce the impact of the noise generated by the use on adjacent businesses, and a noise study was conducted confirming that the proposed use will not cause detrimental noise impacts to surrounding uses.

SECTION 3. PLANNING COMMISSION ACTION

Based on the foregoing findings, and on substantial evidence in the whole of the record, the Planning Commission hereby takes the following actions:

1. Notice of Exemption. The Planning Commission has determined that Conditional Use Permit No. 15-0023 is exempt from environmental review in accordance with Section 15301 (Existing Facilities – Class 1) of the CEQA Guidelines and directs the Planning Director to file a Notice of Exemption (NOE) with the Riverside County Clerk within five (5) working days of Commission approval; and
2. Approval of CUP. The Planning Commission hereby adopts PC Resolution No. 2015-13 approving Conditional Use Permit No. 15-0023, subject to conditions as illustrated herein, and attached hereto, to this Resolution as Exhibit 1

PASSED, APPROVED AND ADOPTED this 19th day of August, 2015 by the following vote:

AYES.

NOES:

ABSENT:

ABSTAINED:

Veronica Langworthy
Planning Commission Chairman

ATTEST:

Matthew C. Bassi
Planning Director/Minutes Secretary

APPROVED AS TO FORM:

Erica L. Vega
Assistant City Attorney

ATTACHMENT A - EXHIBIT 1
CONDITIONS OF APPROVAL – Discount Tire CUP Project

Project Application: Conditional Use Permit No. 15-0023

APN: 380-240-046 & 380-240-017

CUP Project Approval Date:
August 19, 2015

CUP Project Expiration Date:
August 19, 2017

Conditions of Approval	Timing / Implementation	Enforcement / Monitoring Dept.	Verification (Date and Signature)
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PLANNING DEPARTMENT CONDITIONS

General Conditions

1.	In compliance with CEQA Guidelines, the fee to file a Notice of Exemption (NOE) shall be submitted to the Planning Department by the Applicant no later than August 19, 2015. The NOE and Riverside County Administration fee of \$50.00 for the NOE shall be filed by the Planning Department with the Riverside County Clerk within five (5) working days of project approval by the Planning Commission.	August 19, 2015	Planning Department	N/A
2.	The applicant shall review and sign below verifying the "Acceptance of the Conditions of Approval" and return the signed conditions to the Planning Department no later than <u>August 31, 2015.</u> <hr/> Applicant Signature: _____ Date: _____	August 31, 2015	Planning Department	N/A
3.	The applicant shall indemnify, protect, defend, and hold harmless, the City, and/or any of its officials, officers, employees, agents, Dept.'s, agencies, and instrumentalities thereof, from any and all claims, demands, law suits, 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	On-Going	Planning Dept.	

**ATTACHMENT A - EXHIBIT 1
CONDITIONS OF APPROVAL – Discount Tire CUP Project**

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Conditions of Approval

**Timing /
Implementation**

**Enforcement /
Monitoring Dept.**

**Verification
(Date and
Signature)**

such procedures), (collectively "Actions"), brought against the City, and/or any of its officials, officers, employees, agents, Dept.'s, agencies, and instrumentalities thereof, that challenge, attack, or seek to modify, set aside, void, or annul, the any action of, or any permit or approval issued by, the City and/or any of its officials, officers, employees, gents, Dept.'s, 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 court of competent jurisdiction. City shall promptly notify the applicant of any Action brought and request that applicant defend the City. It is expressly agreed that applicant may select legal counsel providing the applicant's defense and the City shall have the right to approve separate legal counsel providing the City's defense. The applicant shall reimburse City for any attorneys' fees, costs and expenses directly and necessarily incurred by the City in the course of the defense. Applicant agrees that City will forward monthly invoices to Applicant for attorneys' fees, costs and expenses it has incurred related to its defense of any Action and applicant agrees to timely payment within thirty (30) days of receipt of the invoice. Applicant agrees to post adequate security or a cash deposit with City in an amount to cover the City's estimated attorneys' fees, costs and expenses incurred by City in the course of the

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August 19, 2017

Conditions of Approval	Timing / Implementation	Enforcement / Monitoring Dept.	Verification (Date and Signature)
defense in order to ensure timely payment of the City's invoices. The amount of the security or cash deposit shall be determined by the City. City shall cooperate with applicant in the defense of any Action.			
4. Within 60 days of approval by the Planning Commission of Conditional Use Permit No. 15-0023, the applicant shall pay any outstanding deposit account balance, if applicable. Failure to pay the outstanding balance by the due date may result in delays in the submittal of grading and building plans.	October 19, 2015	Planning Dept.	
5. In accordance with Section 66020.d.1 of the Government Code, the applicant has 90 days from project approval to file a protest of the imposition of fees, dedications, reservations, or other exactions being imposed on this project. Notice is hereby to the Applicant that the 90-day appeal hereby begins with approval of this project.	November 19, 2015	Planning Dept.	
6. Approval of Conditional Use Permit No. 15-0023 shall expire on <u>August 19, 2017</u> if the proposed conditional use has not commenced or building permits have not been issued. At least 45 days prior to the expiration date, the Applicant may apply for a one-year extension of time. The request for an extension of time shall include the required application form accompanied by the appropriate filing fee.	August 19, 2017	Planning Dept.	
7. Conditional Use Permit No. 15-0023 shall be operated in accordance with the Planning Commission approval on August 19, 2015. If the project requires a modification/revision to the approved plans, the applicant may file a substantial	On-Going	Planning Dept.	

**ATTACHMENT A - EXHIBIT 1
CONDITIONS OF APPROVAL – Discount Tire CUP Project**

Project Application: Conditional Use Permit No. 15-0023

APN: 380-240-046 & 380-240-017

**CUP Project Approval Date:
August 19, 2015**

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Conditions of Approval

**Timing /
Implementation**

**Enforcement /
Monitoring Dept.**

**Verification
(Date and
Signature)**

conformance application (and pay all applicable fees) for review by the Planning and Engineering Dept.'s in accordance with Section 17.228 of the Wildomar Zoning Ordinance.

8. Conditional Use Permit No. 15-0023 is hereby approved for a "Discount Tire Center" allowing tire sales and light auto repair uses outlined below (also refer to Attachment C of the staff report).

- Oil Changes
- Alignment Services
- Brake Service
- Shocks and Struts
- Suspension Work
- Fluid Exchange Services
- Battery Service and Replacement
- Manufacturers Schedules Services
- Air Conditional Service and Repair
- Tire Repair
- Tire Replacement
- Gasket and Seal Replacement
- Clutch Replacement
- Radiator Replacement

** Note: Any other auto repair/services and activities not specifically listed above are prohibited.*

On-Going

Planning Dept.

ATTACHMENT A - EXHIBIT 1
CONDITIONS OF APPROVAL – Discount Tire CUP Project

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August 19, 2017

Conditions of Approval	Timing / Implementation	Enforcement / Monitoring Dept.	Verification (Date and Signature)
9. The development of the premises and the exterior colors and materials shall substantially conform to the approved site plan and elevations for the Oak Creek II Center and contained on file with the Planning Department.	On-Going	Planning Dept.	
10. The developer shall obtain City approval for any modifications or revisions to the approval of this project. Deviations not identified on the plans may not be approved by the City, potentially resulting in the need for the project to be redesigned. Amended entitlement approvals may be necessary as a result.	On-Going	Planning Dept.	
11. There will be no outdoor storage of materials, tires, equipment, etc. and no overnight parking of any vehicles in the Oak Creek Center I and II parking lots serviced by Discount Tire.	On-Going	Planning Dept.	
12. Noise from intercom systems and/or music shall not exceed 55 dBA at the lease space walls and shall not be audible outside the proposed use.			
13. In accordance with Section 17.200 of the Wildomar Municipal Code, CUP No. 15-0023 is subject to a 10-day appeal period which ends on August 31, 2015. If no appeal is filed, CUP No. 15-0023 shall become effective on September 1, 2015. No building permits shall be issued until the appeal period has expired and the CUP is effective.	On-Going	Planning Dept.	
14. Regular cleaning of walkways and apron areas shall be required by the Applicant to minimize debris and staining of pavement areas in and around the building.	On-Going	Planning Dept.	

ATTACHMENT A - EXHIBIT 1
CONDITIONS OF APPROVAL – Discount Tire CUP Project

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Conditions of Approval	Timing / Implementation	Enforcement / Monitoring Dept.	Verification (Date and Signature)
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Prior to Issuance of Building Permits

15.	Prior to the issuance of building permits for any interior tenant improvements to the building, the applicant shall submit three (3) sets of detailed construction/building plans to the Building Official for review. All noise attenuation measures outlined within CUP No. 15-0023 (Planning Conditions No. 18, 19 & 20) and the Discount Tire Noise Study (dated July 7, 2015) shall be complied with and noted in the tenant improvement plans.	Prior to Issuance of Building Permits	Planning Department	
16.	Prior to the issuance of building permits for any signs on the premises, the applicant shall apply for a sign permit with the Building Department. Said sign permit shall be consistent with the adopted regulations of the Oak Creek Center II sign program.	Prior to Issuance of Building Permits	Planning Department	

Prior to Issuance of a Certificate of Occupancy

17.	The applicant shall install special rubberized flooring underneath all air compressors (and any other mechanical device/machine affixed to the floor) to absorb the vibration when in operation and to minimize sound impacts on adjacent businesses. This condition shall be verified by the Planning Department as part of the final inspection process of the tenant improvements prior to the issuance of a certificate of occupancy.	Prior to Issuance of a Certificate of Occupancy	Planning Dept.	
18.	The applicant shall house the air compressor machine(s) within an enclosed & insulated room to minimize any sound	Prior to Issuance of a Certificate of Occupancy	Planning Dept.	

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August 19, 2017

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impacts on adjacent businesses when in operation. The exact type and design of the tenant improvement plans shall be included with all tenant improvement plans. This condition shall be verified by the Planning Department as part of the final inspection process of the tenant improvements prior to the issuance of a certificate of occupancy.			
19. The applicant shall drywall and insulate the office and storage areas in a manner adequate enough to minimize noise impacts emanating from the installation area on surrounding businesses. The exact type and design of the drywall and insulation shall be reflected on all tenant improvement plans. This condition shall be verified by the Planning Department as part of the final inspection process of the tenant improvements prior to the issuance of a certificate of occupancy.	Prior to Issuance of a Certificate of Occupancy	Planning Dept.	
20. Prior to the issuance of a certificate of occupancy for the proposed conditional use permit, all conditions of approval listed herein shall be satisfied.	Prior to Issuance of a Certificate of Occupancy	Planning Department	
PUBLIC WORKS/ENGINEERING/BUILDING DEPARTMENT CONDITIONS			
<u>General Conditions</u>			
1. The developer/applicant shall submit a Business Registration application to the City for approval. The Business Registration shall indicate that this business is required to submit a Stormwater Compliance Deposit to the City to comply with the Commercial/Industrial Inspection requirements of the City's MS4 permit (NPDES Inspection). The requirement for	On-going	Public Works Engineering Dept.	

ATTACHMENT A - EXHIBIT 1
CONDITIONS OF APPROVAL – Discount Tire CUP Project

Project Application: Conditional Use Permit No. 15-0023

APN: 380-240-046 & 380-240-017

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August 19, 2015**

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August 19, 2017**

Conditions of Approval	Timing / Implementation	Enforcement / Monitoring Dept.	Verification (Date and Signature)
stormwater compliance deposits and NPDES inspections are recurring for the duration of the conditional use permit. The frequency of such deposits and inspections may vary and will be determined by the Public Works Department.			
2. The developer shall comply with all applicable laws and regulations regarding the proper disposal of all waste materials generated by this business.	On-going	Public Works Engineering Dept.	
<u>Prior to Issuance of an Occupancy Permit</u>			
3. Within 60 days the Building and Safety Department may request , a traffic calming and signage plan, prepared by a traffic engineer, for the purpose of addressing “cut-through” traffic issues along the main drive aisle in from the of the building. Said plan shall be reviewed and approved by the City Engineer.	Prior to the Issuance of Occupancy Permits	Public Works Engineering Dept.	
4. If the project involves multiple lots, the developer/applicant shall provide the City with a copy of a recorded Reciprocal Use Agreement which provides for cross-lot access and parking across all affected lots.	Prior to the Issuance of Occupancy Permits	Public Works Engineering Dept.	
5. The developer/applicant shall submit a Business Registration application to the City for approval. The Business Registration shall indicate that this business is required to submit a Stormwater Compliance Deposit to the City to comply with the Commercial/Industrial Inspection requirements of the City’s MS4 permit (NPDES Inspection). The requirement for stormwater compliance deposits and NPDES inspections are	Prior to the Issuance of Occupancy Permits	Public Works Engineering Dept.	

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	recurring for the duration of the conditional use permit. The frequency of such deposits and inspections may vary and will be determined by the Public Works Department.			
6.	The developer/applicant shall provide all tenants/employees with educational materials regarding Best Management Practices for Stormwater Pollution Prevention. Educational materials are available on the Riverside County Flood Control and Water Conservation District's website. The developer must provide to the City's Planning Department a copy of educational materials provided to employees and the business' handbook, training, or similar document describing the business' best management practices for stormwater pollution prevention. These documents must be submitted to the City's Planning Department as part of the business' Statement of Operations.			
7.	The developer/applicant shall demonstrate that all development impact and mitigation fees have been paid.	Prior to the Issuance of Occupancy Permits	Public Works Engineering Dept.	

RIVERSIDE COUNTY FIRE DEPT.

General Conditions

1.	Fire sprinkler system plans for the tenant improvement area may be required to be submitted to the Fire Department for review, along with a plan/inspection fee. The sprinkler system will have to be modified and designed in accordance with	Plan check / Prior to the Issuance of Occupancy Permits	County Fire Dept.	
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ATTACHMENT A - EXHIBIT 1
CONDITIONS OF APPROVAL – Discount Tire CUP Project

Project Application: Conditional Use Permit No. 15-0023

APN: 380-240-046 & 380-240-017

**CUP Project Approval Date:
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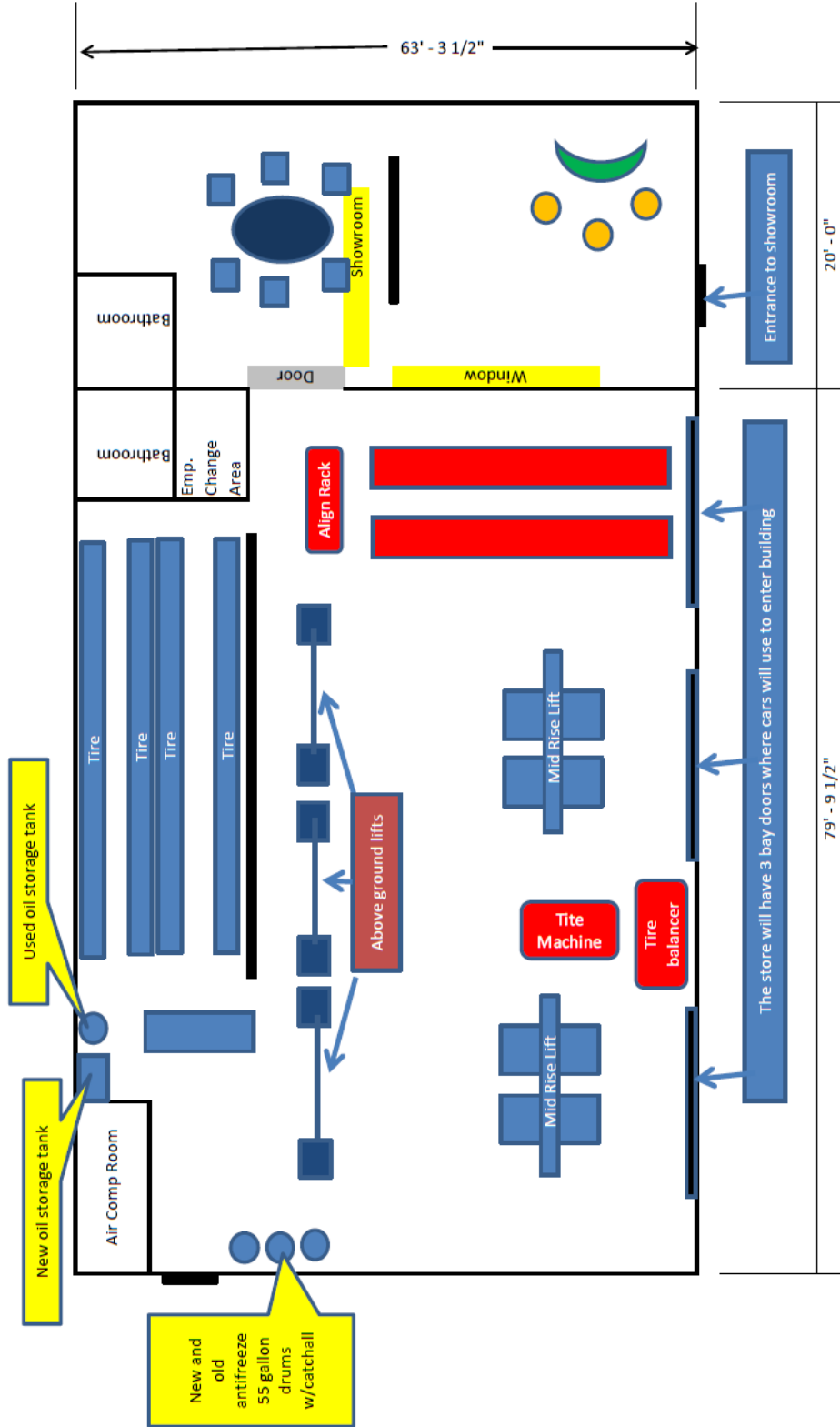
**CUP Project Expiration Date:
August 19, 2017**

Conditions of Approval	Timing / Implementation	Enforcement / Monitoring Dept.	Verification (Date and Signature)
NFPA 13, 2013 Edition. A licensed C-16 contractor shall do all sprinkler work and certification. The approved plans, with Fire Department Job card must be at the job site for all inspections.			
2. Building(s) shall be approved for high-piled storage (materials in closely packed piles or on pallets, or in racks where the top of storage exceeds 12 feet in height, 6 feet for Group A plastics and certain other hazardous commodities) or aerosols products. High-piled and aerosol stock shall be approved by the Fire Department prior to materials being stored on site. A licensed Fire Protection Engineer or a Fire Department approved consultant must prepare plans for high-piled storage or aerosol storage in accordance with the 2013 CFC and NFPA 13, 2013 Edition.	Plan check / Prior to the Issuance of Occupancy Permits	County Fire Dept.	
3. Install portable fire extinguishers per Title 19, but not less than 2A10BC in rating. Contact a certified extinguisher company for proper placement and spacing of equipment.	Plan check / Prior to the Issuance of Occupancy Permits	County Fire Dept.	

END

ATTACHMENT B

FLOOR PLAN



ATTACHMENT C

Light Auto Repair Uses List

Discount Tire Centers Mechanical Service Categories	Common Tools used for Services- Most service listed require the use of a vehicle hoist.
Oil Changes	Impact ratchets to remove some covers & hand tools Air operated dispensers for oil and lube
Alignment Services	Computerized Align Equipment, hand tools and occasional impact gun
Brake Service	Impact gun, Brake lathe and hand tools
Shocks and Struts	Impact gun, spring compressor and hand tools
Suspension Work	Impact gun, hand tools and occasional air jiffy gun
Fluid Exchange Services	Flush Machines electrically operated or manually performed, Brake, Coolant, Trans Fluid & Power Steering Fluid Flushes.
Battery Service and Replacement	Hand tools and Electronic test equipment
Manufacturers Schedules Services (i.e., 30 60,90 services	Hands tools, test equipment, impact gun
Air Conditional Service and Repair	Certified Auto AC recycling machines, hand tools occasional impact gun
Tire Repair	impact gun, air buffer, tire machine & balancer
Tire Replacement	Same as above except no buffer used.
Gasket and Seal Replacement	Impact gun, air disc sander, hand tools
Clutch Replacement	Impact gun & hand tools
Radiator Replacement	Impact gun & hand tools
<u>Please note:</u> We do not perform the following: Complete engine rebuilding, Transmission overhaul, Body or Painting work	

ATTACHMENT D

Discount Tire Noise Study



Oak Creek Discount Tire Center

NOISE IMPACT ANALYSIS

CITY OF WILDOMAR

PREPARED BY:

Bill Lawson, PE, INCE
blawson@urbanxroads.com
(949) 660-1994 x203

Alex Wolfe
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JULY 7, 2015

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LIST OF ABBREVIATED TERMS

(1)	Reference
ANSI	American National Standards Institute
ASTM	American Society for Testing and Materials
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
CUP	Conditional Use Permit
dBA	A-weighted decibels
FHWA	Federal Highway Administration
HVAC	Heating, ventilating and air conditioning
Hz	Hertz
I-15	Interstate 15 Freeway
INCE	Institute of Noise Control Engineering
Leq	Equivalent continuous (average) sound level
Lmax	Maximum level measured over the time interval
Lmin	Minimum level measured over the time interval
mph	Miles per hour
NR	Noise Reduction
Project	Oak Creek Discount Tire Center
sf	Square feet
SPR	Source-Path-Receiver
STC	Sound Transmission Class
TL	Transmission Loss

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1 INTRODUCTION

This noise analysis has been completed to determine the noise impacts associated with the development of the proposed Oak Creek Discount Tire Center (“Project”). Specifically, this noise analysis evaluates the potential for the Project to impact the adjacent businesses. This noise study briefly describes the proposed Project, provides information regarding noise fundamentals, describes the local regulatory setting, and evaluates the potential Project-related noise impacts. This noise study has been prepared to satisfy the City of Wildomar Planning Commission Conditional Use Permit No. 15-0023 conditions of approval for the Discount Tire Center.

1.1 SITE LOCATION

The proposed Oak Creek Discount Tire Center Project is located within the Oak Creek II shopping center on the south side of Clinton Keith Road, east of Interstate 15 (I-15 Freeway) in the same retail center as city hall in the City of Wildomar, as shown on Exhibit 1-A. The planned Discount Tire Center tenant space (Project Site) is currently vacant. The adjacent retail space is currently occupied by Ace Hardware to the south and Massage Envy to the west as shown on Exhibit 1-B. The nearest noise-sensitive residential receivers are located approximately 220 feet east of the shopping center within the Oak Springs Ranch apartment community.

1.2 PROJECT DESCRIPTION

The proposed Project consists of the development of a Discount Tire Center consisting of approximately 5,070 square feet (sf), providing tire sales/installation and minor auto repair. The planned Oak Creek Discount Tire Center will include three roll-up garage doors, two mid-rise lifts, an alignment rack, three above ground lifts, a tire machine, a tire balancer, tire storage, an air compressor room and a showroom, as shown on Exhibit 1-C. Based on information provided by the applicant, this analysis assumes the Project would be operational during the typical business hours of 8:00 a.m. to 6:00 p.m., seven days per week. These hours are typically reduced on Saturdays and Sundays. The nature of the proposed tire sales/installation business will create noise that will impact adjacent businesses (i.e. Massage Envy & Ace hardware). A review of the Project suggests that the Oak Creek Discount Tire Center will include the following noise sources: an air compressor, an air impact wrench, car lifts, tire balancer machines, and a variety hand tools. Discount Tire Centers provide the following mechanical services:

- Oil Changes
- Alignment Services
- Brake Service
- Shocks and Struts
- Suspension Work
- Fluid Exchanges Services
- Battery Service and Replacement
- Air Conditioning Service and Repair
- Tire Repair
- Tire Replacement

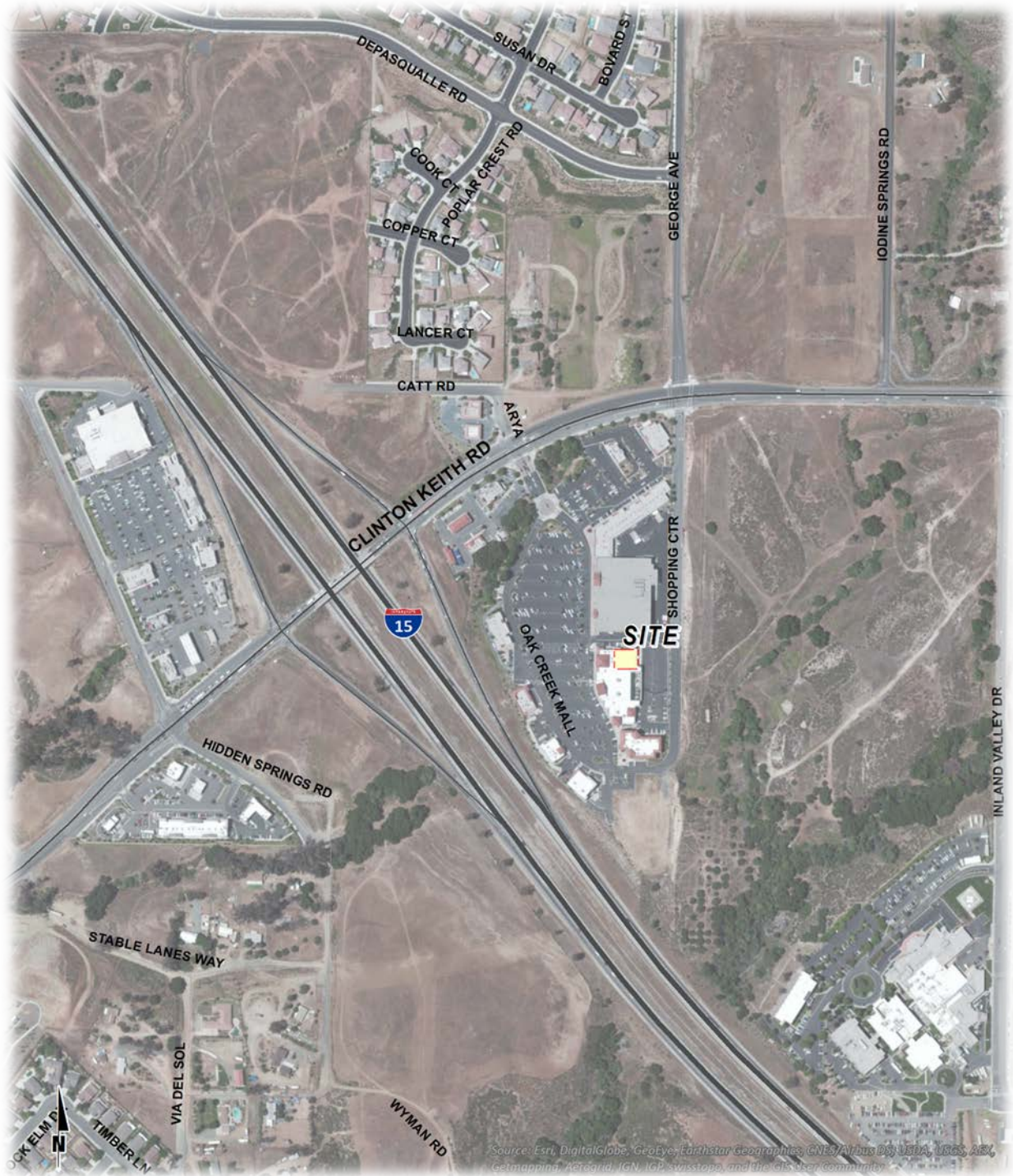
1.3 PROJECT DESIGN FEATURES

According to the June 3, 2015 CUP staff report, the nature of the proposed tire sales/installation business will create noise that will impact adjacent businesses (i.e. Massage Envy, Ace Hardware) (1). In an effort to minimize the potential noise impacts on the adjacent businesses, Discount Tires will be implementing multiple sound attenuation measures to shield and reduce sound impacts emanating from the tire installation areas. Such measures proposed by the applicant include the following:

1. Placing the air compressor to the far east corner of the suite (closer to the rear parking lot);
2. House the air compressor tank in a dry-walled insulated room to help conceal any noise and inhibit noise extending outdoors and to the adjacent suites;
3. Place the compressor on a thick rubber platform to absorb any vibration when in use;
4. The office and storage area will also have insulated walls which will provide an additional sound buffer between the installation area and the adjacent businesses/tenants;
5. The applicant has rearranged their floor plan to designate the first "tire bay" for tire alignments only since this activity is a "low noise" service; and the applicant has also decided to use new "low noise impact guns" for all tire installations to further reduce noise impact on the adjacent businesses.

Further, the applicant has agreed to monitor noise on a regular basis and coordinate with adjacent businesses/tenants to ensure that noise will not be a problem. In addition, the applicant is required to conduct a final noise analysis/study that accounts for the proposed interior improvements to ensure that noise generated from the proposed uses does not exceed 55 dBA along the lease space boundary walls in accordance with Section 9.48.040 of the Wildomar Municipal Code. This noise study satisfies the applicant's requirement to conduct a final noise analysis/study.

EXHIBIT 1-A: LOCATION MAP



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User community

EXHIBIT 1-B: OAK CREEK II RETAIL CENTER

Premises

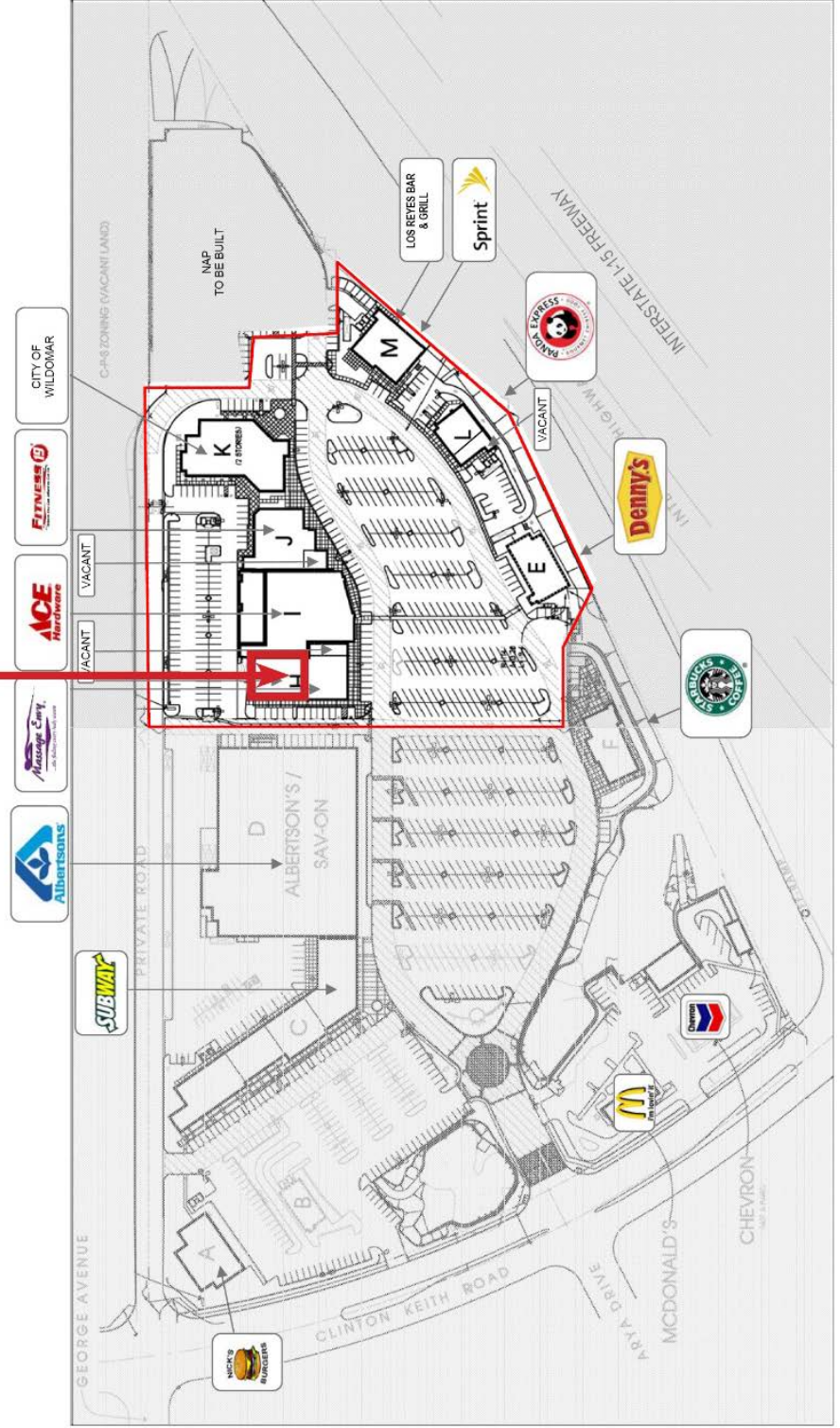
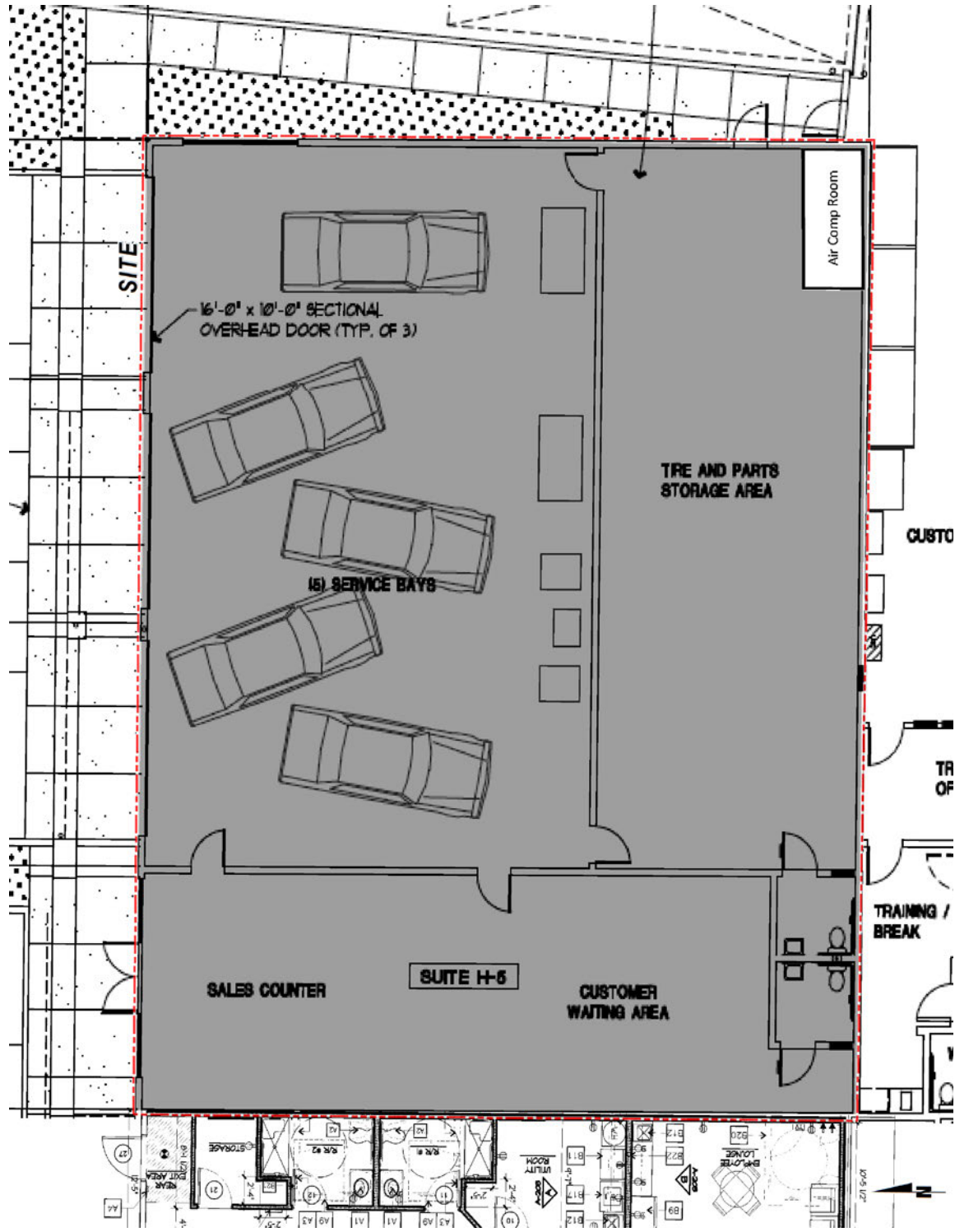


EXHIBIT 1-C: DISCOUNT TIRE CENTER SITE PLAN



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2 FUNDAMENTALS

Sound is what we hear when our ears are exposed to small pressure fluctuations in the air. These fluctuations can be generated by the vibrating movement of a solid object. Sound can be described in terms of three variables: amplitude (loud or soft); frequency (pitch); and time pattern (variability). The amplitude of sound is measured in the universal unit of decibels (dB) on a logarithmic scale, which corresponds to the way in which the human ear responds to loudness. The number of times a fluctuation of air pressure occurs in one second is called a sound's frequency, and the time pattern of sound can be expressed in single-number descriptors based on a given duration of the sound event. (2) Each variable of sound is further described in the sections below.

2.1 AMPLITUDE

Since the range of intensities that the human ear can detect is so large, the scale frequently used to measure intensity is a scale based on multiples of 10, the logarithmic scale. The scale for measuring intensity is the decibel scale. Each interval of 10 decibels indicates a sound energy ten times greater than before, which is perceived by the human ear as being roughly twice as loud. (3) The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at three feet is roughly at 60 dBA, while loud jet engine noises equate to 110 dBA at approximately 100 feet, which can cause serious discomfort. (4) Another important aspect of noise is the duration of the sound and the way it is described and distributed in time. Exhibit 2-A presents a summary of the typical noise levels and their subjective loudness and effects that are described in more detail below.

2.2 FREQUENCY

The frequency of a sound is defined as the number of fluctuations of the pressure wave per second. The unit of frequency is the Hertz (Hz), where one Hz equals one cycle per second. (3) The human ear is not equally sensitive to sound of different frequencies. For instance, the human ear is more sensitive to sound in the higher portion of this range than in the lower, and sound waves below 16 Hz or above 20,000 Hz cannot be heard at all. The upper limit decreases as people become older. To describe the frequency range, sound levels are commonly divided into octave or 1/3 octave bands referred to by their center frequencies. Frequency is important because the acoustics of building materials change with frequency. (5)

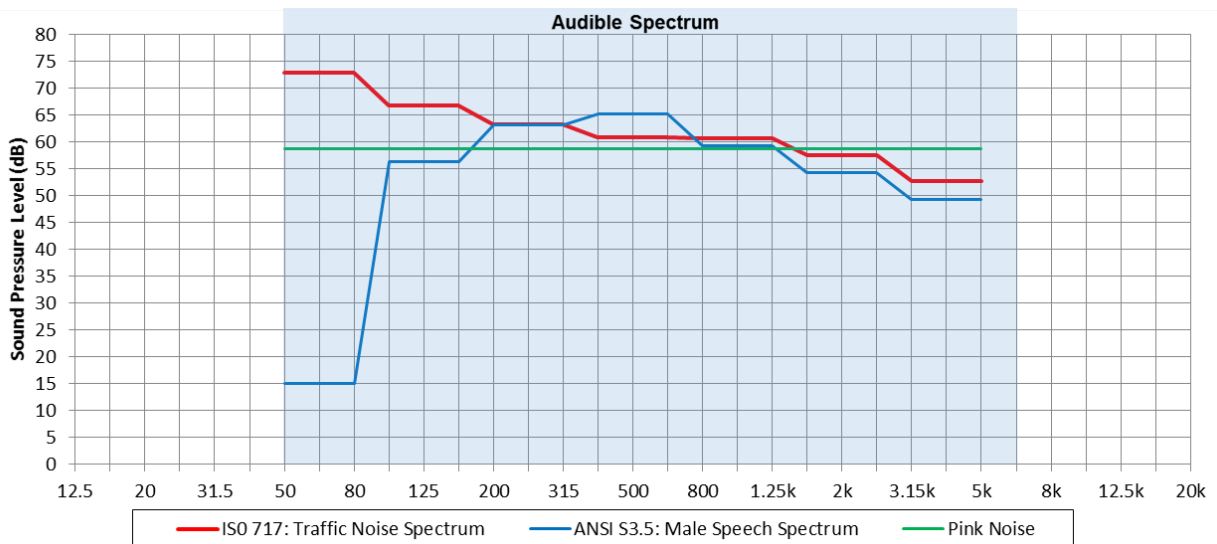
Noise has been simply defined as "unwanted sound." Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise sources by discriminating against very low and very high frequencies of the *audible spectrum*. They are adjusted to reflect only those frequencies which are the most audible to the human ear. Exhibit 2-B shows the spectrum of typical noise levels within the audible A-weighted frequency range. The reference noise sources presented on Exhibit 2-B include traffic noise, the male speech spectrum, and pink noise. (6)

EXHIBIT 2-A: TYPICAL NOISE LEVELS

COMMON OUTDOOR ACTIVITIES	COMMON INDOOR ACTIVITIES	A - WEIGHTED SOUND LEVEL dBA	SUBJECTIVE LOUDNESS	EFFECTS OF NOISE
THRESHOLD OF PAIN		140	INTOLERABLE OR DEAFENING	HEARING LOSS
NEAR JET ENGINE		130		
		120		
JET FLY-OVER AT 300m (1000 ft)	ROCK BAND	110		
LOUD AUTO HORN		100	VERY NOISY	SPEECH INTERFERENCE
GAS LAWN MOWER AT 1m (3 ft)		90		
DIESEL TRUCK AT 15m (50 ft), at 80 km/hr (50 mph)	FOOD BLENDER AT 1m (3 ft)	80	LOUD	
NOISY URBAN AREA, DAYTIME	VACUUM CLEANER AT 3m (10 ft)	70		
HEAVY TRAFFIC AT 90m (300 ft)	NORMAL SPEECH AT 1m (3 ft)	60	MODERATE	SLEEP DISTURBANCE
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50		
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40	FAINT	NO EFFECT
QUIET SUBURBAN NIGHTTIME	LIBRARY	30		
QUIET RURAL NIGHTTIME	BEDROOM AT NIGHT, CONCERT HALL (BACKGROUND)	20		
	BROADCAST/RECORDING STUDIO	10	VERY FAINT	
LOWEST THRESHOLD OF HUMAN HEARING	LOWEST THRESHOLD OF HUMAN HEARING	0		

Source: Environmental Protection Agency Office of Noise Abatement and Control, Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (EPA/ONAC 550/9-74-004) March 1974.

EXHIBIT 2-B: AUDIBLE SPECTRUM OF TYPICAL NOISE LEVELS



Source: INSUL Sound Insulation Prediction Software (v8.0.4) Marshall Day Acoustics, 2014

2.3 TIME PATTERN

Environmental noise descriptors are generally based on averages, rather than instantaneous, noise levels. The most commonly used figure is the equivalent level (Leq). Equivalent sound levels are not measured directly but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level (Leq) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period and is commonly used to describe the “average” noise levels within the environment.

To describe the time-varying character of environmental noise, the statistical or percentile noise descriptors L_{50} , L_{25} , L_8 and L_2 , are commonly used. The percentile noise descriptors are the noise levels equaled or exceeded during 50 percent, 25 percent, 8 percent and 2 percent of a stated time. Sound levels associated with the L_2 and L_8 typically describe transient or short-term events, while levels associated with the L_{50} describe the steady state (or median) noise conditions. While the L_{50} describes the mean noise levels occurring 50 percent of the time, the Leq accounts for the total energy (average) observed for the entire hour. Therefore, the Leq noise descriptor is generally 1-2 dBA higher than the L_{50} noise level.

2.4 SOUND PROPAGATION

When sound propagates over a distance, it changes in level and frequency content. Sound from a localized source (i.e., a stationary point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source.

2.5 NOISE CONTROL

Noise control is the process of obtaining an acceptable noise environment for a particular observation point or receiver is by controlling the noise source, transmission path, receiver, or all three. This concept is known as the Source-Path-Receiver concept (SPR). (7) In general, noise control measures can be applied to any and all of these three elements.

2.5.1 SOURCE

The source may be one or any number of mechanical devices radiating noise or vibratory energy, such as several appliances or machines in operation at a given time. Basically, the best way of controlling noise at its source is through the selection of quiet equipment.

2.5.2 PATH

The most obvious transmission path by which noise travels is simply a direct line-of-sight path between the source and the receiver; for example, aircraft flyover noise reaches a receiver on the ground by the direct line-of-sight path through the air. After reducing noise at the source, additional noise reduction may be attained by constructing barriers in the transmission path to block or reduce the flow of sound energy. A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of

attenuation provided by shielding depends on the size of the object and the frequency content of the noise source.

2.5.3 RECEIVER

The receiver may be a single person, a classroom of students, or a suburban community near an airport or expressway. One way to control noise at the receiver is by minimizing the duration of continuous exposure to the receiver. Additional methods of controlling noise at the receiver may include the use hearing protection, or through masking of specific noise sources.

2.6 TRANSMISSION LOSS

Sound Transmission Loss (TL) is the physical measure which describes the sound insulation value of a construction system or component. The TL is expressed in decibels, and the greater the sound insulation, the higher the TL value and the less sound will be transmitted through the building material. (8) TL values are determined for different frequency ranges and give an indication of how a building product or assembly respond to sound at different frequencies. Since working with a series of TL measurements for different frequencies can be cumbersome, a single number descriptor based on the TL values has been developed. The rating method is called the Sound Transmission Class (STC). (9) As with the TL, the greater the STC rating for a construction method or component, the higher the sound insulation. Like all single number ratings, STC has its limitations, first, it does not give any idea as the magnitudes and locations of deficiencies in the TL of a panel. Second, it is limited to the 125 Hz to 4k Hz region – which includes the frequency range of speech (500 Hz to 2k Hz), and is based A-weighted sound levels. (5)

2.7 NOISE LEVEL REDUCTION

A large object or barrier in the path between a noise source and a receiver can substantially attenuate or reduce noise levels at the receiver. The amount of noise level reduction provided by shielding depends on the size of the object and the frequency content of the noise source. Natural terrain features (e.g., hills and dense woods) and man-made features (e.g., buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receiver specifically to reduce noise. A barrier that breaks the line of sight between a source and a receiver will typically result in a minimum 5 dB of noise reduction.

Building construction noise reductions can vary depending on construction materials and techniques. Standard construction practices typically provide approximately 15 dBA exterior-to-interior noise reductions for building façades, with windows open, and approximately 20 to 25 dBA with windows closed. Compliance with current Title 24 energy efficiency standards, which require increased building insulation and inclusion of an interior air ventilation system to allow windows on noise-impacted façades to remain closed. Exterior-to-interior noise reductions typically average approximately 25 dBA. The absorptive characteristics of interior rooms, such as carpeted floors, draperies, and furniture, can also provide further reductions in interior noise levels.

2.8 COMMUNITY RESPONSE TO NOISE

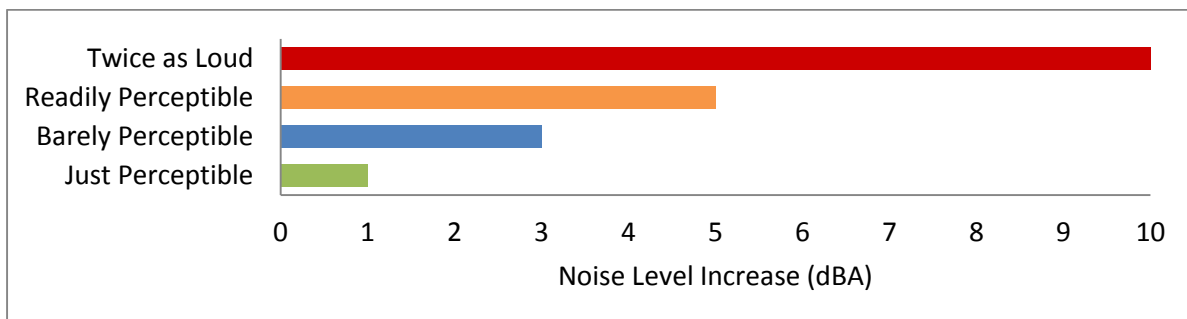
Community responses to noise may range from registering a complaint by telephone or letter, to initiating court action, depending upon each individual's susceptibility to noise and personal attitudes about noise. Several factors are related to the level of community annoyance including:

- Fear associated with noise producing activities;
- Socio-economic status and educational level;
- Perception that those affected are being unfairly treated;
- Attitudes regarding the usefulness of the noise-producing activity;
- Belief that the noise source can be controlled.

Approximately ten percent of the population has a very low tolerance for noise and will object to any noise not of their making. Consequently, even in the quietest environment, some complaints will occur. Another twenty-five percent of the population will not complain even in very severe noise environments. Thus, a variety of reactions can be expected from people exposed to any given noise environment. (10) Surveys have shown that about ten percent of the people exposed to traffic noise of 60 dBA will report being highly annoyed with the noise, and each increase of one dBA is associated with approximately two percent more people being highly annoyed. When traffic noise exceeds 60 dBA or aircraft noise exceeds 55 dBA, people may begin to complain. (10)

Despite this variability in behavior on an individual level, the population as a whole can be expected to exhibit the following responses to changes in noise levels as shown on Exhibit 2-C. An increase or decrease of 1 dBA cannot be perceived except in carefully controlled laboratory experiments, a change of 3 dBA are considered *barely perceptible*, and changes of 5 dBA are considered *readily perceptible*. (11)

EXHIBIT 2-C: NOISE LEVEL INCREASE PERCEPTION



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3 REGULATORY SETTING

To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the federal government, the State of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise. In most areas, automobile and truck traffic is the major source of environmental noise. Traffic activity generally produces an average sound level that remains fairly constant with time. Air and rail traffic, and commercial and industrial activities are also major sources of noise in some areas. Federal, state, and local agencies regulate different aspects of environmental noise. Federal and state agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies.

3.1 STATE OF CALIFORNIA NOISE REQUIREMENTS

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that includes a Noise Element which is to be prepared according to guidelines adopted by the Governor's Office of Planning and Research. (12) The purpose of the Noise Element is to *limit the exposure of the community to excessive noise levels*. In addition, the California Environmental Quality Act (CEQA) requires that all known environmental effects of a project be analyzed, including environmental noise impacts.

3.2 STATE OF CALIFORNIA GREEN BUILDING STANDARDS CODE

The 2014 State of California's Green Building Standards Code contains mandatory measures for non-residential building construction in Section 5.506 on Environmental Comfort. (13) These noise standards are applied to new construction in California for the purpose of controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when non-residential structures are developed in areas where the exterior noise levels exceed 65 dBA CNEL, such as within a noise contour of an airport, freeway, railroad, and other areas where noise contours are not readily available. If the development falls within an airport or freeway 65 dBA CNEL noise contour, the combined sound transmission class (STC) rating of the wall and roof-ceiling assemblies must be at least 50. For those developments in areas where noise contours are not readily available and the noise level exceeds 65 dBA Leq for any hour of operation, a wall and roof-ceiling combined STC rating of 45, and exterior windows with a minimum STC rating of 40 are required (Section 5.507.4.1).

3.3 CITY OF WILDOMAR NOISE ELEMENT

The City of Wildomar was incorporated as a City in October of 2008. Through the incorporation process, the City adopted the Riverside County General Plan Noise Element to control and abate environmental noise, and to protect the citizens of the City of Wildomar from excessive exposure to noise. (14) The Noise Element adopted from the County of Riverside at incorporation specifies the maximum allowable exterior noise levels for new developments impacted by stationary noise sources. The City of Wildomar has identified exterior noise limits to control operational noise impacts associated with the development of the proposed Oak Creek Discount Tire Center Project. Table N-2 of the Noise Element *provides the City's Stationary Source Land Use Noise Standards* that are limited to residential land use.

3.4 CITY OF WILDOMAR NOISE ORDINANCE

The most effective method to control community noise impacts from non-transportation stationary noise sources (such as an air compressor, an air impact wrench, car lifts, tire balancer machines, and a variety hand tools) is through the application of a noise control ordinance. To analyze noise impacts originating from a designated location or private property such as the Project site, stationary noise sources such as the operational activities associated with the Project are evaluated against standards established under the City's Municipal Code. (15) The City of Wildomar Noise Ordinance is included in Appendix 3.1.

The City of Wildomar Noise Ordinance, included in the Municipal Code (Chapter 9.48), establishes the maximum permissible noise level that may intrude into a neighboring property. The Noise Ordinance (Section 9.48.040) establishes the exterior noise level criteria for properties affected by operational (stationary) noise sources. For Retail Commercial (CR) properties, the exterior noise level shall not exceed 65 dBA Leq during daytime hours (7:00 a.m. to 10:00 p.m.) and 55 dBA Leq during the nighttime hours (10:00 p.m. to 7:00 a.m.) Consistent with the conditions of approval, this analysis has been prepared to satisfy the 55 dBA noise level criteria at the lease space boundary walls in accordance with Section 9.48.040 of the Wildomar Municipal Code.

4 MEASURED BARRIER PERFORMANCE

To evaluate the potential for the Project to impact the adjacent businesses, the performance of the existing demising wall barrier was measured. This section describes the existing background noise level measurements taken within the neighboring unit to the Project site, occupied by Massage Envy. To describe the existing barrier performance or transmission loss (TL) of the demising wall between the units, 1/3 octave band frequency noise level measurements were taken within the Massage Envy both without and with a simulated noise source. To measure the barrier performance, a total of five short-term noise level measurements were collected at the locations shown on Exhibit 4-A. The noise level measurements were collected by Urban Crossroads, Inc. on Thursday, June 18th, 2015. Appendix 4.1 includes study area photos.

4.1 MEASUREMENT PROCEDURE AND CRITERIA

To describe the existing barrier performance, noise levels were measured during typical weekday conditions within the Massage Envy and Discount Tire units. The short-term interior noise level measurements were collected using a Mezzo Type 1 precision microphone with a ½" prepolarized MPA 231 microphone from BSWA Technology, Inc. (Serial Number 490731). The Mezzo meter is capable of measuring the frequency spectrums of 1/1 Octave (16 Hz to 16k Hz) and 1/3 Octave (12.5 Hz to 20k Hz). The sound level meter was calibrated using a Larson-Davis calibrator, Model CAL 200. The sound level meter and microphone was equipped with a windscreen during all measurements. All noise level measurement equipment satisfies the American National Standards Institute (ANSI) standard specifications for sound level meters ANSI S1.4-2014/IEC 61672-1:2013. (16)

4.2 BARRIER PERFORMANCE ANALYSIS METHODS

To determine the existing performance of the demising wall (barrier) between the Discount Tire unit and the Massage Envy tenant, noise level measurements were taken at each location, as shown on Exhibit 4-A, within Massage Envy without and with a simulated Project noise level of 80 dBA of pink noise. Pink noise contains all the frequencies on the audible spectrum for human hearing, however, the power per hertz in pink noise decreases as the frequency increases. (17) The use of pink noise provides higher levels of the lower frequencies along the audible spectrum. Low frequency noise levels travel further than high frequency due to their longer distance between wave peaks, or wavelengths. This makes attenuating low frequency noise levels more difficult than that of the higher frequencies, as the noise attenuator (e.g. barrier, etc.) must block the lower frequencies to be effective.

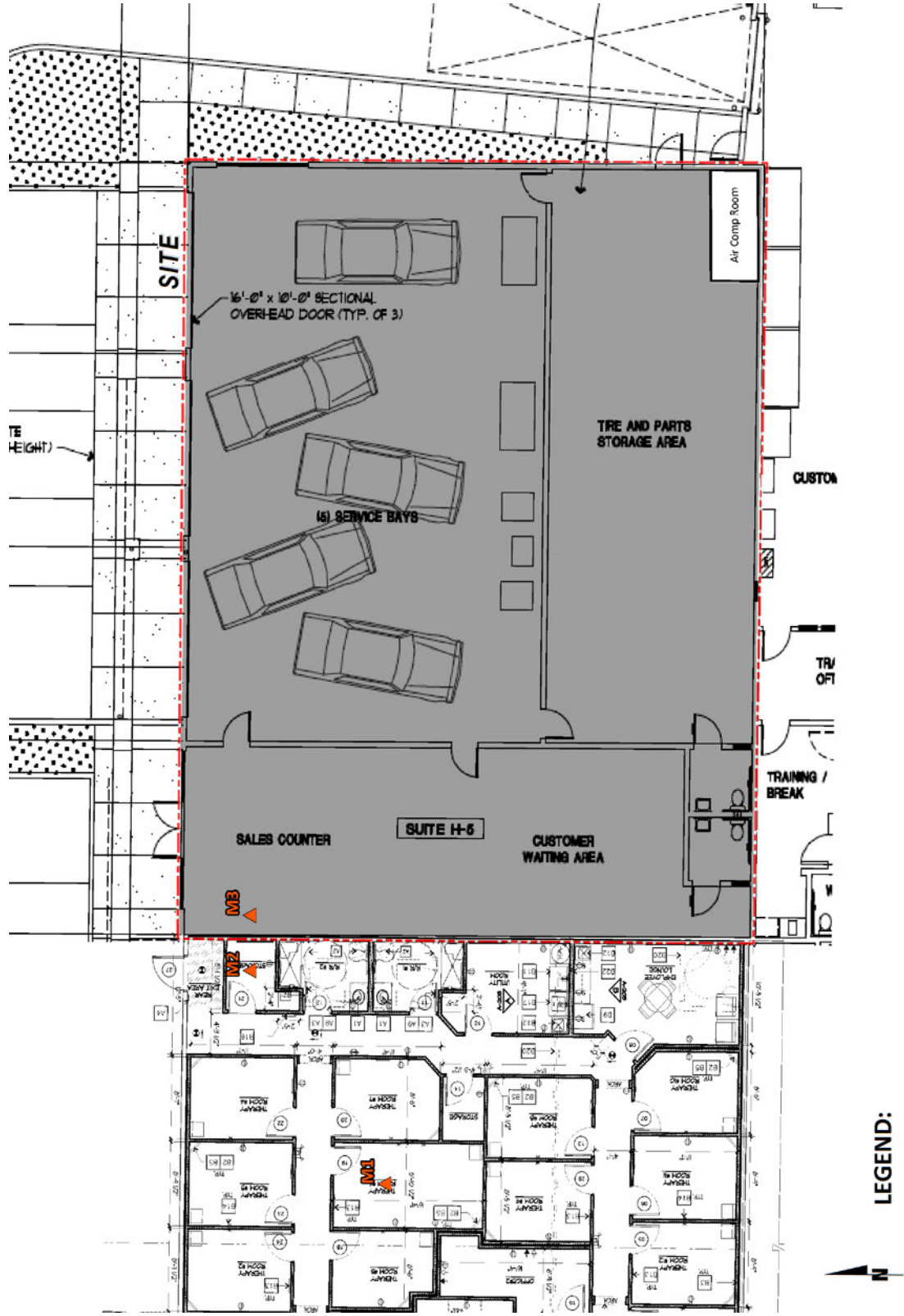
The simulated Project-source test signal consisted of 18 contiguous 1/3 octave bands of pink noise. By using a reference sound level (pink noise) with high levels of lower frequencies, the demising wall's ability to attenuate the future Discount Tire operational noise levels can be assessed. It is important to note that the pink noise source was located in the future lobby of the Discount Tire unit, adjacent to the demising wall to represent worst-case conditions, in reality the Project operational noise sources would be located behind an additional interior wall in the garage portion of the unit. Further, the Massage Envy space has been designed with noise

considerations in mind, with all the storage and utility, wash room, and employee areas located on the demising wall with the therapy rooms in the center. The noise level in both the source and receiving room are then measured and the difference between them is calculated, resulting in what is known as the noise reduction (NR) of the demising wall. The results of this analysis are presented later in this chapter, and represent the existing measured NR performance of the demising wall between the Massage Envy and Discount Tire units.

4.3 NOISE MEASUREMENT LOCATIONS

To describe the existing noise environment within the neighboring Massage Envy unit, it is not necessary to collect measurements at each individual room, because each receiver measurement represents a group of rooms that share acoustical equivalence. In other words, the area represented by the receiver shares similar shielding and geometric relationship to the reference noise source. Receivers represent a location of noise sensitive areas and are used to estimate the future noise level impacts. Collecting reference ambient noise level measurements at the nearby sensitive receiving rooms allows for a comparison of the before and after Project noise levels.

EXHIBIT 4-A: NOISE MEASUREMENT LOCATIONS



4.4 NOISE MEASUREMENT RESULTS

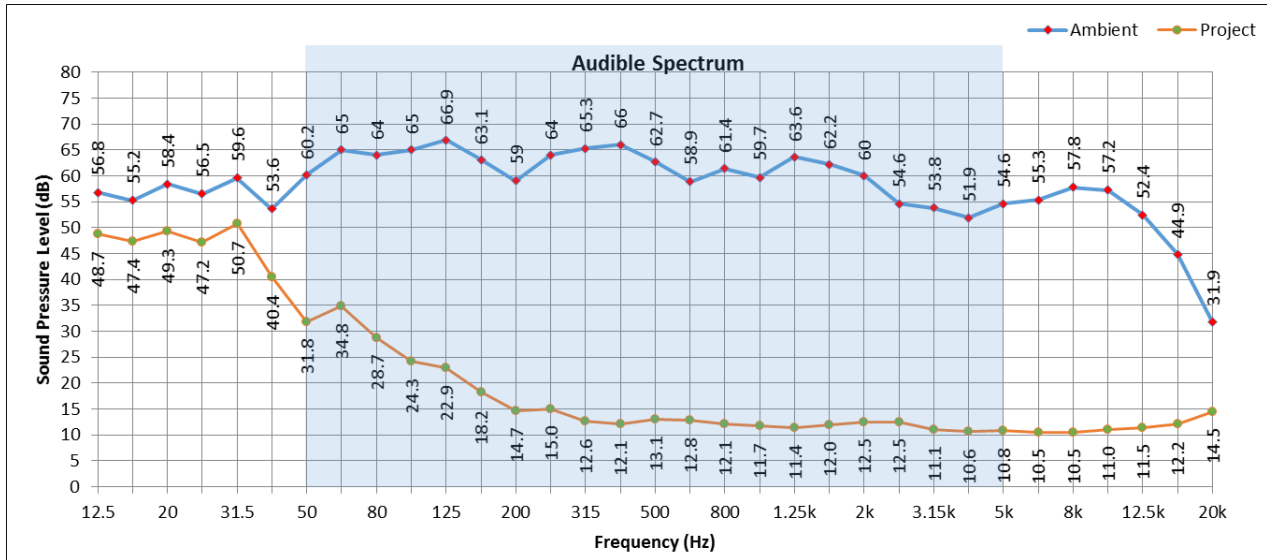
To describe the existing ambient noise environment, the noise measurements presented below focus on the average or equivalent sound levels (Leq). The equivalent sound level (Leq) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. Table 5-1 identifies the noise levels at each noise level measurement location and the duration of each measurement. Appendix 4.2 provides a summary of the existing hourly ambient noise levels described below:

M1 Location M1 represents the (without simulated noise source) existing Therapy Room #9 within the neighboring Massage Envy space. Based on the noise level measurement of the interior background ambient noise conditions, the measured noise level approached 42.7 dBA Leq. This interior background ambient noise level includes typical background noise sources within Massage Envy therapy rooms including spa music that can be adjusted for each individual therapy room, ventilation from the central air conditioning unit, and a small corded room fan.

Measurements taken with the simulated 80 dBA pink noise source in the Discount Tire lobby produced a measured interior noise level of 24.1 dBA Leq. All background ambient noise sources (spa music, central air conditioning and room fans) were removed during the simulated conditions noise level measurements. The only audible noise source at the time of the simulated noise source measurement was background voices from a neighboring therapy room. In effect, the typical interior background ambient noise conditions in the neighboring Massage Envy therapy rooms were associated with the spa music, air conditioning, and room fan were higher than the measurements taken with the simulated noise source and the background ambient noise sources (spa music, central air conditioning and room fans) removed.

Also, it is important to note that noise levels of 34.2 dBA begin to extend beyond the lower limits of the microphones ability to measure community and environmental noise level impacts.. This shows that the existing interior background ambient noise conditions (spa music, air conditioning, and fan) within Therapy Room #9 were far greater than the measurement with the simulated Project (80 dBA pink noise in the Discount Tire Center lobby) operational noise. Exhibit 4-B shows the frequency spectrum of both measurements taken at location M1.

EXHIBIT 4-B: THERAPY ROOM 9 (LOCATION M1) FREQUENCY CONTENT



M2 Location M2 represents the interior background ambient noise conditions within the Storage Room, strategically located next to the demising wall to the Discount Tire Center unit. The background ambient noise level measurement, without the simulated Project noise source, resulted in an energy-average noise level of 28.9 dBA Leq. With the addition of the simulated pink noise source of 80 dBA, located on the other side of the demising wall, the noise level measurement within the Storage Room approached 33.6 dBA Leq.

This shows that the simulated noise source measurement conditions produced a noise reduction of approximately 46.4 dBA from the demising wall to the Massage Envy Storage Room, immediately adjacent to the Project. It is important to note that the noise source was located in the future lobby of the Discount Tire Center unit, adjacent to the demising wall to represent worst-case conditions, and in reality the Project operational noise sources would be located behind a second interior wall in the garage portion of the unit. Exhibit 4-C shows the frequency content of both measurements taken at location M2.

Table 4-1 provides the (energy average) noise levels used to describe the without and with Project conditions at each measurement location within the Massage Envy unit. These energy average noise levels represent the average of all noise levels observed during these time periods expressed as a single number. Appendix 4.2 provides a summary of the noise levels for each measurement location as well as the 1/3 octave band frequencies of each measurement.

EXHIBIT 4-C: STORAGE ROOM (LOCATION M2) FREQUENCY CONTENT

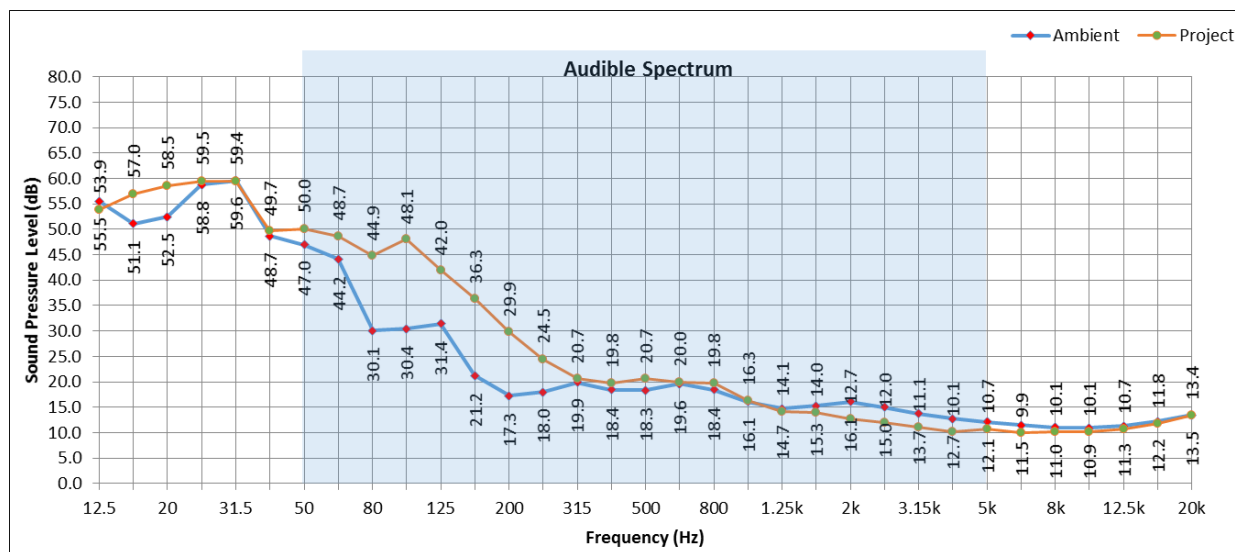


TABLE 4-1: AMBIENT NOISE LEVEL MEASUREMENTS

ID	Location	Noise Source	Duration (hh:mm:ss)	Distance From Source (Feet)	Noise Source Height (Feet)	Average Noise Level (dBA Leq) ¹
M1	Therapy Room 9	Existing/Current Interior Background Ambient Noise Conditions	0:03:40	0'	0'	42.7
		80 dBA pink noise source in the adjacent Discount Tire Lobby	0:01:15	30'	3'	24.1
M2	Storage Room	Existing/Current Interior Background Ambient Noise Conditions	0:01:00	0'	0'	28.9
		80 dBA pink noise source in the adjacent Discount Tire Lobby	0:01:00	8'	3'	33.6

¹ As measured by Urban Crossroads, Inc. on Thursday, June 18, 2015.

4.5 MEASURED BARRIER PERFORMANCE RESULTS

Based on the existing interior background ambient noise level measurements taken at locations M1 and M2, the noise levels without the simulated Project noise, ranged from 28.9 to 42.7 dBA Leq. When measured with the simulated 80 dBA of pink noise from the Project site lobby area, the noise levels at measurement locations M1 and M2 ranged from 24.1 to 33.6 dBA Leq. The analysis shows that the indoor background ambient noise conditions at location M1, within Therapy Room #9, were primarily influenced by the existing noise sources within the Massage Envy space. The 80 dBA simulated noise source placed in the Discount Tire Center lobby was simply not audible in Therapy Room #9 even without all the typical background noise levels (spa music, air conditioning, and room fan) turned off.

The indoor background ambient noise conditions at measurement location M2, within the Massage Envy Storage Room adjacent to the demising wall, experienced noise levels of 28.9 dBA Leq. With the simulated Project pink noise of 80 dBA, the noise levels approached 33.6 dBA Leq. Location M2 was the closest measurement within Massage Envy to the simulated source in the neighboring Project unit, and experienced up to 46.4 dBA of noise reduction. This suggests that the Discount Tire Center may contribute a noise level of 4.7 dBA Leq in the storage room of Massage Envy. It is important to note that the simulated noise source was located in the future lobby of the Discount Tire Center unit, adjacent to the demising wall to represent worst-case conditions, and in reality the Project operational noise sources would be located behind a second interior wall in the garage area with the air compressor enclosed in the eastern corner to minimize potential noise levels.

Based on the measured barrier performance analysis, the existing demising wall adequately reduced the 80 dBA simulated Project noise source to below the City of Wildomar 55 dBA Leq noise level standard. This shows that the noise sources associated with the Oak Creek Discount Tire Center, such as an air compressor, an air impact wrench, car lifts, tire balancer machines, and a variety hand tools, will not exceed the City of Wildomar 55 dBA Leq noise level standard within the neighboring Massage Envy..

This analysis demonstrates that the existing noise-related design features of both the Massage Envy unit and demising wall are adequate to satisfy the conditions of approval and City of Wildomar 55 dBA Leq noise level standard. The Massage Envy space was designed with the non-sensitive rooms (e.g. storage room, wash room, and employee areas) along the demising wall with the therapy rooms located in the center of the space away from Discount Tire Center. Further, the demising wall includes the installation of ¾" QuietRock 510 sound board to reduce the noise levels within the unit.

To minimize the potential noise impacts on the adjacent businesses, the Discount Tire Center has also planned multiple sound attenuation measures to shield and reduce sound impacts emanating from the tire installation areas. Such measures proposed by the Applicant include the installation of ¾" QuietRock 510 as an additional layer to the existing demising wall within the Discount Tire Center lobby. . Further, the Applicant has strategically arranged their floor plan to designate the first "tire bay" for tire alignments only since this activity is a "low noise" service; and the applicant has also decided to use new "low noise impact guns" for all tire installations to further reduce noise impact on the adjacent businesses. The added attenuation provided by these noise-reducing design features is further discussed in Section 5.

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5 PREDICTED BARRIER PERFORMANCE

This section shows the existing and future barrier performance of the demising wall between the Massage Envy and Discount Tire units, and describes their performance in reducing interior noise levels based on typical noise levels associated with the future Project operational noise sources.

5.1 INSUL PREDICTION MODEL

To predict the barrier performance of the existing demising wall and the Project applicant's planned installation of additional noise attenuation features, the Transmission Loss characteristics for each of the wall assemblies using plan details were estimated using INSUL Sound Insulation Prediction Version 8.04. (6) INSUL is a model-based computer program, developed by Marshall Day Acoustics for predicting the Transmission Loss (TL) performance of single, double and triple panel walls, floors, roofs, ceilings and windows in 1/3 octave bands. It is acoustically based on theoretical models that require only minimal material information that can make reasonable estimates of the TL and sound transmission class (STC) for use in sound insulation calculation. It models individual materials using the simple mass law and coincidence frequency approach and can model more complex assembly partitions as well. It has evolved over several versions into an easy to use tool and has refined its theoretical models through continued comparison with laboratory tests to provide acceptable accuracy for a wide range of construction materials. INSUL model performance comparisons with laboratory test data show that the model generally predicts the performance of a given assembly within 3 STC points.

5.2 NOISE REDUCTION METHODOLOGY

The noise insulation provided by a building shell is dependent on the characteristics of the noise source, including loudness, frequency, duration, and angle of incidence, the transmission characteristics of the structure, and the sound absorption characteristics within the receiving room. Noise reduction is the performance of the system as a whole and represents the quantitative measure of sound isolation between spaces. The NR between two spaces, such as from the exterior to the interior of a dwelling, depend on the TL of the various components in the separating wall, the area of the separating wall, and the acoustical absorption in the receiving room. The amount of sound energy transmitted through a wall, roof or floor can be limited in several ways including the elimination of all air infiltration gaps, openings, and possible flanking paths. Flanking noise degrades the performance of a partition by going over or around it.

Some materials reflect more of the incident sound, converting less of it into vibration energy. The mass of the exterior and interior panels influence how much sound will pass through them. The more mass a structural element has the more energy it takes to set it into vibration, and therefore, adding weight to a wall or ceiling by attaching a gypsum board layer will make the assembly pass less sound. (8) The concept that the transmission loss of a barrier is directly related to the barrier's surface mass (pounds per square foot) is known as mass law. The law specifically states that for each doubling of surface mass, or frequency, there is a 6 dB increase in the transmission loss of the barrier.

Using the general approach outlined in ASTM E336-14 *Standard Test Method for Measurement of Airborne Sound Attenuation between Rooms in Buildings*, TL data can be expressed as a single-number rating called the Sound Transmission Class (STC), which is often used for specification purposes. (18) The Massage Envy Tenant Improvement Plans prepared by Creative Heights Designs, Inc. provide floor plans, ceiling plans and wall assembly details. The floor and ceiling plans are included in Appendix 5.1. The Massage Envy shared wall assembly details are shown on Exhibit 5-A. The wall assembly details indicated that Massage Envy tenant improvements did not rely solely on the existing building structure demising wall and instead constructed a second interior wall separated using ¾" QuietRock 510 sound damping gypsum panel.

5.2.1 SOUND TRANSMISSION LOSS

The *composite* sound transmission loss (TL) of an assembly can be calculated to determine the transmission loss achieved by an assembly composed of multiple elements. This can be achieved by examining the total area of the partition, the area of the penetration (such as a window, door, or hole in the partition), and the transmission loss of each element. Since the sound transmitted between rooms often involves several building components, it is necessary to consider the TL of each separate component to calculate the NR.

5.2.2 SOUND TRANSMISSION CLASS

STC is a single number rating calculated in accordance with ASTM E413, using values of sound transmission loss. It provides an estimate of the sound performance of a partition, window, or door in sound insulation problems. STC is appropriate as an initial screening device. Final selection of the barrier materials should be based on analyzing the entire frequency spectrum and comparing it with the anticipated type of noise source. (17)

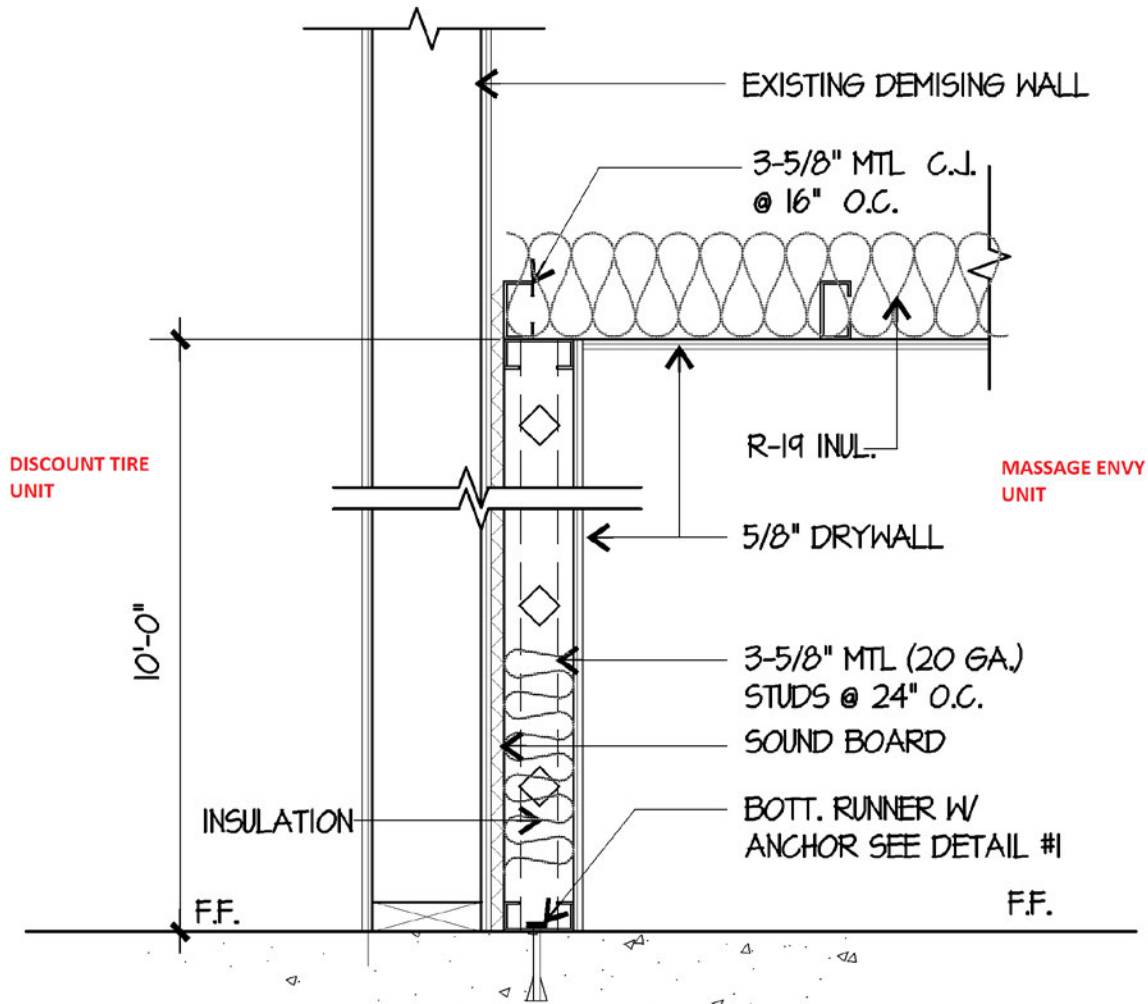
5.3 NOISE REDUCTION CALCULATIONS

To determine the noise reduction (NR) of the existing demising wall and predict the future NR with the planned attenuation measures provided by the Project applicant, the INSUL prediction model was used. The existing building materials of the Massage Envy demising wall are shown on Exhibit 5-A, and detail the use of sound board within the existing structure. This soundboard represents a single layer of ¾" QuietRock 510 and was used during construction to reduce the noise levels within the Massage Envy unit. Further, Exhibit 5-A shows that the demising wall was constructed to wrap around the top of the wall to fully enclose the ceiling of the Massage Envy unit as well to provide sound isolation. The information provided by the Massage Envy Tenant Improvement Plans prepared by Creative Heights Designs, Inc. was used to input the demising wall parameters into the INSUL program. The floor and ceiling plans are included in Appendix 5.1.

Based on the results of the INSUL analysis, the existing demising wall provides an STC rating of 48. For future conditions, an additional sound board, ¾" QuietRock 510, was added to the Discount Tire side of the demising wall to predict the NR of the wall under future conditions. The resulting STC rating under future conditions was estimated with an STC rating of 55. The

additional TL calculations for each frequency band are included in Appendix 5.2 for both existing and future wall conditions.

EXHIBIT 5-A: EXISTING DEMISING WALL DETAIL



5.4 OPERATIONAL NOISE SOURCES

The operational noise sources associated with the proposed Project are expected to include an air compressor, an air impact wrench, car lifts, tire balancer machines, and a variety hand tools. Based on information provided by the applicant this analysis assumes the Project would be operational during the typical business hours of 8:00 a.m. to 6:00 p.m., seven days per week. These hours are typically reduced on Saturdays and Sundays. Discount Tire Centers provide the following mechanical services:

- Oil Changes
- Alignment Services
- Brake Service
- Shocks and Struts

- Suspension Work
- Fluid Exchanges Services
- Battery Service and Replacement
- Air Conditioning Service and Repair
- Tire Repair
- Tire Replacement
- Radiator Replacement

5.5 REFERENCE NOISE LEVELS

To estimate the Project operational noise impacts, reference noise level measurements were collected from similar types of activities at two existing Discount Tire Center locations to represent the noise levels expected with the development of the proposed Project. It is important to recognize that these reference noise levels overstate the noise levels expected at the Oak Creek Discount Tire Center with the Project design features identified in the June 3, 2013 CUP staff report outlined in Section 1.3 of this report. The reference noise levels are intended to describe the expected air compressor, air impact wrench, car lifts, tire balancer machines, and a variety hand tools noise sources. To estimate the Project operational noise impacts at the neighboring Massage Envy unit, the following seven reference noise level measurements were collected from existing Discount Tire Center locations containing similar operational noise sources, as shown on Table 5-1. Appendix 5.3 includes reference noise source photos for each location, and Appendix 5.4 includes the reference noise level measurement worksheets.

5.5.1 LAKE FOREST DISCOUNT TIRE CENTER

On Friday, June 19th, 2015, Urban Crossroads, Inc. collected short-term operational noise level measurements at the Discount Tire Center located at 22482 Muirlands Boulevard in the City of Lake Forest. The measurements taken at the Lake Forest Discount Tire Center represent typical weekday activities including noise sources such as the lobby TV, air compressor, air impact wrench, car lift, and rotary car lift. The noise levels measured for the reference noise level measurements described below are provided on Table 5-1.

Lobby TV

The reference lobby TV measurement was taken within the Lake Forest Discount Tire Center waiting room and includes noise from the lobby TV and coffee machine. The reference measurements taken over a one-minute period in the waiting room resulted in a combined noise level of 61.0 dBA Leq at a reference distance of five feet and an eight-foot high noise source height.

Air Compressor

A reference measurement was taken of the air compressor within the garage of the Lake Forest Discount Tire Center. The results of the measurement showed a noise level of 81.1 dBA Leq over a one-minute period at a distance of three feet and at a noise source height of two feet.

Air Impact Wrench

The air impact wrench at the Lake Forest Discount Tire Center was measured at a noise level of 78.7 dBA Leq over a one-minute period. The reference distance to the air impact wrench was 15 feet at a noise source height of five feet.

Car Lift

An additional reference noise level measurement was taken of the car lift within the Discount Tire Center garage. The thirty-four second reference measurement results showed a noise level of 75.1 dBA Leq at distance of 15 feet and a noise source height of seven feet.

Rotary Car Lift

The rotary car lift was measured over a twenty-three second period at the Lake Forest Discount Tire Center. The resulting noise level was 64.2 dBA Leq at a reference distance of 10 feet and a noise source height of seven feet.

5.5.2 RANCHO SANTA MARGARITA DISCOUNT TIRE CENTER

Additional reference noise level measurements were taken on Friday, June 19th, 2015, by Urban Crossroads, Inc. at the Discount Tire Center located at 23051 Antonio Parkway in the City of Rancho Santa Margarita (RSM). The measurements taken at the RSM Discount Tire Center represent typical weekday activities including noise sources such as tire balancing and the air wrench, phone, and compressor operating simultaneously. The noise levels measured for each reference noise level measurement are provided on Table 5-1.

Tire Balancing

A reference noise level measurement was taken at the RSM Discount Tire Center over a one-minute and twenty-second period to describe the tire balancing activities at the proposed Project. The reference noise level was measured at 73.0 dBA Leq at a distance of three feet and a noise source height of three feet.

Air Wrench, Phone, and Compressor

To describe the noise levels when multiple sources are operating simultaneously within a Discount Tire Center such as the Project, a reference noise level measurement was taken at the RSM Discount Tire Center to describe the air wrench, phone, and compressor noise sources. Over a one-minute period of activity, the noise level at a distance of five feet was measured at 80.6 dBA Leq, with a noise source height of five feet.

5.5.3 WORST-CASE REFERENCE NOISE LEVELS

To describe the worst-case Project-only operational noise levels associated with the Oak Creek Discount Tire Center, this analysis relies on a reference noise level of 80.6 dBA Leq representing the air wrench, phone ringing, and compressor operating simultaneously. While specific noise levels at the Project site will depend on the actual intensity of operations during normal operating hours, the reference noise level of 80.6 dBA Leq is used to describe the peak Project operational

noise activity since it represents similar operational characteristics to the Project. However it is important to recognize the noise levels from the Oak Creek Discount Tire Center are expected to be reduced through the additional noise-related design considerations outlined in Section 1.3 including: the location of the air compressor within an enclosed room furthest from the demising wall, the additional QuietRock sound board for the lobby and demising walls, and the use of a low noise impact wrench.

TABLE 5-1: REFERENCE NOISE LEVEL MEASUREMENTS

Location	Noise Source	Duration (h:mm:ss)	Distance From Source (Feet)	Noise Source Height (Feet)	Average Noise Level (dBA Leq)
Lake Forest	Lobby TV	0:01:00	5'	8'	61.0
	Air Compressor	0:01:07	3'	2'	81.1
	Air Impact Wrench	0:01:13	15'	5'	78.7
	Car Lift	0:00:34	15'	7'	75.1
	Rotary Car Lift	0:00:23	10'	7'	64.2
RSM	Tire Balancing	0:01:20	3'	3'	73.0
	Air Wrench, Phone, Compressor	0:01:05	5'	5'	80.6

¹ As measured by Urban Crossroads, Inc. on Friday, June 19, 2015. See Appendix 5.3 for the reference noise source photos, and Appendix 5.4 for the reference noise level measurement printouts.

5.6 PREDICTED BARRIER PERFORMANCE RESULTS

The NR between the two spaces, Massage Envy and Discount Tire Center, depends on the TL of the various components in the separating wall, the area of the separating wall, and the acoustical absorption in the receiving room. With the STC calculations previously discussed in Section 5.3, the interior noise level can be determined within the Massage Envy unit based on existing and future Project operational noise conditions. The reference noise level measurements, described in Section 5.5, show a noise level of 80.6 dBA Leq within the garage of an existing Discount Tire Center located in RSM. By using the reference noise level of similar operational activities, the future operational noise of the Project can be estimated at the neighboring Massage Envy unit.

Since the STC rating of the demising wall has been calculated, it is possible to estimate the interior noise levels with the reference 80.6 dBA Leq noise source from the Oak Creek Discount Tire Center. The interior noise levels are predicted based on the exterior noise level, minus the STC rating of the wall, plus ten times the logarithmic division of the square footage of the receiving room ("S") by the total absorption of the receiving room ("A"). Additional adjustment factors are added to the equation below based on the type of furnishings and floor areas of the receiving room. For the purposes of this analysis, the receiving Storage Room was given an adjustment factor of 0.8 for standard office furnishings, such as reflective walls, an acoustical ceiling, and a hard floor. (19) The equation used to calculate the interior noise levels is shown below:

$$\text{Leq (Interior)} = \text{Leq (Exterior)} - \text{STC} + 10 * \text{Log}(S/A) + \text{ADJ}$$

Based on the equation above, the existing and future interior noise level of the Storage Room and Therapy Rooms can be calculated. The Storage Room is closest to the demising wall between the Massage Envy and Discount Tire Center units, and therefore, the noise levels experienced in the other measurement location from Section 4, Therapy Room #9, will be lower due to the additional interior walls which will further attenuate the Project noise levels. Exhibit 5-B shows the receiving rooms of Massage Envy in relation to the Discount Tire Center noise source activity.

5.6.1 EXISTING BARRIER PERFORMANCE

Table 5-2 shows the noise levels with the existing demising wall with an STC rating of 48 results in an interior noise level of 36.5 dBA Leq in the Storage Room, and a noise level of 36.1 dBA Leq in Therapy Room #9. This shows that with a reference noise source of 80.6 dBA Leq for the Discount Tire Center, the interior noise levels of up to 36.5 dBA Leq will not exceed the City of Wildomar CUP 55 dBA Leq noise level standard. Further, the noise levels in Therapy Room #9 do not account for the additional attenuation provided by any other wall other than the demising wall, which represents a conservative analysis and may overstate the actual noise levels due to the operation of the Project.

5.6.2 FUTURE BARRIER PERFORMANCE

The future barrier performance includes the additional attenuation provided by the planned Project addition of the ¾" QuietRock 510 sound board along the demising wall, resulting in an STC rating of 55. The future interior noise levels, as shown on Table 5-2, will approach 29.5 dBA Leq within the Storage Room, and 29.1 dBA Leq within Therapy Room #9, and will not exceed the City of Wildomar CUP 55 dBA Leq noise level standard.

TABLE 5-2: PREDICTED INTERIOR NOISE LEVELS

Receiver Location	Distance To Source (Feet)	Reference Noise Level (dBA Leq) ¹	Distance Attenuation (dBA Leq)	Noise Level At Wall (dBA Leq)	STC Rating Of Demising Wall ²		Noise Level With STC Rating (dBA Leq) ³	
					Existing	Future	Existing	Future
Storage Room	21'	80.6	-12.5	68.1	48	55	36.5	29.5
Therapy Room #9	42'	80.6	-18.5	62.1	48	55	36.1	29.1

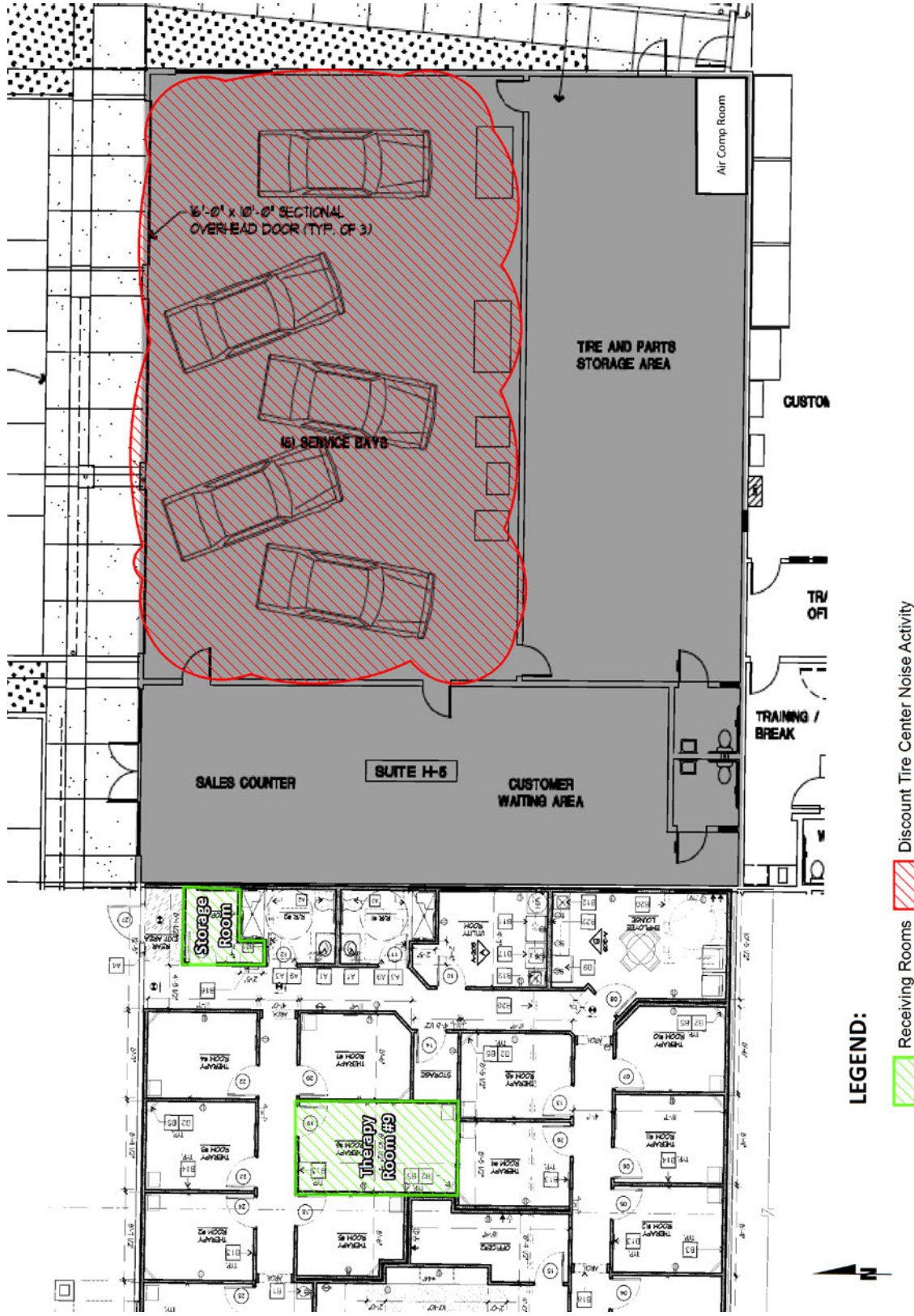
¹ As measured by Urban Crossroads, Inc. on Friday, June 19, 2015.

² See Appendix 5.2 for the INSUL STC calculation printouts.

³ Calculated using the equation provided in Section 5.6.

Based on the existing and future barrier performance analysis, the Project noise impact on the neighboring Massage Envy unit under existing or future conditions with the planned Project design features are considered less than significant. Therefore, no additional noise abatement measures are required of the Discount Tire Center

EXHIBIT 5-B: OPERATIONAL NOISE SOURCE AND RECEIVING ROOMS



6 EXTERIOR NOISE LEVEL ANALYSIS

This section presents the existing ambient noise level measurements collected outside of the Project site, as well as the expected exterior operational noise levels due to the Project site.

6.1 EXISTING EXTERIOR AMBIENT NOISE LEVELS

To assess the existing exterior ambient noise environment outside of the Discount Tire Center and Massage Envy units, an exterior noise level measurement, L1, was taken at the Albertson's southern building façade, across from the Project as shown on Exhibit 6-A. The existing background exterior noise levels consist primarily of vehicle drive aisle traffic between the Albertson's and the outside of the Discount Tire Center and Massage Envy. Vehicular traffic from the nearby I-15 Freeway is also included in the exterior noise level measurement. The background exterior ambient noise levels approached 61.2 dBA Leq during the short-term noise level measurement at location L1, and was taken during typical weekday conditions on June 18th, 2015. This shows that the existing exterior ambient noise levels already far exceed the City of Wildomar 55 dBA Leq noise level standard at the Project site. The exterior noise level measurement worksheet is included in Appendix 6.1.

6.2 CADNAA NOISE PREDICTION MODEL

To fully describe the exterior operational noise levels from the Discount Tire Center, Urban Crossroads developed a noise prediction model using a recognized computer aided noise abatement computer program, CadnaA. Using the spatially accurate Project site plan, aerial imagery from Google Earth Pro, and the reference noise level measurements from the Oak Creek Discount Tire Center, previously described in Section 5, the CadnaA model was used to calculate the worst-case exterior noise levels at the north and west building façades of the Massage Envy unit, and the nearby residential homes east of the Project site.

Exhibit 6-A shows the noise level contours calculated in the CadnaA noise prediction model. To present the worst-case exterior Project noise levels, the reference noise source of 80.6 dBA Leq was located outside of the building at the three future garage door locations to the Massage Envy space. It is important to note that the actual Project noise levels will be generated within the Discount Tire Center unit and will be further reduced due to the Project design features, such as the additional insulated air compressor room in the southeast corner of the unit.

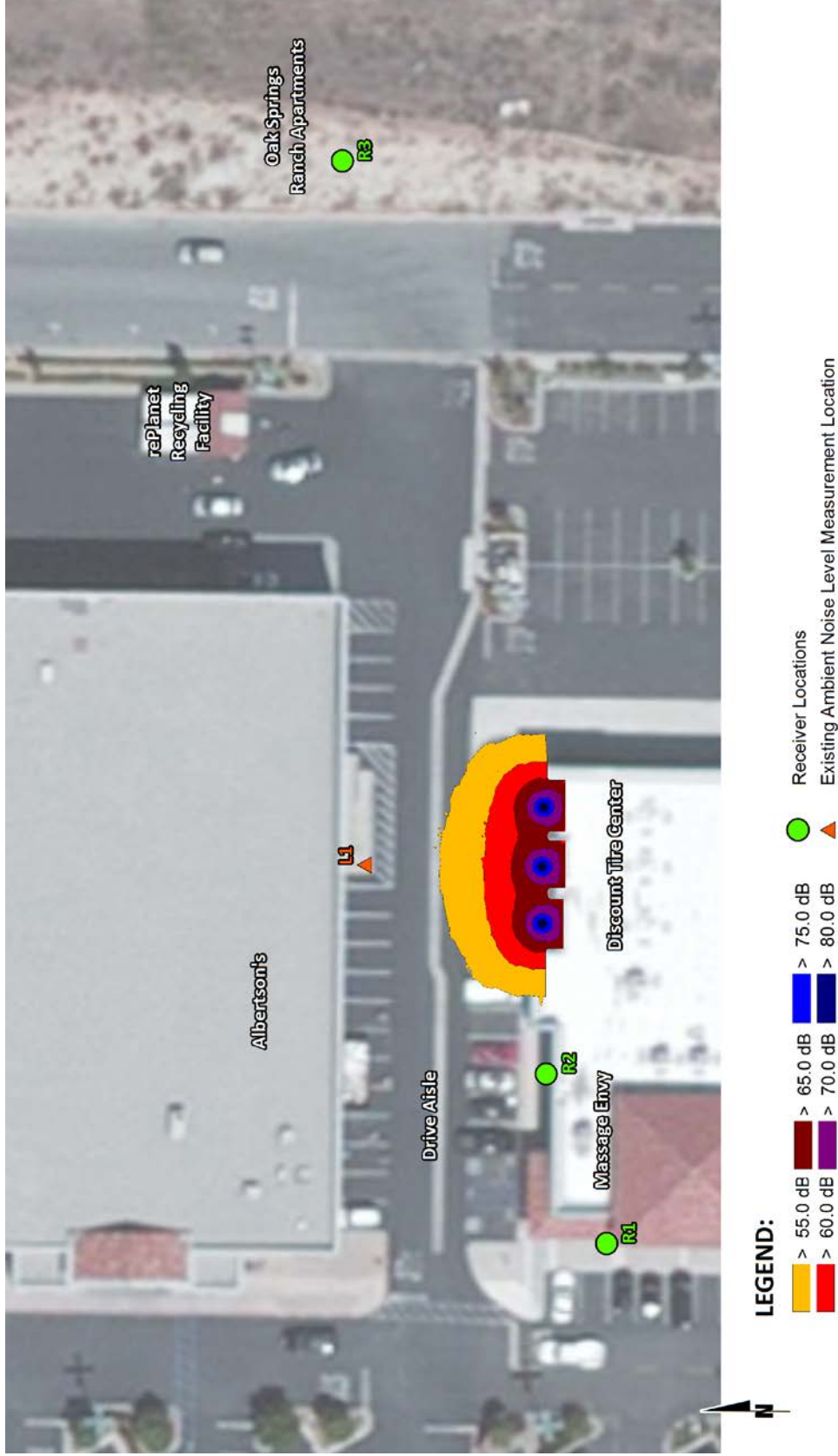
In addition, the CadnaA noise prediction model analysis includes the potential noise reflection associated with the 30-foot Albertson's store located across from the Discount Tire Center buildings. The analysis suggest that the reflective surface only adds approximately 2.6 dBA at the front of the Massage Envy store, receiver location R1.

6.2.1 RECEIVER LOCATIONS

To assess the potential for operational noise impacts, the following three receiver locations as shown on Exhibit 6-A were identified as representative locations for analysis. Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. For the purposes of this analysis, the following receiver locations were identified:

- R1: Located at the front of the Massage Envy unit (western building façade).
- R2: Located along the exterior wall to Therapy Room #4 within the Massage Envy unit (northern building façade).
- R3: Location R3 represents the existing Oak Springs Ranch apartment community located approximately 200 feet northeast of the Project site.

EXHIBIT 6-A: EXTERIOR OPERATIONAL NOISE LEVELS



6.3 EXTERIOR NOISE ANALYSIS RESULTS

The exterior operational noise level analysis results indicate that the Project noise levels at receiver locations R1 to R3 will range from 28.0 to 45.7 dBA Leq, as shown on Table 6-1. The maximum Project-related exterior noise level of 45.7 dBA Leq at the Therapy Rooms (R2) along the northern building façade will not exceed the City of Wildomar CUP 55 dBA Leq noise level standard. Further, the highest Project-related exterior noise level of 45.7 dBA Leq estimated at receiver location R2 is well below the existing exterior measured ambient noise level of 61.2 dBA Leq, shown on Table 6-1, and represents a Project-related noise level increase of up to 0.1 dBA Leq. Based on the typical perception of noise level increases, previously shown on Exhibit 2-C, a noise level increase of 0.1 dBA represents a less than perceptible increase to the existing ambient noise environment. Appendix 6.2 shows the results of the CadnaA noise model analysis at each receiver location.

With exterior noise levels approaching 45.7 dBA Leq, the interior noise levels at the Therapy Rooms along the northern Massage Envy building façade will be further reduced based on the building specifications described in Section 5, and will not exceed the City of Wildomar CUP 55 dBA Leq noise level standard.

TABLE 6-1: PROJECT OPERATIONAL NOISE LEVEL COMPLIANCE

Receiver Location ¹	Description	Noise Standards (dBA Leq) ²	Project Operational Noise Levels (dBA Leq) ³	Compliance (dBA Leq) ⁴	Background Ambient Noise Level (dBA Leq) ⁵	Combined Project and Ambient (dBA Leq) ⁶	Project Contribution (dBA Leq)
R1	Massage Envy storefront (western façade)	55	28.0	Yes	61.2	61.2	0.0
R2	Massage Envy exterior wall (northern façade)	55	45.7	Yes	61.2	61.3	0.1
R3	Oak Springs Ranch apartments	55	31.5	Yes	61.2	61.2	0.0

¹ See Exhibit 6-A for the noise receiver and noise source locations.

² Source: City of Wildomar Planning Commission Conditional Use Permit No. 15-0023 conditions of approval.

³ Estimated Project stationary source noise levels as shown in Appendix 6.2.

⁴ Do the estimated Project stationary source noise levels meet the City of Wildomar CUP conditions of approval?

⁵ Noise level measurement worksheet for location L1 included in Appendix 6.1.

⁶ Represents the combined ambient conditions plus the Project activities.

7 CONCLUSIONS

This noise study has been prepared to satisfy the City of Wildomar Planning Commission Conditional Use Permit (CUP) No. 15-0023 conditions of approval for the Discount Tire Center. According to the June 3, 2015 CUP staff report, the nature of the proposed tire sales/installation business will create noise that will impact adjacent businesses (i.e. Massage Envy, Ace Hardware) (1). The most successful way to solve sound and noise problems is through good planning and building design, and this analysis shows that the Massage Envy space and proposed Discount Tire Center both include noise considerations in their designs. Through the measured and predicted barrier performance analyses within this study, the results of the noise analysis show that the Oak Creek Discount Tire Center has been designed with noise considerations in mind and will not exceed the 55 dBA noise level criteria at the lease space boundary walls in accordance with Section 9.48.040 of the Wildomar Municipal Code and CUP No. 15-0023.

7.1 EXISTING BARRIER PERFORMANCE ANALYSIS

The existing demising wall was analyzed using two different methods: measured and predicted barrier performance analyses. The measured barrier performance analysis results indicated that the highest measured noise level of 42.7 dBA Leq within Therapy Room #9 of the Massage Envy unit was due to the existing indoor background ambient conditions (spa music that can be adjusted for each individual therapy room, ventilation from the central air conditioning unit, and a small corded room fan). The interior noise levels were also analyzed with the addition of an 80 dBA Leq pink noise source to simulate Project noise levels adjacent to the demising wall at the Massage Envy Storage Room. The noise levels with the simulated Project noise source approached 33.6 dBA Leq and did not exceed the 55 dBA noise level criteria in the interior room. This shows that the existing demising wall is adequate to reduce the future Discount Tire Center operational noise levels. It is important to note that the noise source was located in the future lobby of the Discount Tire Center unit, adjacent to the demising wall to represent worst-case conditions, and in reality the Project operational noise sources would be located behind an additional interior wall in the garage and the air compressor will be enclosed in the eastern corner of the unit.

To further analyze the existing demising wall performance, a reference noise level was collected from an existing Discount Tire Center in the City of Rancho Santa Margarita of 80.6 dBA Leq. This noise level is similar to the simulated noise level used during the measured barrier performance analysis of 80 dBA and represents multiple Project operational activities occurring simultaneously. With the reference noise source within the Discount Tire Center, the interior noise levels at the Storage Room were calculated at 36.5 dBA Leq. Based on the two existing barrier performance conditions, the noise levels using the measured barrier methodology varied by less than 3 dBA from the predicted barrier performance analysis results.

The results of this analysis demonstrate that under worst-case operating conditions the existing demising wall satisfies the requirements of the City of Wildomar Planning CUP No. 15-0023 conditions of approval and the 55 dBA Leq Municipal Code standard. No additional noise abatement is required.

7.2 FUTURE BARRIER PERFORMANCE ANALYSIS

In an effort to minimize the potential noise impacts on the adjacent businesses, Discount Tires will be implementing multiple sound attenuation measures to shield and reduce sound impacts emanating from the tire installation areas. Such measures proposed by the applicant include the following:

1. Placing the air compressor to the far east corner of the suite (closer to the rear parking lot);
2. House the air compressor tank in a dry-walled insulated room to help conceal any noise and inhibit noise extending outdoors and to the adjacent suites;
3. Place the compressor on a thick rubber platform to absorb any vibration when in use;
4. The office and storage area will also have insulated walls which will provide an additional sound buffer between the installation area and the adjacent businesses/tenants;
5. The applicant has rearranged their floor plan to designate the first "tire bay" for tire alignments only since this activity is a "low noise" service; and the applicant has also decided to use new "low noise impact guns" for all tire installations to further reduce noise impact on the adjacent businesses.

To analyze the performance of the additional noise attenuation measures proposed by the applicant, the demising wall was analyzed with the addition of the ¾" QuietRock 510 sound board to the Discount Tire Center side of the barrier. With the additional attenuation measures, the reference noise source of 80.6 dBA Leq was reduced to an interior noise level of 29.5 dBA Leq, which satisfies the City of Wildomar Planning CUP No. 15-0023 conditions of approval and the 55 dBA Leq Municipal Code standard. It is important to note that this analysis does not account for the additional attenuation provided by the interior lobby wall or the enclosed compressor room with added sound board enclosure.

The analysis presents the worst-case noise levels with the noise sources located within the garage area, when in reality the compressor will be enclosed in a room furthest from the Massage Envy demising wall. Therefore, with the incorporation of the planned noise attenuation measures proposed by the applicant, the noise levels within the adjacent Massage Envy rooms to the demising wall will be less than the City of Wildomar Planning CUP No. 15-0023 conditions of approval and the 55 dBA Leq Municipal Code standard. Further, this analysis demonstrates that the Massage Envy space and proposed Discount Tire Center both have included noise considerations into their designs which adequately reduce the noise levels expected with the proposed Oak Creek Discount Tire Center.

7.3 EXTERIOR NOISE LEVEL ANALYSIS

The exterior operational noise level analysis results indicate that the Project noise levels will range from 28.0 to 45.7 dBA Leq, as previously shown on Table 6-1. The maximum Project-related exterior noise level of 45.7 dBA Leq at the Therapy Rooms (R2) along the northern building façade will not exceed the City of Wildomar CUP 55 dBA Leq noise level standard. Further, the highest Project-related exterior noise level of 45.7 dBA Leq estimated at receiver location R2 is well below the existing exterior measured ambient noise level of 61.2 dBA Leq, previously shown on Table 6-1, and represents a Project-related noise level increase of up to 0.1 dBA Leq. Based on the typical perception of noise level increases, previously shown on Exhibit 2-C, a noise level increase of 0.1 dBA represents a less than perceptible increase to the existing ambient noise environment. With exterior noise levels approaching 45.7 dBA Leq, the interior noise levels at the Therapy Rooms along the northern Massage Envy building façade will be further reduced based on the building specifications described in Section 5, and will not exceed the City of Wildomar CUP 55 dBA Leq noise level standard.

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8 REFERENCES

1. **City of Wildomar Planning Commission.** *Discount Tire Conditional use Permit (P.A. No. 15-0023).* June 3, 2015.
2. **U.S. Department of Transportation, Federal Transit Administration.** *Transit Noise and Vibration Impact Assessment, FTA-VA-90-1003-06.* May 2006.
3. **California Department of Transportation Environmental Program.** *Technical Noise Supplement - A Technical Supplement to the Traffic Noise Analysis Protocol.* Sacramento, CA : s.n., September 2013.
4. **Environmental Protection Agency Office of Noise Abatement and Control.** *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety.* March, 1974. EPA/ONAC 550/9/74-004.
5. **Richards, Leland K. Irvine and Roy L.** *Acoustics and Noise Control Handbook for Architects and Builders.* 1998.
6. **Marshall Day Acoustics.** *INSUL Sound Insulation Prediction Software (v 8.0.4).* 2014.
7. **U.S. Environmental Protection Agency Office of Noise Abatement and Control.** *Quieting - A Practical Guide to Noise Control.*
8. **Wyle Acoustics Group Report (WR 03-10).** *New Construction Acoustical Design Guide.* March 2003.
9. **American Society for Testing and Materials (ASTM).** *Standard Terminology Relating to Building and Environmental Acoustics ASTM C634-13.* 2013.
10. **U.S. Environmental Protection Agency Office of Noise Abatement and Control.** *Noise Effects Handbook-A Desk Reference to Health and Welfare Effects of Noise.* October 1979 (revised July 1981). EPA 550/9/82/106.
11. **U.S. Department of Transportation, Federal Highway Administration, Office of Environment and Planning, Noise and Air Quality Branch.** *Highway Traffic Noise Analysis and Abatement Policy and Guidance.* June, 1995.
12. **Office of Planning and Research.** *State of California General Plan Guidelines 2003.* October 2003.
13. **State of California.** *2013 California Green Building Standards Code.* January 2014.
14. **City of Wildomar.** *General Plan Noise Element.* October 2003.
15. **City of Wildomar Municipal Code.** *Title 9 - Public Peace, Morals and Welfare, Chapter 9.48 Noise Regulation.*
16. **American National Standards Institute (ANSI).** *Specification for Sound Level Meters ANSI S1.4-2014/IEC 61672-1:2013.*
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18. **American Society for Testing and Materials (ASTM).** *Standard Test Method for Measurement of Airborne Sound Attenuation Between Rooms in Buildings ASTM E336-14.* 2014.
19. **Owens Corning.** *Noise Control Design Guide.* December 2004.

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9 CERTIFICATION

The contents of this noise study report represent an accurate depiction of the noise environment and impacts associated with the proposed Oak Creek Discount Tire Center Project. The information contained in this noise study report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (949) 660-1994 ext. 203.

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EDUCATION

Master of Science in Civil and Environmental Engineering
California Polytechnic State University, San Luis Obispo • December, 1993

Bachelor of Science in City and Regional Planning
California Polytechnic State University, San Luis Obispo • June, 1992

PROFESSIONAL REGISTRATIONS

PE – Registered Professional Traffic Engineer – TR 2537 • January, 2009
AICP – American Institute of Certified Planners – 013011 • June, 1997–January 1, 2012
PTP – Professional Transportation Planner • May, 2007 – May, 2013
INCE – Institute of Noise Control Engineering • March, 2004

PROFESSIONAL AFFILIATIONS

ASA – Acoustical Society of America
ITE – Institute of Transportation Engineers

PROFESSIONAL CERTIFICATIONS

Certified Acoustical Consultant – County of Orange • February, 2011
FHWA-NHI-142051 Highway Traffic Noise Certificate of Training • February, 2013

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APPENDIX 3.1:

CITY OF WILDOMAR MUNICIPAL CODE

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Wildomar Municipal Code[Up](#)[Previous](#)[Next](#)[Main](#)[Collapse](#)[Search](#)[Print](#)[No Frames](#)[Title 9 PUBLIC PEACE AND WELFARE](#)**Chapter 9.48 NOISE REGULATION**

9.48.010 Intent.

At certain levels, sound becomes noise and may jeopardize the health, safety or general welfare of the City of Wildomar residents and degrade their quality of life. Pursuant to its police power, the City Council declares that noise shall be regulated in the manner described in this chapter. This chapter is intended to establish City-wide standards regulating noise. This chapter is not intended to establish thresholds of significance for the purpose of any analysis required by the California Environmental Quality Act and no such thresholds are established. (Ord. 18 § 2, 2008, RCC § [9.52.010](#))

9.48.020 Exemptions.

Sound emanating from the following sources is exempt from the provisions of this chapter:

- A. Facilities owned or operated by or for a governmental agency;
- B. Capital improvement projects of a governmental agency;
- C. The maintenance or repair of public properties;
- D. Public safety personnel in the course of executing their official duties, including, but not limited to, sworn peace officers, emergency personnel and public utility personnel. This exemption includes, without limitation, sound emanating from all equipment used by such personnel, whether stationary or mobile;
- E. Public or private schools and school-sponsored activities;
- F. Agricultural operations on land designated “agriculture” in the City General Plan, or land zoned A-1 (light agriculture), A-P (light agriculture with poultry), A-2 (heavy agriculture), A-D (agriculture-dairy) or C/V (citrus/vineyard), provided such operations are carried out in a manner consistent with accepted industry standards. This exemption includes, without limitation, sound emanating from all equipment used during such operations, whether stationary or mobile;
- G. Wind energy conversion systems (WECS), provided such systems comply with the WECS noise provisions of Title 17;
- H. Private construction projects located one-quarter of a mile or more from an inhabited dwelling;
- I. Private construction projects located within one-quarter of a mile from an inhabited dwelling, provided that:
 1. Construction does not occur between the hours of 6:00 p.m. and 6:00 a.m. during the months of June through September, and
 2. Construction does not occur between the hours of 6:00 p.m. and 7:00 a.m. during the months of October through May;
- J. Property maintenance, including, but not limited to, the operation of lawnmowers, leaf blowers, etc., provided such maintenance occurs between the hours of 7:00 a.m. and 8:00 p.m.;
- K. Motor vehicles, other than off-highway vehicles. This exemption does not include sound emanating from motor vehicle sound systems;
- L. Heating and air conditioning equipment;
- M. Safety, warning and alarm devices, including, but not limited to, house and car alarms, and other warning devices that are designed to protect the public health, safety, and welfare;

N. The discharge of firearms consistent with all state laws. (Ord. 18 § 2, 2008, RCC § [9.52.020](#))

9.48.030 Definitions.

As used in this chapter, the following terms shall have the following meanings:

“Audio equipment” means a television, stereo, radio, tape player, compact disc player, mp3 player, iPod or other similar device.

“Decibel (dB)” means a unit for measuring the relative amplitude of a sound equal approximately to the smallest difference normally detectable by the human ear, the range of which includes approximately 130 decibels on a scale beginning with zero decibels for the faintest detectable sound. Decibels are measured with a sound level meter using different methodologies as defined below:

1. “A-weighting (dBA)” means the standard A-weighted frequency response of a sound level meter, which de-emphasizes low and high frequencies of sound in a manner similar to the human ear for moderate sounds.
2. “Maximum sound level (L_{max})” means the maximum sound level measured on a sound level meter.

“Governmental agency” means the United States, the State of California, Riverside County, any city within Riverside County, any special district within Riverside County, the City of Wildomar or any combination of these agencies.

“Land use permit” means a discretionary permit issued by the City pursuant to Title 17.

“Motor vehicle” means a vehicle that is self-propelled.

“Motor vehicle sound system” means a stereo, radio, tape player, compact disc player, mp3 player, iPod or other similar device.

“Noise” means any loud, discordant or disagreeable sound.

“Occupied property” means property upon which is located a residence, business or industrial or manufacturing use.

“Off-highway vehicle” means a motor vehicle designed to travel over any terrain.

“Public or private school” means an institution conducting academic instruction at the preschool, elementary school, junior high school, high school, or college level.

“Public property” means property owned by a governmental agency or held open to the public, including, but not limited to, parks, streets, sidewalks, and alleys.

“Sensitive receptor” means a land use that is identified as sensitive to noise in the noise element of the City General Plan, including, but not limited to, residences, schools, hospitals, churches, rest homes, cemeteries or public libraries.

“Sound-amplifying equipment” means a loudspeaker, microphone, megaphone or other similar device.

“Sound level meter” means an instrument meeting the standards of the American National Standards Institute for Type 1 or Type 2 sound level meters or an instrument that provides equivalent data. (Ord. 18 § 2, 2008, RCC § [9.52.030](#))

9.48.040 General sound level standards.

No person shall create any sound, or allow the creation of any sound, on any property that causes the exterior sound level on any other occupied property to exceed the sound level standards set forth in Table 1.

TABLE 1
Sound Level Standards (Db L_{max})

GENERAL PLAN FOUNDATION COMPONENT	GENERAL PLAN LAND USE DESIGNATION	GENERAL PLAN LAND USE DESIGNATION NAME	DENSITY	MAXIMUM DECIBEL LEVEL	
				7 am—10 pm	10 pm—7 am
Community Development	EDR	Estate Density Residential	2 AC	55	45
	VLDR	Very Low Density Residential	1 AC	55	45
	LDR	Low Density Residential	1/2 AC	55	45
	MDR	Medium Density Residential	2—5	55	45
	MHDR	Medium High Density Residential	5—8	55	45
	HDR	High Density Residential	8—14	55	45
	VHDR	Very High Density Residential	14—20	55	45
	H'TDR	Highest Density Residential	20+	55	45
	CR	Retail Commercial		65	55
	CO	Office Commercial		65	55
	CT	Tourist Commercial		65	55
	CC	Community Center		65	55
	LI	Light Industrial		75	55
	HI	Heavy Industrial		75	75
	BP	Business Park		65	45
	PF	Public Facility		65	45
	SP	Specific Plan-Residential		55	45
		Specific Plan-Commercial		65	55
	Specific Plan-Light Industrial		75	55	
	Specific Plan-Heavy Industrial		75	75	
Rural Community	EDR	Estate Density Residential	2 AC	55	45
	VLDR	Very Low Density Residential	1 AC	55	45
	LDR	Low Density Residential	1/2 AC	55	45
Rural	RR	Rural Residential	5 AC	45	45
	RM	Rural Mountainous	10 AC	45	45
	RD	Rural Desert	10 AC	45	45
Agriculture	AG	Agriculture	10 AC	45	45
Open Space	C	Conservation		45	45
	CH	Conservation Habitat		45	45
	REC	Recreation		45	45
	RUR	Rural	20 AC	45	45
	W	Watershed		45	45

	MR	Mineral Resources		75	45
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(Ord. 18 § 2, 2008, RCC § [9.52.040](#))

9.48.050 Sound level measurement methodology.

Sound level measurements may be made anywhere within the boundaries of an occupied property. The actual location of a sound level measurement shall be at the discretion of the enforcement officials identified in Section [9.48.080](#) of this chapter. Sound level measurements shall be made with a sound level meter. Immediately before a measurement is made, the sound level meter shall be calibrated utilizing an acoustical calibrator meeting the standards of the American National Standards Institute. Following a sound level measurement, the calibration of the sound level meter shall be re-verified. Sound level meters and calibration equipment shall be certified annually. (Ord. 18 § 2, 2008, RCC § [9.52.050](#))

9.48.060 Special sound sources standards.

The general sound level standards set forth in Section [9.48.040](#) of this chapter apply to sound emanating from all sources, including the following special sound sources, and the person creating, or allowing the creation of, the sound is subject to the requirements of that section. The following special sound sources are also subject to the following additional standards, the failure to comply with which constitutes separate violations of this chapter:

A. Motor Vehicles.

1. Off-Highway Vehicles.

a. No person shall operate an off-highway vehicle unless it is equipped with a USDA-qualified spark arrester and a constantly operating and properly maintained muffler. A muffler is not considered constantly operating and properly maintained if it is equipped with a cutout, bypass or similar device.

b. No person shall operate an off-highway vehicle unless the noise emitted by the vehicle is not more than 96 dBA if the vehicle was manufactured on or after January 1, 1986 or is not more than 101 dBA if the vehicle was manufactured before January 1, 1986. For purposes of this subsection, emitted noise shall be measured a distance of 20 inches from the vehicle tailpipe using test procedures established by the Society of Automotive Engineers under Standard J-1287.

2. Sound Systems. No person shall operate a motor vehicle sound system, whether affixed to the vehicle or not, between the hours of 10:00 p.m. and 8:00 a.m., such that the sound system is audible to the human ear inside any inhabited dwelling. No person shall operate a motor vehicle sound system, whether affixed to the vehicle or not, at any other time such that the sound system is audible to the human ear at a distance greater than 100 feet from the vehicle.

B. Power Tools and Equipment. No person shall operate any power tools or equipment between the hours of 10:00 p.m. and 8:00 a.m. such that the power tools or equipment are audible to the human ear inside an inhabited dwelling other than a dwelling in which the power tools or equipment may be located. No person shall operate any power tools or equipment at any other time such that the power tools or equipment are audible to the human ear at a distance greater than 100 feet from the power tools or equipment.

C. Audio Equipment. No person shall operate any audio equipment, whether portable or not, between the hours of 10:00 p.m. and 8:00 a.m. such that the equipment is audible to the human ear inside an inhabited dwelling other than a dwelling in which the equipment may be located. No person shall operate any audio equipment, whether portable or not, at any other time such that the equipment is audible to the human ear at a distance greater than 100 feet from the equipment.

D. **Sound-Amplifying Equipment and Live Music.** No person shall install, use or operate sound-amplifying equipment, or perform, or allow to be performed, live music unless such activities comply with the following requirements. To the extent that these requirements conflict with any conditions of approval attached to an underlying land use permit, these requirements shall control:

1. Sound-amplifying equipment or live music is prohibited between the hours of 10:00 p.m. and 8:00 a.m.
2. Sound emanating from sound-amplifying equipment or live music at any other time shall not be audible to the human ear at a distance greater than 200 feet from the equipment or music. (Ord. 18 § 2, 2008, RCC § [9.52.060](#))

9.48.070 Exceptions.

Exceptions may be requested from the standards set forth in Section [9.48.040](#) or [9.48.060](#) of this chapter and may be characterized as construction-related, single-event or continuous-events exceptions.

A. Application and Processing.

1. **Construction-Related Exceptions.** An application for a construction-related exception shall be made to and considered by the Director of Building and Safety on forms provided by the Building and Safety Department and shall be accompanied by the appropriate filing fee. No public hearing is required.
2. **Single-Event Exceptions.** An application for a single-event exception shall be made to and considered by the Planning Director on forms provided by the Planning Department and shall be accompanied by the appropriate filing fee. No public hearing is required.
3. **Continuous-Events Exceptions.** An application for a continuous-events exception shall be made to the Planning Director on forms provided by the Planning Department and shall be accompanied by the appropriate filing fee. Upon receipt of an application for a continuous-events exception, the Planning Director shall set the matter for public hearing before the Planning Commission, notice of which shall be given as provided in Title 17. Notwithstanding the above, an application for a continuous-events exception that is associated with an application for a land use permit shall be processed concurrently with the land use permit in the same manner that the land use permit is required to be processed.

B. **Requirements for Approval.** The appropriate decision-making body or officer shall not approve an exception application unless the applicant demonstrates that the activities described in the application would not be detrimental to the health, safety or general welfare of the community. In determining whether activities are detrimental to the health, safety or general welfare of the community, the appropriate decision-making body or officer shall consider such factors as the proposed duration of the activities and their location in relation to sensitive receptors. If an exception application is approved, reasonable conditions may be imposed to minimize the public detriment, including, but not limited to, restrictions on sound level, sound duration and operating hours.

C. **Appeals.** The Director of Building and Safety's decision on an application for a construction-related exception is considered final. The Planning Director's decision on an application for a single-event exception is considered final. After making a decision on an application for a continuous-events exception, the appropriate decision-making body or officer shall mail notice of the decision to the applicant. Within 10 calendar days after the mailing of such notice, the applicant or an interested person may appeal the decision to the City Council. Upon receipt of an appeal and payment of the appropriate appeal fee, the City Clerk shall set the matter for hearing not less than five days nor more than 30 days thereafter and shall give written notice of the hearing in the same manner as notice of the hearing was given by the appropriate hearing officer or body. The City Council shall render its decision within 30 days after the appeal hearing is closed.

D. **Effect of a Pending Continuous-Events Exception Application.** For a period of 180 days from the

effective date of the ordinance codified in this chapter, no person creating any sound prohibited by this chapter shall be considered in violation of this chapter if the sound is related to a use that is operating pursuant to an approved land use permit, if an application for a continuous-events exception has been filed to sanction the sound and if a decision on the application is pending. (Ord. 18 § 2, 2008, RCC § [9.52.070](#))

9.48.080 Enforcement.

The Chief of Police and Code Enforcement Department shall have the primary responsibility for enforcing this chapter; provided, however, the Chief of Police and Code Enforcement Department may be assisted by the Public Health Department. Violations shall be prosecuted as described in Section [9.48.100](#) of this chapter, but nothing in this chapter shall prevent the Chief of Police, Code Enforcement or the Department of Public Health from engaging in efforts to obtain voluntary compliance by means of warnings, notices, or educational programs. (Ord. 18 § 2, 2008, RCC § [9.52.080](#))

9.48.090 Duty to cooperate.

No person shall refuse to cooperate with, or obstruct, the enforcement officials identified in Section [9.48.080](#) of this chapter when they are engaged in the process of enforcing the provisions of this chapter. This duty to cooperate may require a person to extinguish a sound source so that it can be determined whether sound emanating from the source violates the provisions of this chapter. (Ord. 18 § 2, 2008, RCC § [9.52.090](#))

9.48.100 Violations and penalties.

Any person who violates any provision of this chapter once or twice within a 180-day period shall be guilty of an infraction. Any person who violates any provision of this chapter more than twice within a 180-day period shall be guilty of a misdemeanor. Each day a violation is committed or permitted to continue shall constitute a separate offense and shall be punishable as such. Penalties shall not exceed the following amounts:

- A. For the first violation within a 180-day period, the minimum mandatory fine shall be \$500.00.
- B. For the second violation within a 180-day period, the minimum mandatory fine shall be \$750.00.
- C. For any further violations within a 180-day period, the minimum mandatory fine shall be \$1,000.00 or imprisonment for a period not exceeding six months, or both. (Ord. 18 § 2, 2008, RCC § [9.52.100](#))

View the [mobile version](#).

APPENDIX 4.1:
STUDY AREA PHOTOS

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Oak Creek Massage Envy



Oak Creek Massage Envy



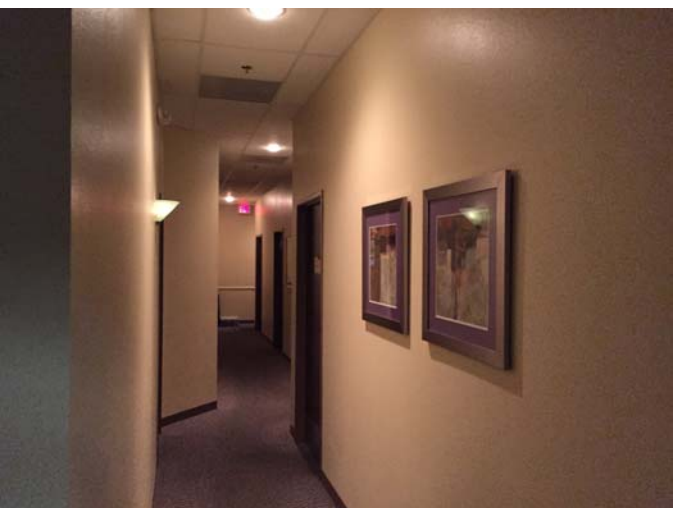
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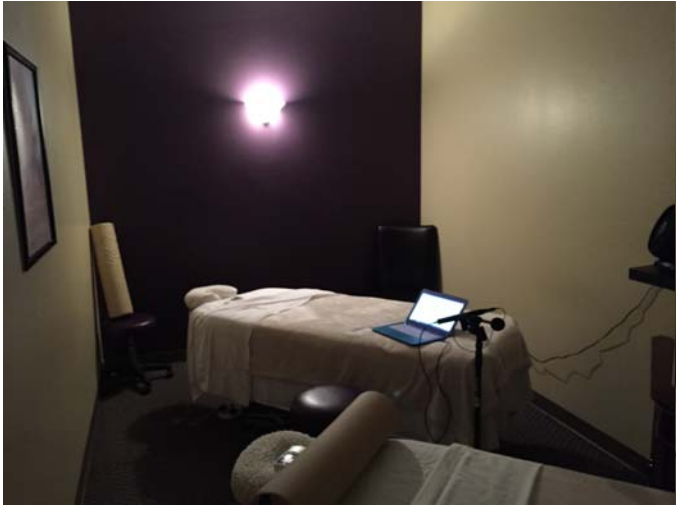
Oak Creek Massage Envy



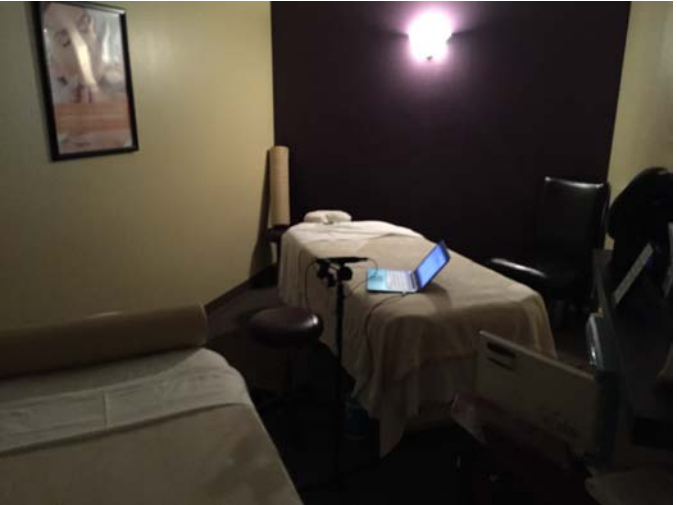
Massage Envy Storage Room



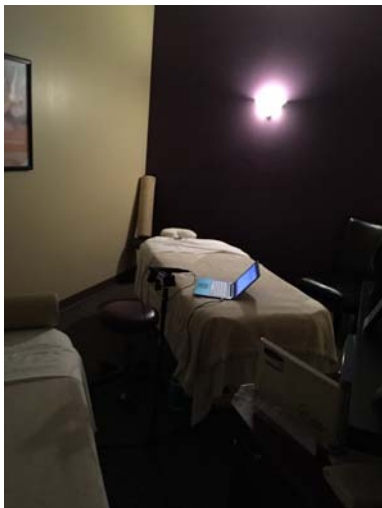
Massage Envy Back Hallway



Massage Envy Therapy Room 9



Massage Envy Therapy Room 9



Massage Envy Therapy Room 9



Massage Envy Therapy Room 9



Massage Envy Therapy Room 9



Massage Envy Therapy Room 9



Massage Envy Therapy Room 9



Massage Envy Therapy Room 9



Massage Envy Therapy Room 9



Massage Envy Storage Room



Massage Envy Storage Room



Massage Envy Hallway

JN:09809 Discount Tire Oak Creek



Massage Envy Exterior Door



Discount Tire Shared Wall



Discount Tire Shared Wall



Discount Tire Shared Wall



Discount Tire Garage Area



Discount Tire Garage Area

JN:09809 Discount Tire Oak Creek



Discount Tire Garage Area



Discount Tire Garage Area



Discount Tire Garage Area



Discount Tire Garage Area



Discount Tire Garage Area



Discount Tire Garage Area

JN:09809 Discount Tire Oak Creek



Discount Tire Planned Window Location



Discount Tire Planned Window Location

Discount Tire Planned Window Location



Discount Tire Noise Reading Location

Discount Tire Noise Reading Location

JN:09809 Discount Tire Oak Creek



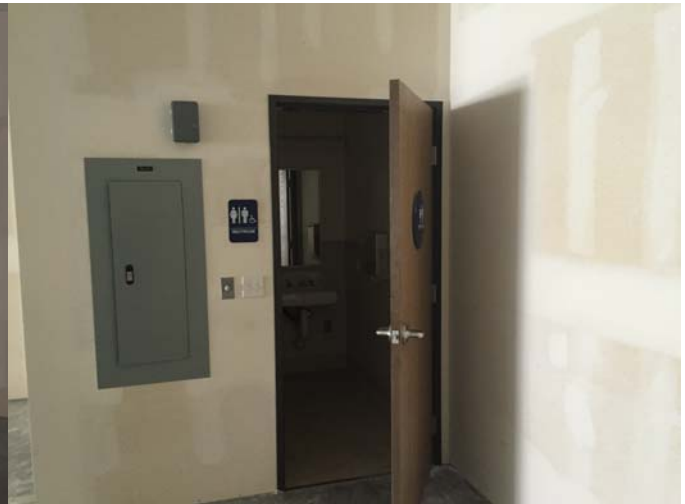
Discount Tire Door to Garage



Discount Tire Door to Garage



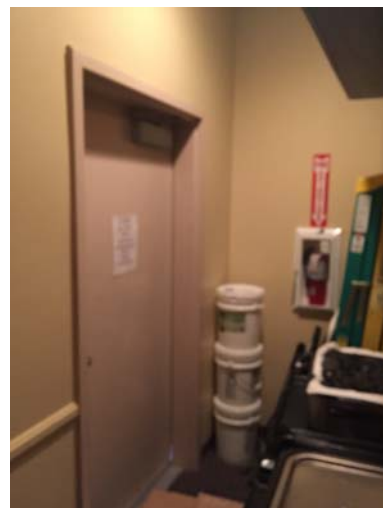
Discount Tire Door to Garage



Discount Tire Door to Garage



Massage Envy Therapy Room 9



Massage Envy Exterior Door

JN:09809 Discount Tire Oak Creek



Massage Envy Exterior Door



Discount Tire Center Exterior Setting



Discount Tire Center Exterior Setting



Discount Tire Center Exterior Setting



Discount Tire Center Exterior Setting

Discount Tire Center Exterior Setting

JN:09809 Discount Tire Oak Creek



Discount Tire Center Exterior Setting



Discount Tire Center Exterior Setting



Discount Tire Center Exterior Setting



Discount Tire Center Exterior Setting



Discount Tire Center Exterior Setting



Discount Tire Center Exterior Setting

JN:09809 Discount Tire Oak Creek



Discount Tire Center Exterior Setting



Discount Tire Center Exterior Setting



Discount Tire Center Exterior Setting



Discount Tire Center Exterior Setting



Discount Tire Center Exterior Setting



Discount Tire Center Exterior Setting

APPENDIX 4.2:
NOISE LEVEL MEASUREMENT WORKSHEETS

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Noise Level Measurement Summary

Project Name: Oak Creek Discount Tire Center

JN: 9809

Measurement ID: M1

Analyst: B. Lawson

Measurement Location: Therapy Room 9 Interior

Date: 6/18/2015

Sound Level Meter: SoftDB Mezzo Type 1

Response: Fast

Noise Source: Background ambient noise conditions

Measurement Time (hh:mm:ss)

Start	Stop	Duration
2:38:44 PM	2:42:24 PM	0:03:40

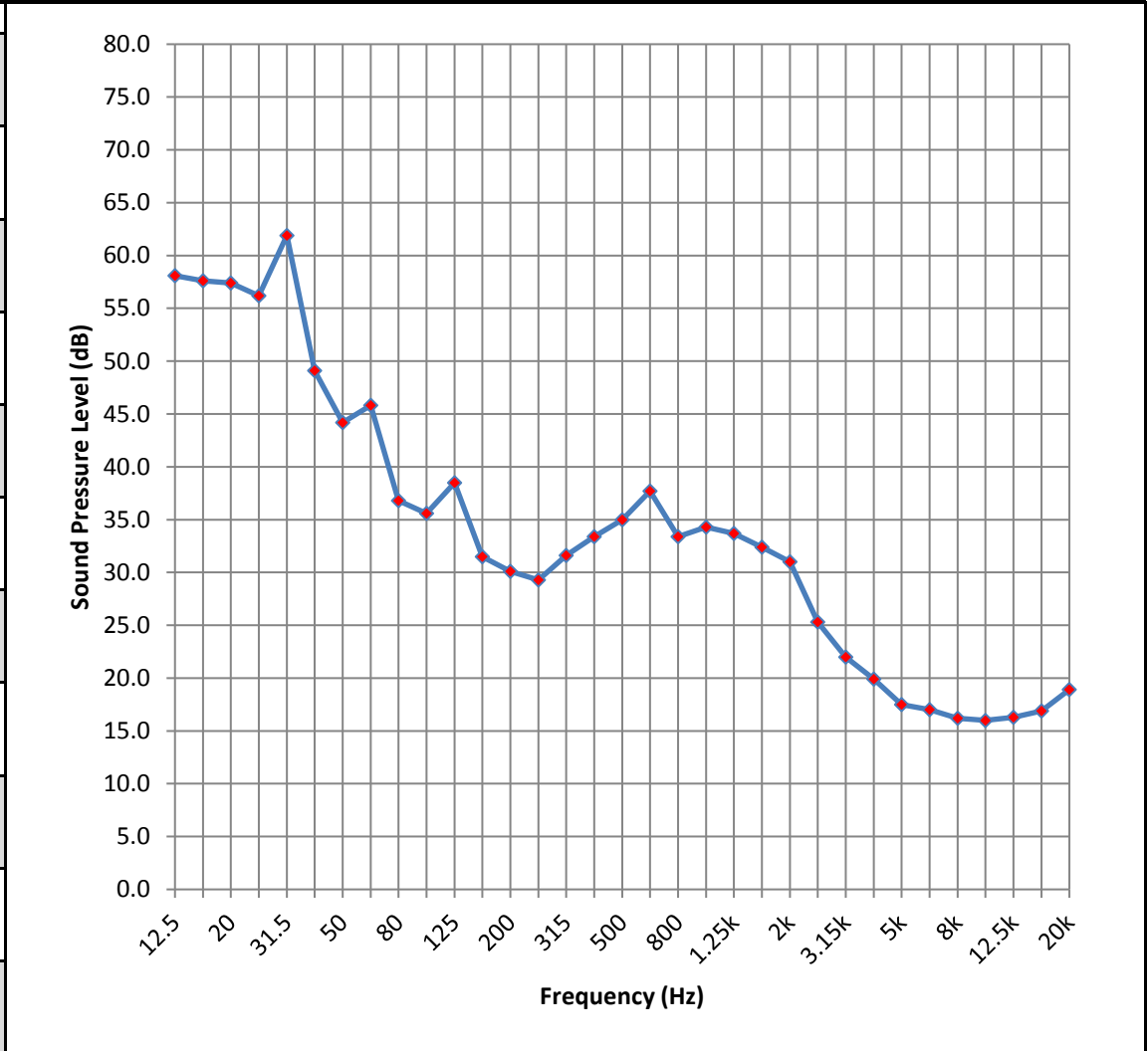
M1

Measurement Results (dBA)

Total SPL	L _{eq}	L _{max}	L _{min}	L ₂	L ₈	L ₂₅	L ₅₀	L ₉₀	L ₉₉
42.8	42.7	44.0	41.5	43.9	43.7	43.2	42.5	41.6	41.5

1/3 Octave Band Center Frequency (Hz)

Freq. (Hz)	dB
12.5	58.1
16	57.6
20	57.4
25	56.2
31.5	61.9
40	49.1
50	44.2
63	45.8
80	36.8
100	35.6
125	38.5
160	31.5
200	30.1
250	29.3
315	31.6
400	33.4
500	35.0
630	37.7
800	33.4
1k	34.3
1.25k	33.7
1.6k	32.4
2k	31.0
2.5k	25.3
3.15k	22.0
4k	19.9
5k	17.5
6.3k	17.0
8k	16.2
10k	16.0
12.5k	16.3
16k	16.9
20k	18.9



Noise Level Measurement Summary

Project Name: Oak Creek Discount Tire Center

JN: 9809

Measurement ID: M1

Analyst: B. Lawson

Measurement Location: Therapy Room 9

Date: 6/18/2015

Sound Level Meter: SoftDB Mezzo Type 1

Response: Fast

Noise Source: With 80 dBA Pink Noise Source in Lobby

Measurement Time (hh:mm:ss)

Start

Stop

Duration

3:17:05 PM

3:18:20 PM

0:01:15

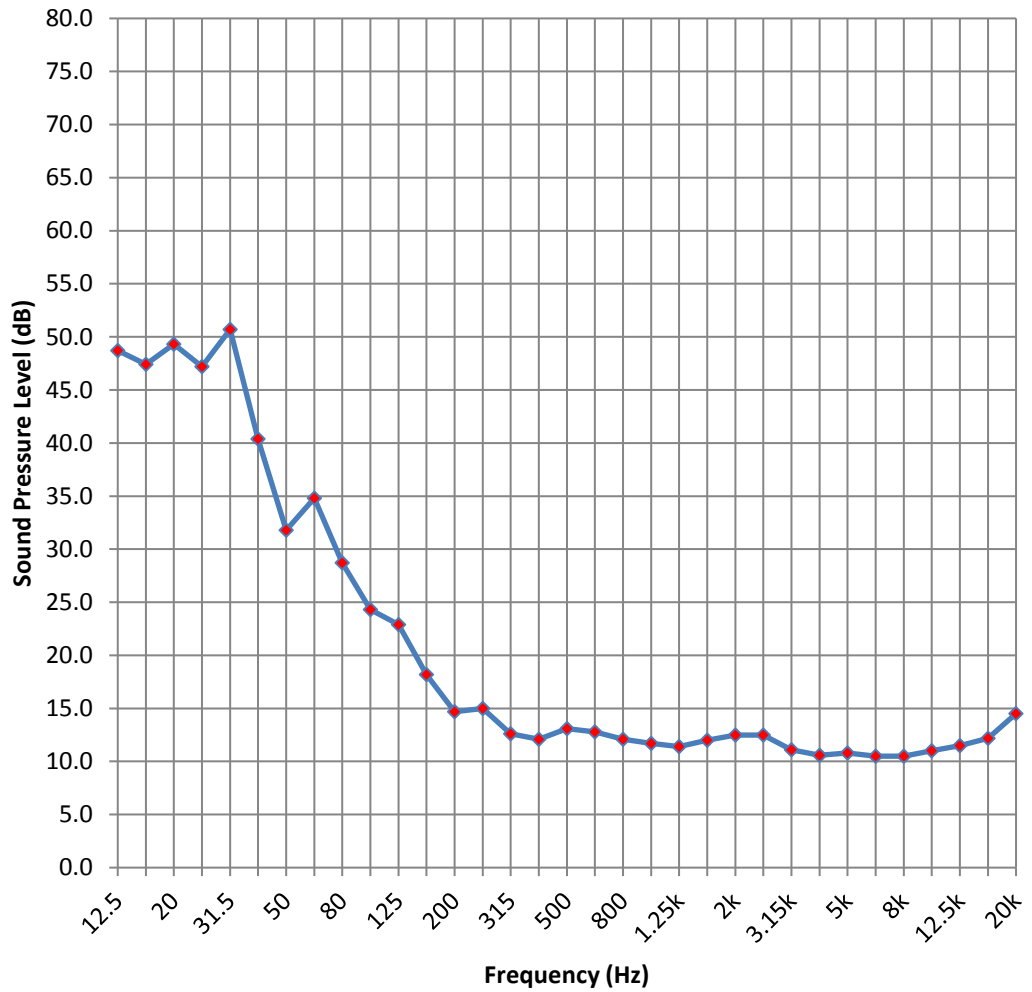
M1

Measurement Results (dBA)

Total SPL	L _{eq}	L _{max}	L _{min}	L ₂	L ₈	L ₂₅	L ₅₀	L ₉₀	L ₉₉
24.4	24.1	27.9	21.3	27.9	27.1	24.5	22.7	21.5	21.4

1/3 Octave Band Center Frequency (Hz)

Freq. (Hz)	dB
12.5	48.7
16	47.4
20	49.3
25	47.2
31.5	50.7
40	40.4
50	31.8
63	34.8
80	28.7
100	24.3
125	22.9
160	18.2
200	14.7
250	15.0
315	12.6
400	12.1
500	13.1
630	12.8
800	12.1
1k	11.7
1.25k	11.4
1.6k	12.0
2k	12.5
2.5k	12.5
3.15k	11.1
4k	10.6
5k	10.8
6.3k	10.5
8k	10.5
10k	11.0
12.5k	11.5
16k	12.2
20k	14.5



Noise Level Measurement Summary

Project Name: Oak Creek Discount Tire Center
Measurement ID: M2
Measurement Location: Storage Room
Sound Level Meter: SoftDB Mezzo Type 1
Response: Fast
Noise Source: Background ambient noise conditions

JN: 9809

Analyst: B. Lawson

Date: 6/18/2015

Measurement Time (hh:mm:ss)

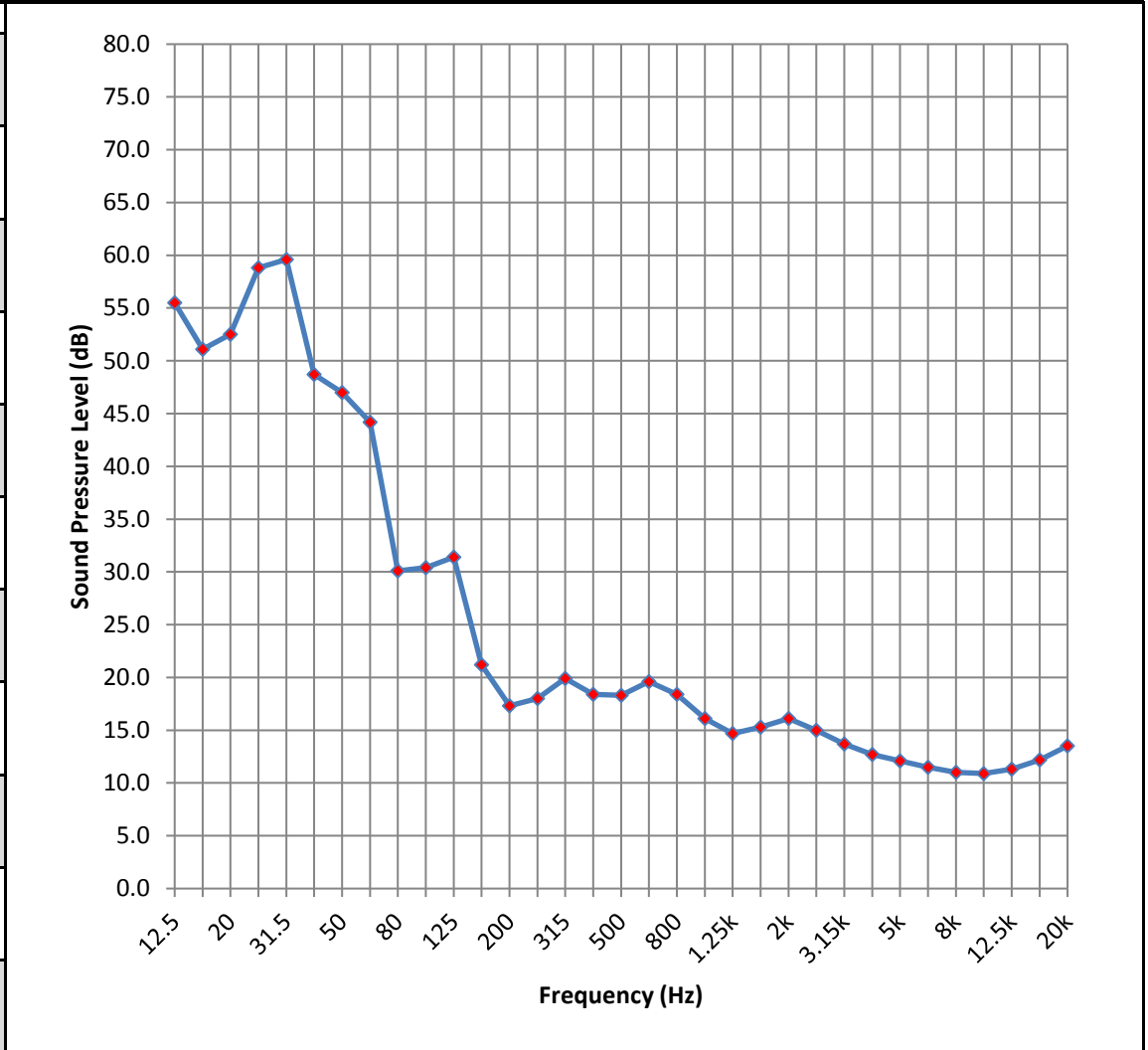
Start	Stop	Duration
2:45:16 PM	2:46:16 PM	0:01:00
M2		

Measurement Results (dBA)

Total SPL	L _{eq}	L _{max}	L _{min}	L ₂	L ₈	L ₂₅	L ₅₀	L ₉₀	L ₉₉
29.4	28.9	31.9	26.8	31.9	31.1	29.5	28.3	27.0	26.8

1/3 Octave Band Center Frequency (Hz)

Freq. (Hz)	dB
12.5	55.5
16	51.1
20	52.5
25	58.8
31.5	59.6
40	48.7
50	47.0
63	44.2
80	30.1
100	30.4
125	31.4
160	21.2
200	17.3
250	18.0
315	19.9
400	18.4
500	18.3
630	19.6
800	18.4
1k	16.1
1.25k	14.7
1.6k	15.3
2k	16.1
2.5k	15.0
3.15k	13.7
4k	12.7
5k	12.1
6.3k	11.5
8k	11.0
10k	10.9
12.5k	11.3
16k	12.2
20k	13.5



Noise Level Measurement Summary

Project Name: Oak Creek Discount Tire Center
Measurement ID: M2
Measurement Location: Storage Room
Sound Level Meter: SoftDB Mezzo Type 1
Response: Fast
Noise Source: With 80 dBA Pink Noise Source in Lobby

JN: 9809

Analyst: B. Lawson

Date: 6/18/2015

Measurement Time (hh:mm:ss)

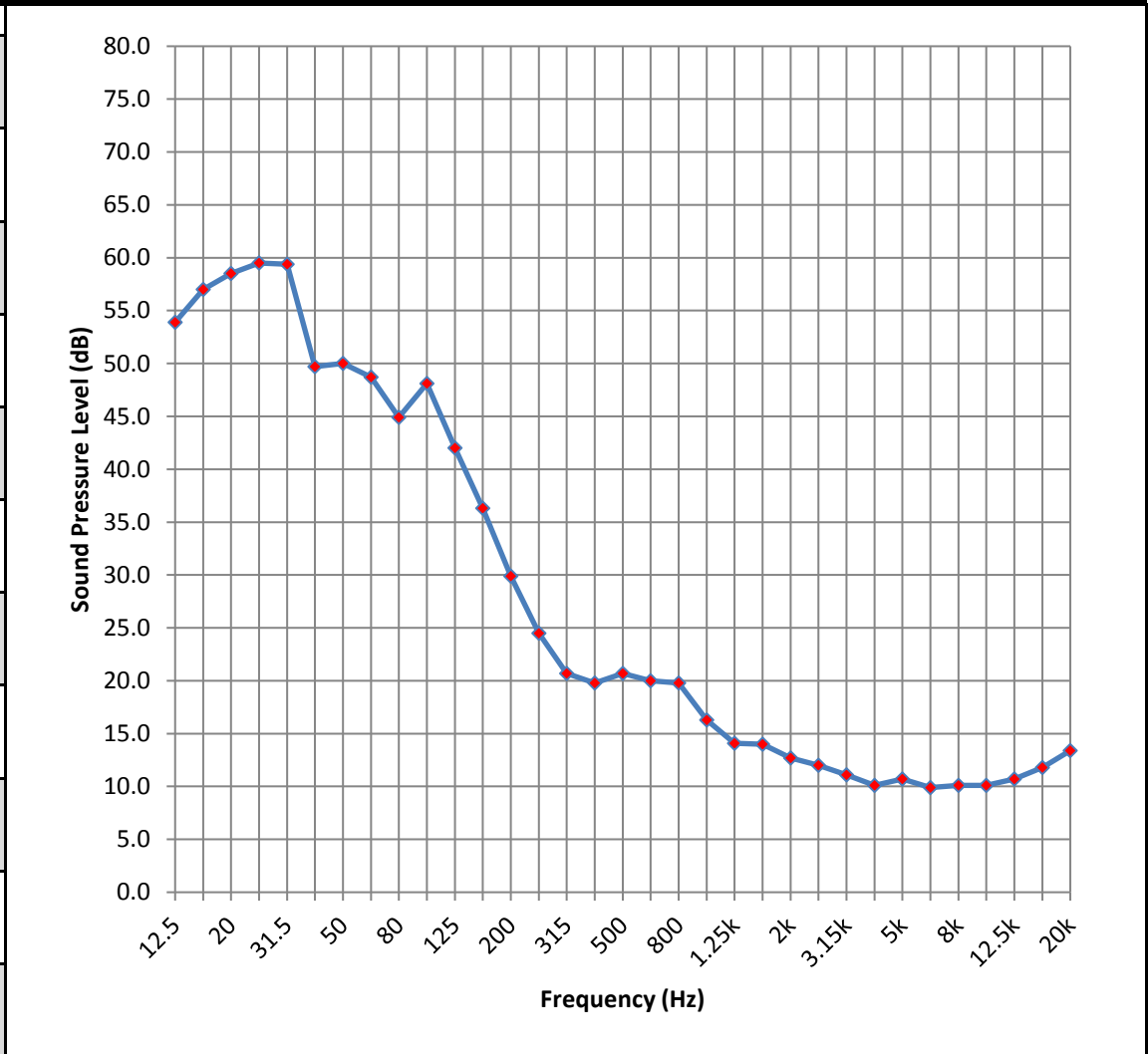
Start	Stop	Duration
3:13:51 PM	3:14:51 PM	0:01:00
M2		

Measurement Results (dBA)

Total SPL	L _{eq}	L _{max}	L _{min}	L ₂	L ₈	L ₂₅	L ₅₀	L ₉₀	L ₉₉
34.1	33.6	35.3	32.2	35.3	34.9	34.0	33.3	32.4	32.2

1/3 Octave Band Center Frequency (Hz)

Freq. (Hz)	dB
12.5	53.9
16	57.0
20	58.5
25	59.5
31.5	59.4
40	49.7
50	50.0
63	48.7
80	44.9
100	48.1
125	42.0
160	36.3
200	29.9
250	24.5
315	20.7
400	19.8
500	20.7
630	20.0
800	19.8
1k	16.3
1.25k	14.1
1.6k	14.0
2k	12.7
2.5k	12.0
3.15k	11.1
4k	10.1
5k	10.7
6.3k	9.9
8k	10.1
10k	10.1
12.5k	10.7
16k	11.8
20k	13.4



APPENDIX 5.1:
MESSAGE ENVY TENANT IMPROVEMENT PLANS

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CREATIVE
HEIGHTS
DESIGNS
INCORPORATED

951 981 7008
951 988 8284
www.creativeheights.com
14855 Santa Anita, Ste. 105 - Fullerton, CA 92626

STAMP

MOISES VILLEGAS
DESIGNER

NO. DATE
REVISIONS
REMARKS

ISSUED
Issued for
PLAN CHECK
BIDDING
CONSTRUCTION

PROJECT TITLE
TENANT IMPROVEMENT MASSAGE ENVOY
JOB ADDRESS
23885 CLINTON KEITH RD. STE. No. 1
WILDOMAR, CA 92595

LEGAL DESCRIPTION
APN- 380-240-046-1
LOT - 0000000
P.M. - 0000000
I.R. - 0000000

OWNER
CHANGE INVESTMENTS, Doing Business As
Envy Massage
Larry & Leslie Ferguson
23885 Clinton Keith Rd. Ste. No. 1
Wilcomar, CA 92595

Tel: 951-795-3102
JOB NO.: 27110
DATE: 11/01/07
DRAWN BY: M.V.
CHECKED BY: M.V.
DRAWING SHEET

A202

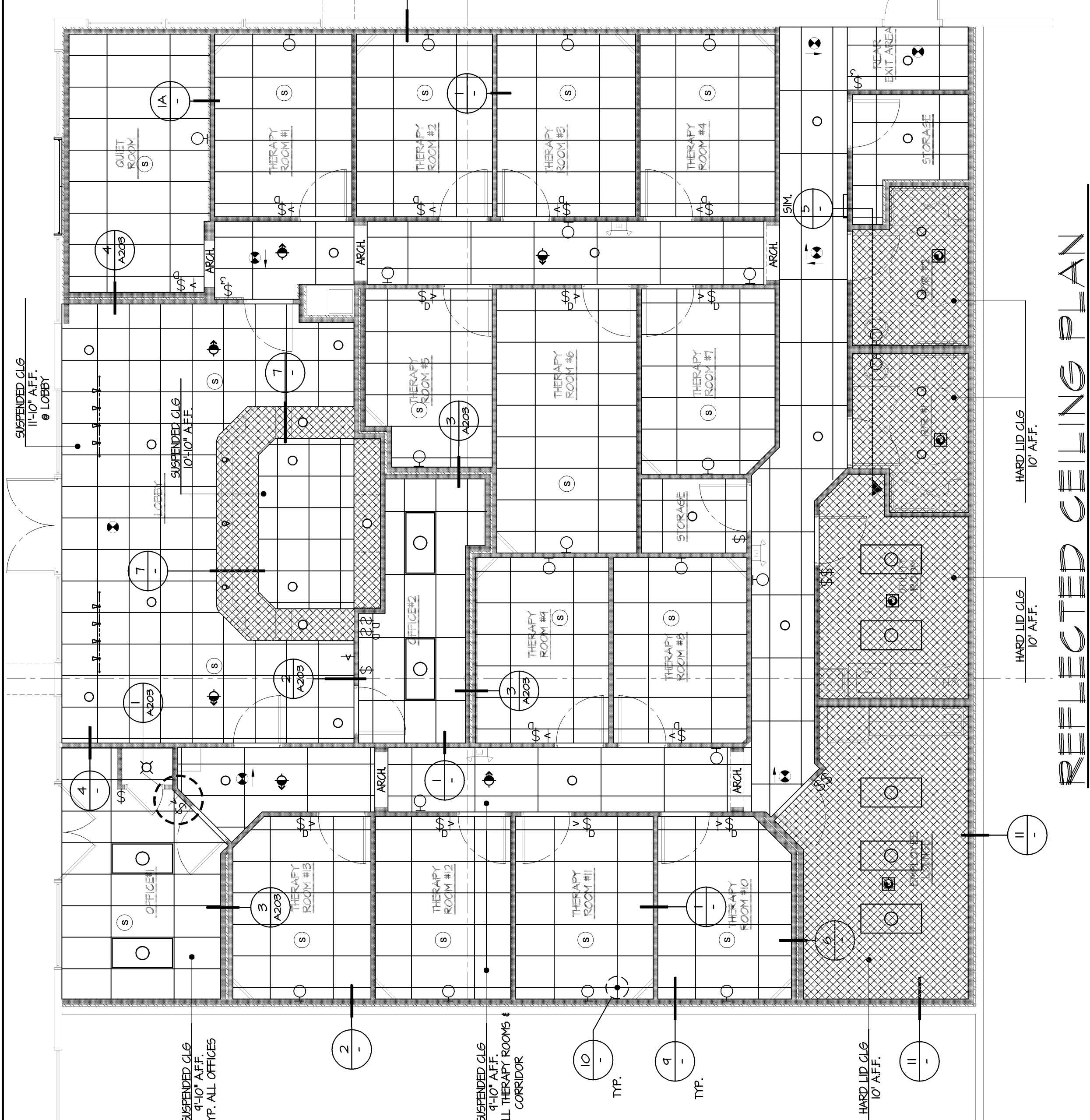
LIGHTING & A.C. NOTE:

SEE ELECTRICAL AND HVAC PLANS

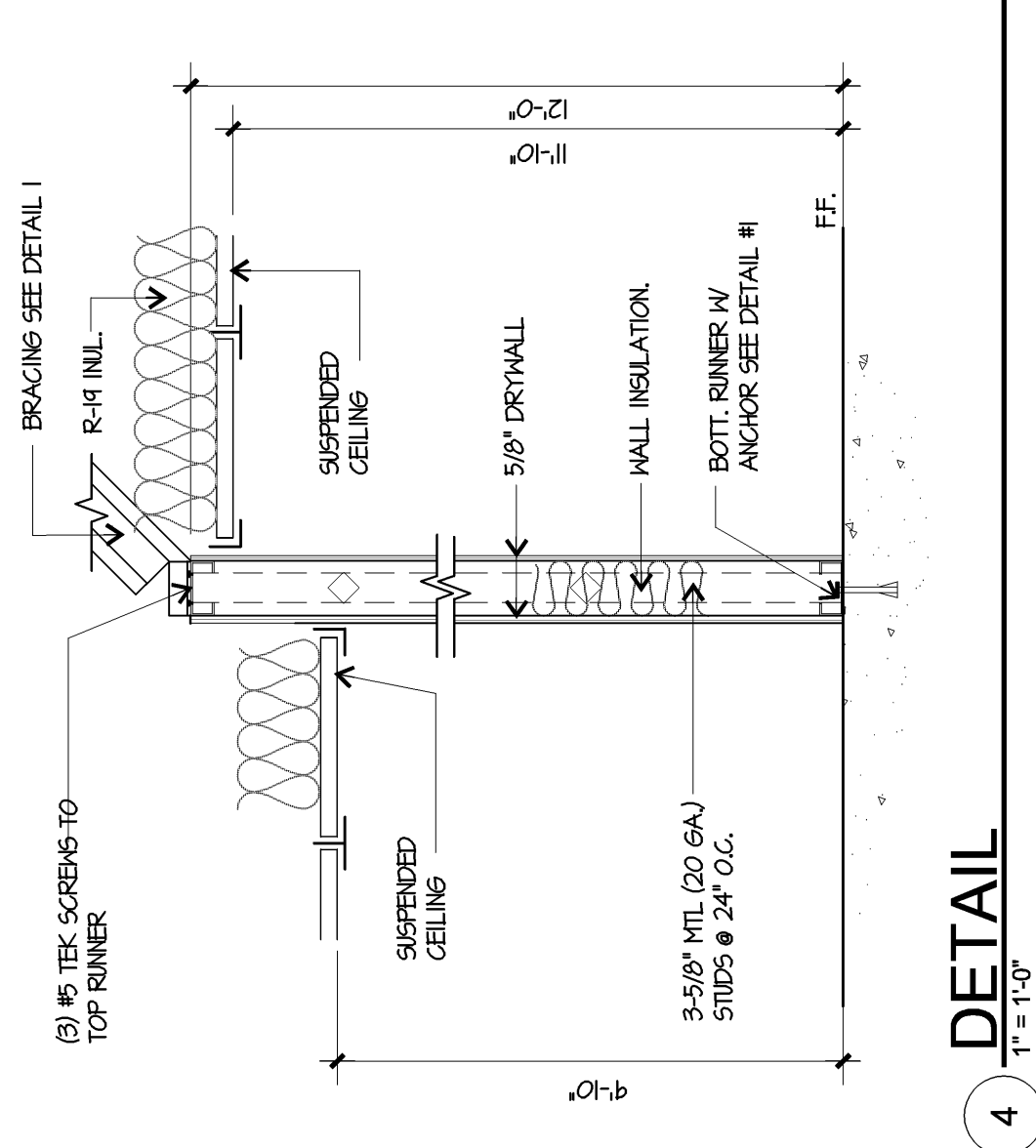
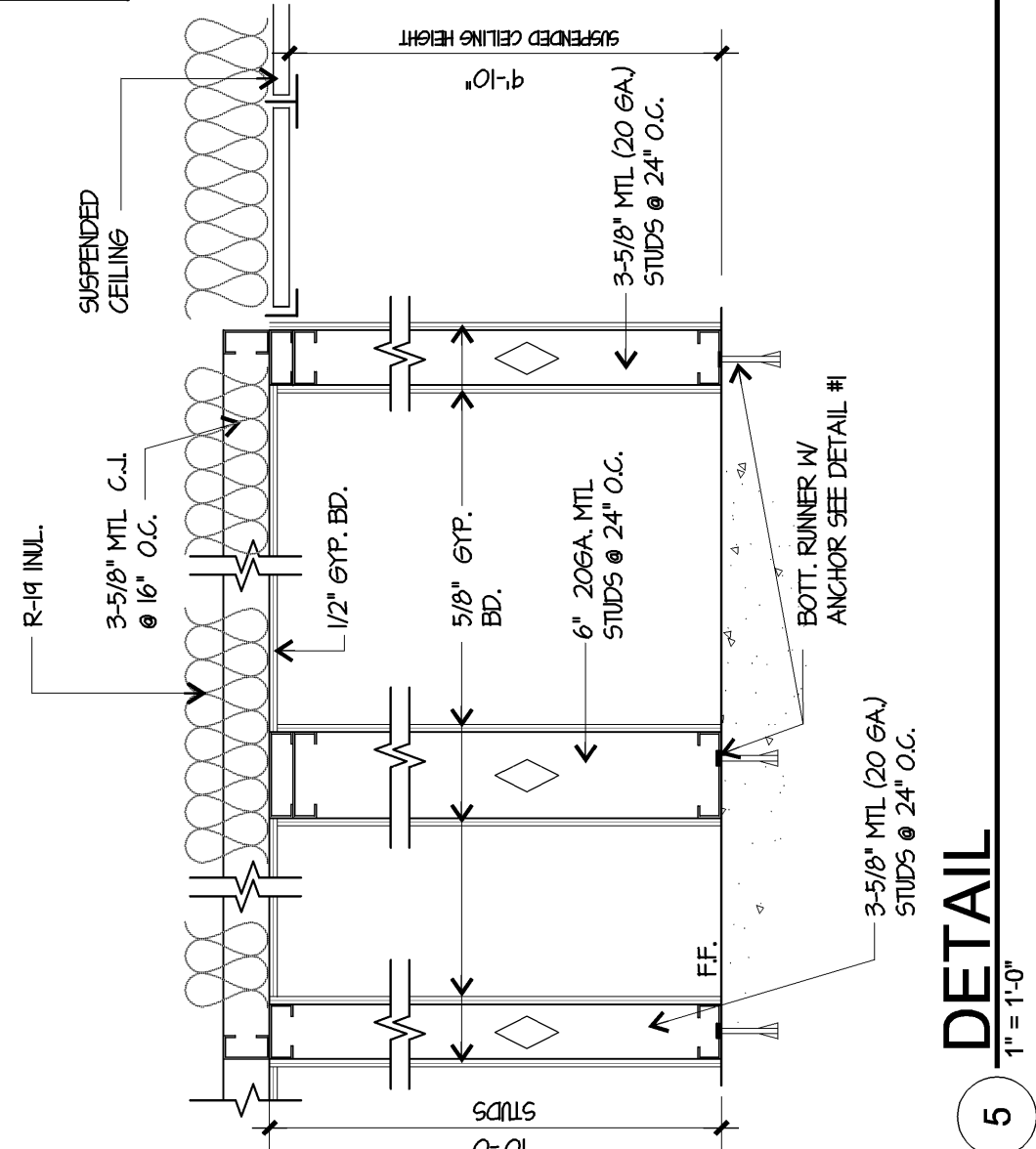
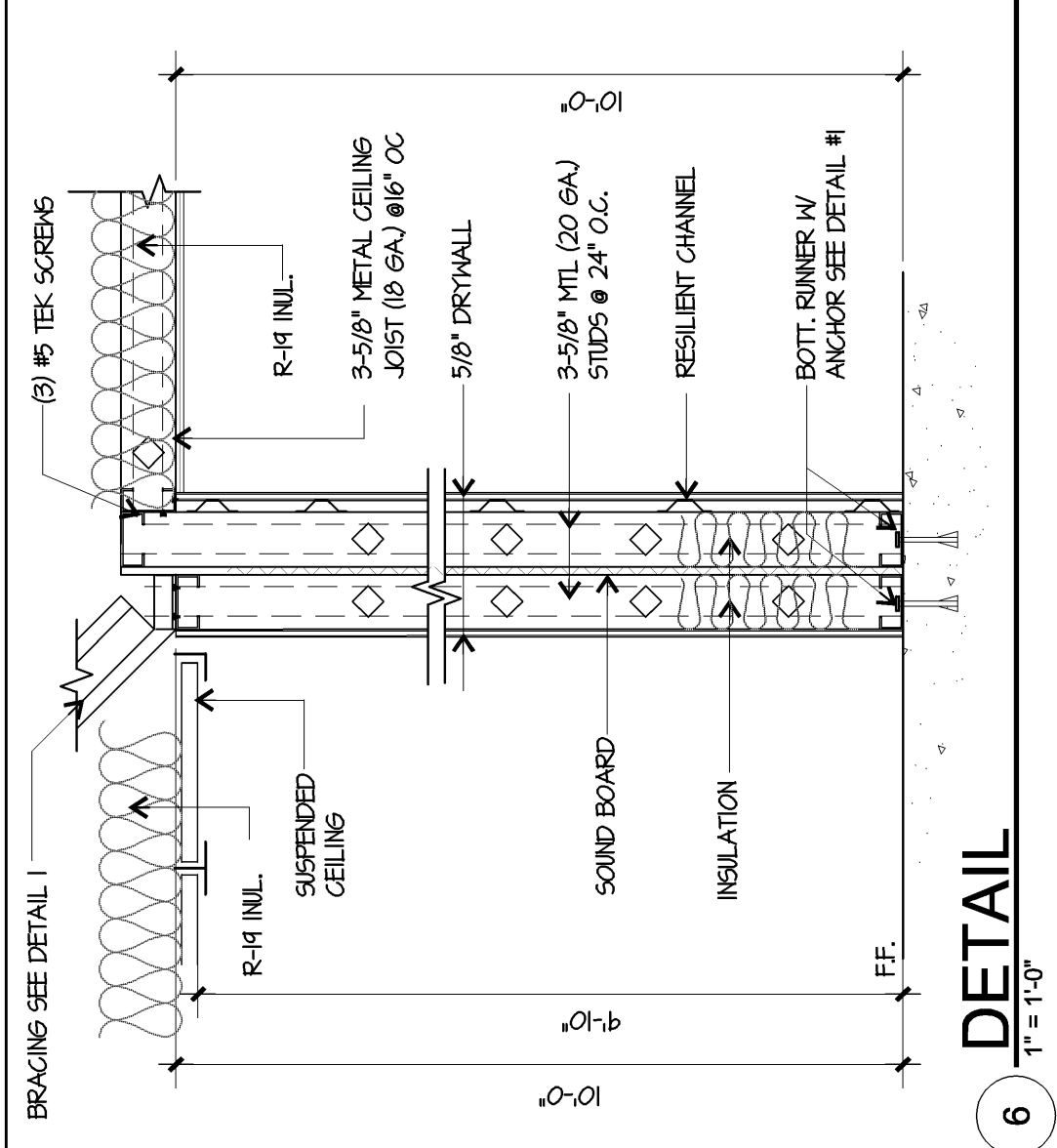
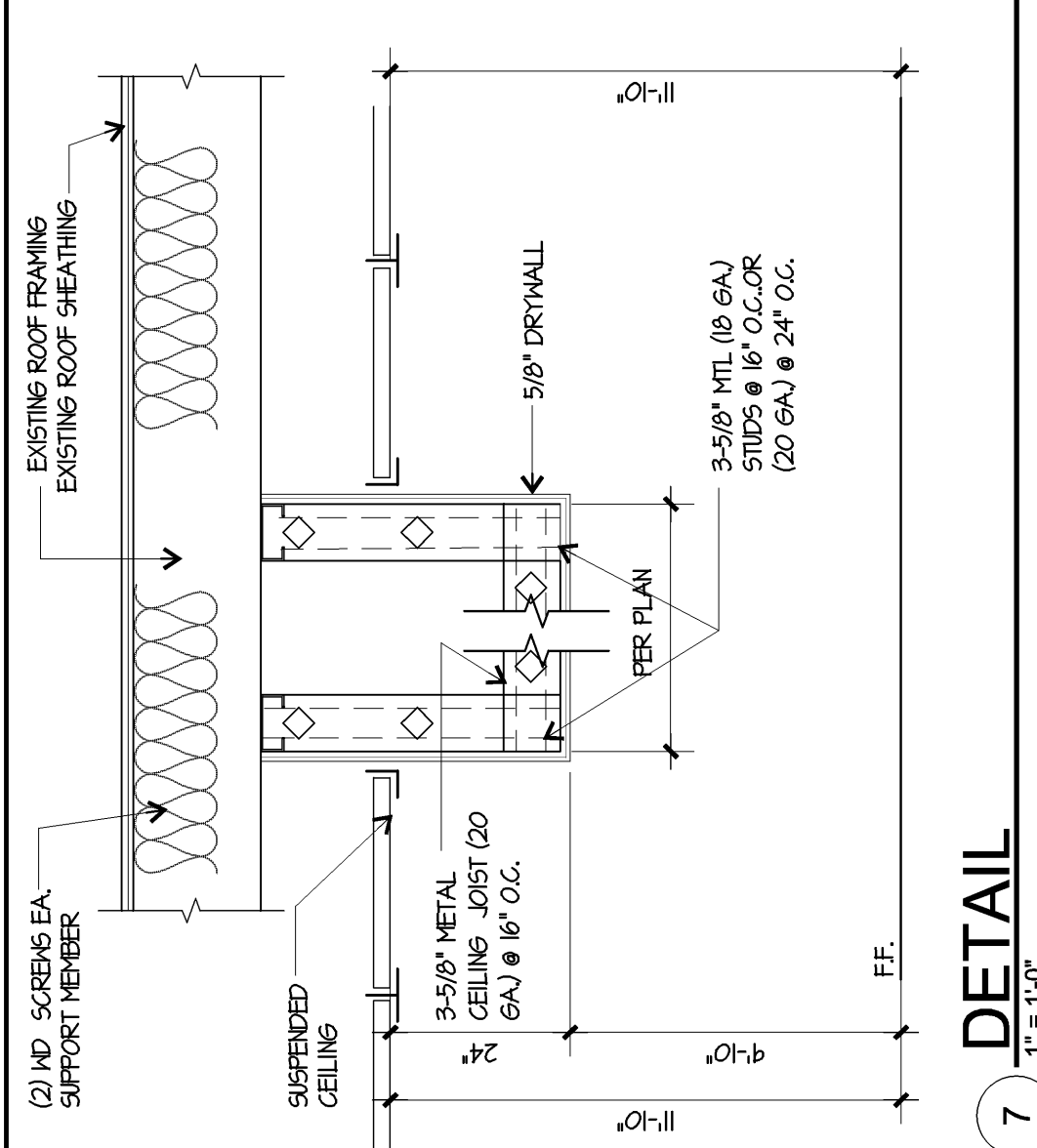
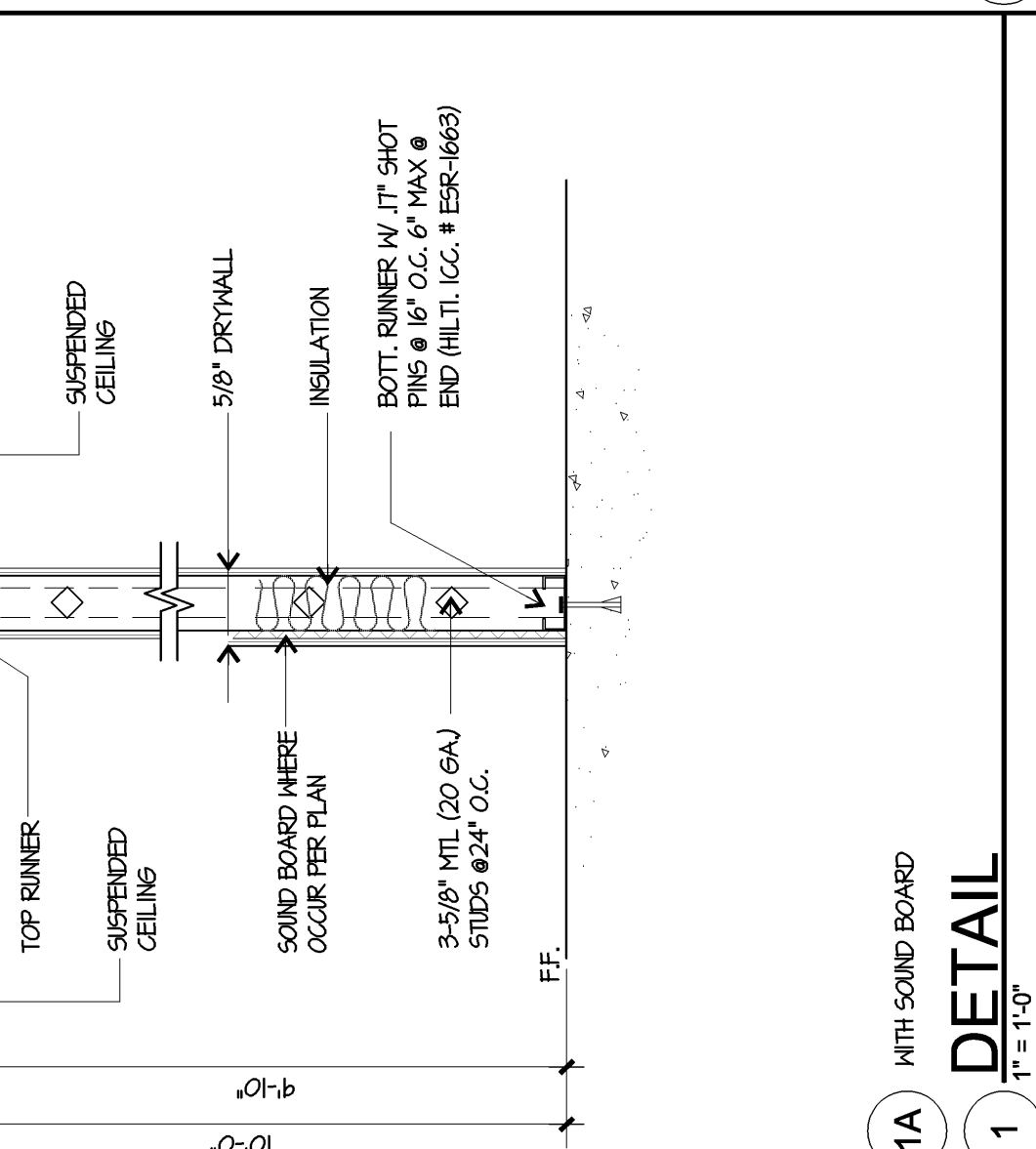
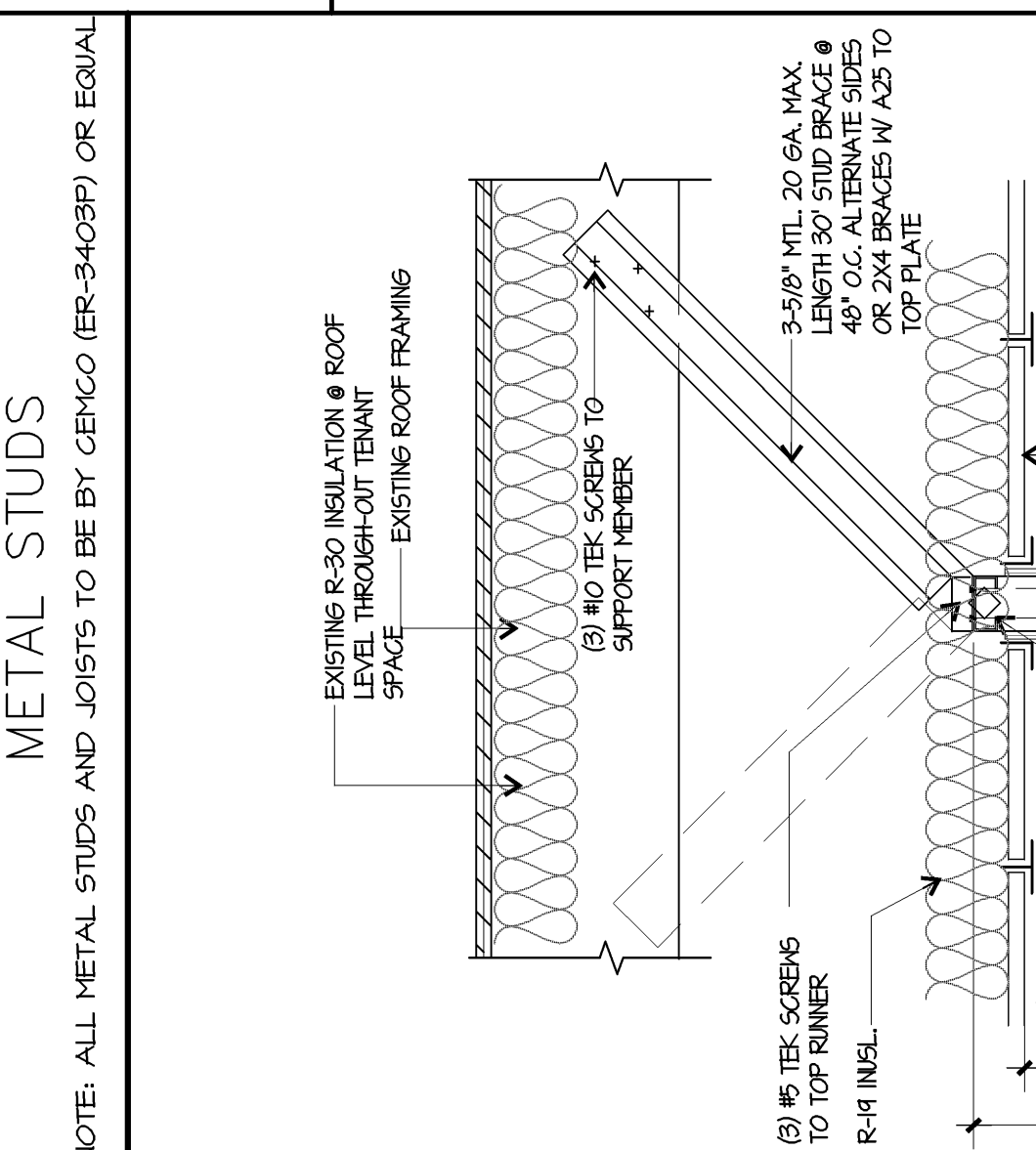
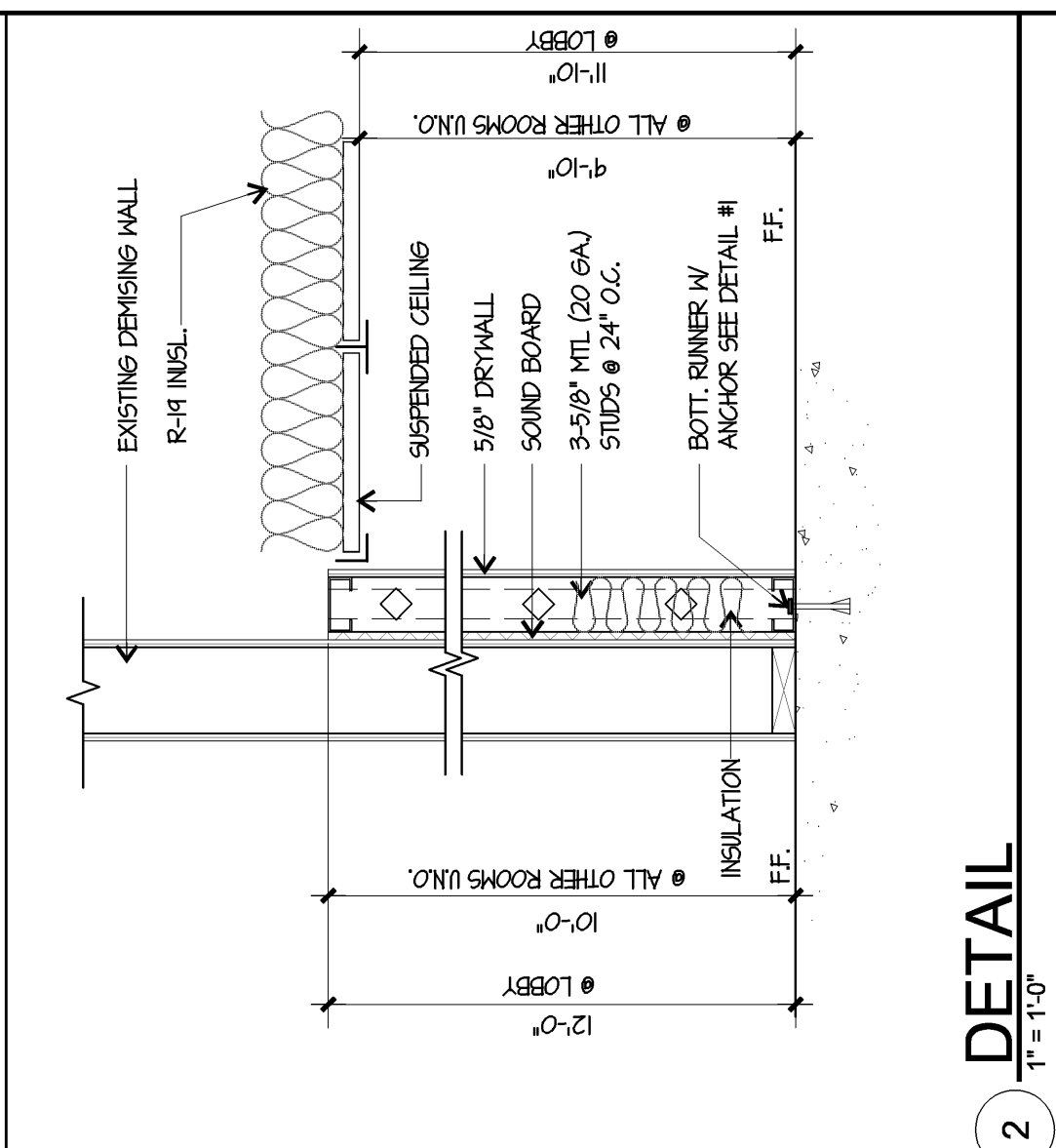
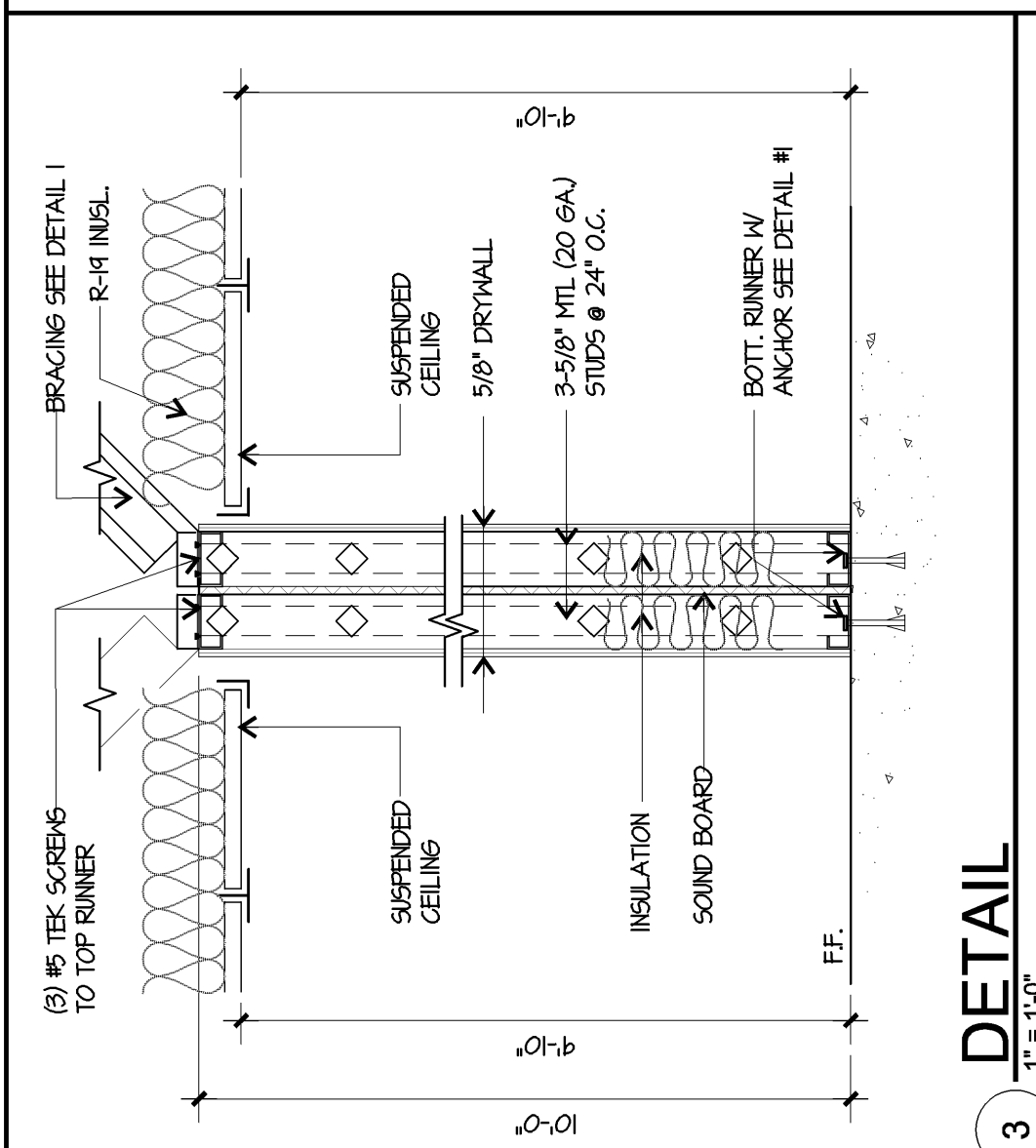
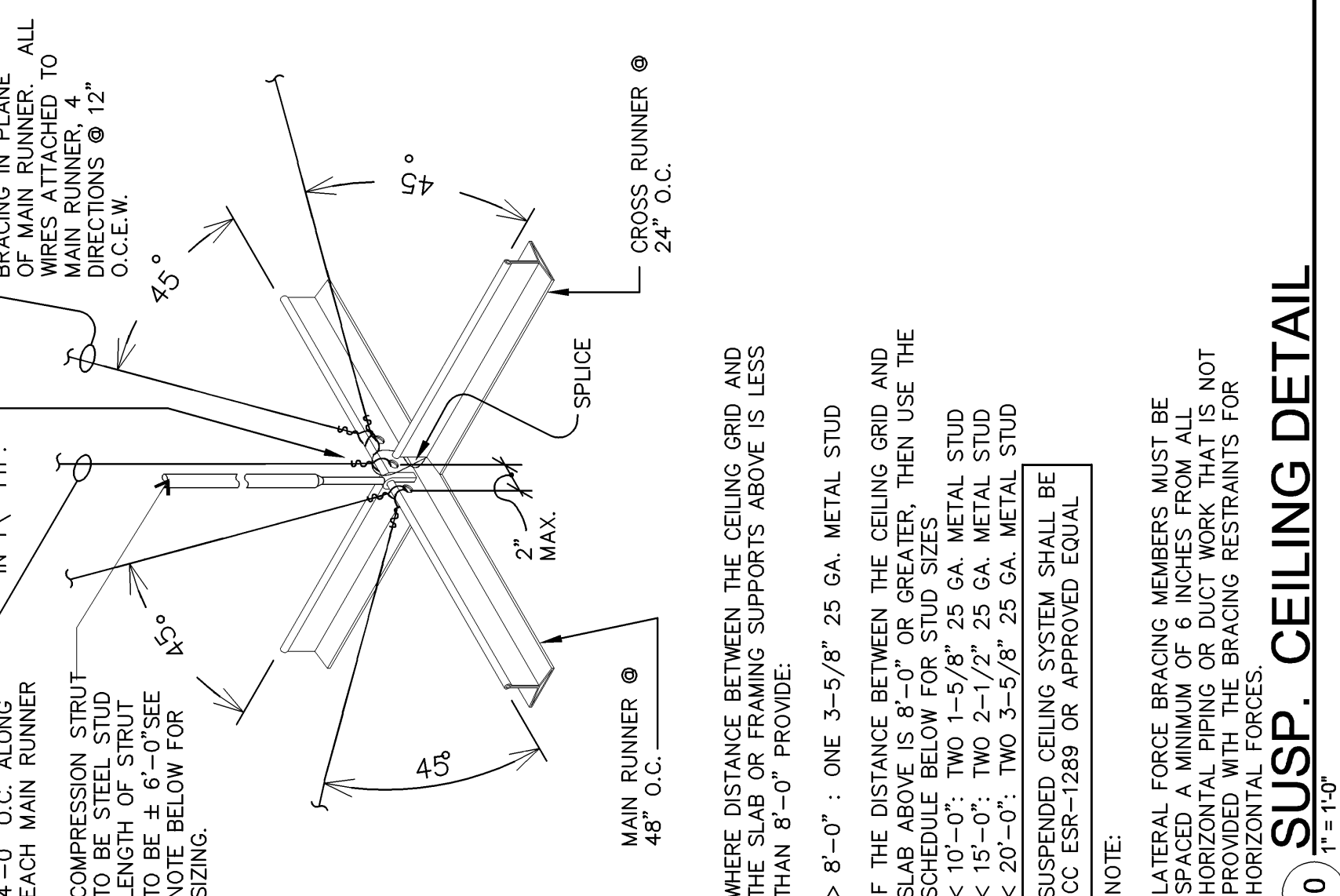
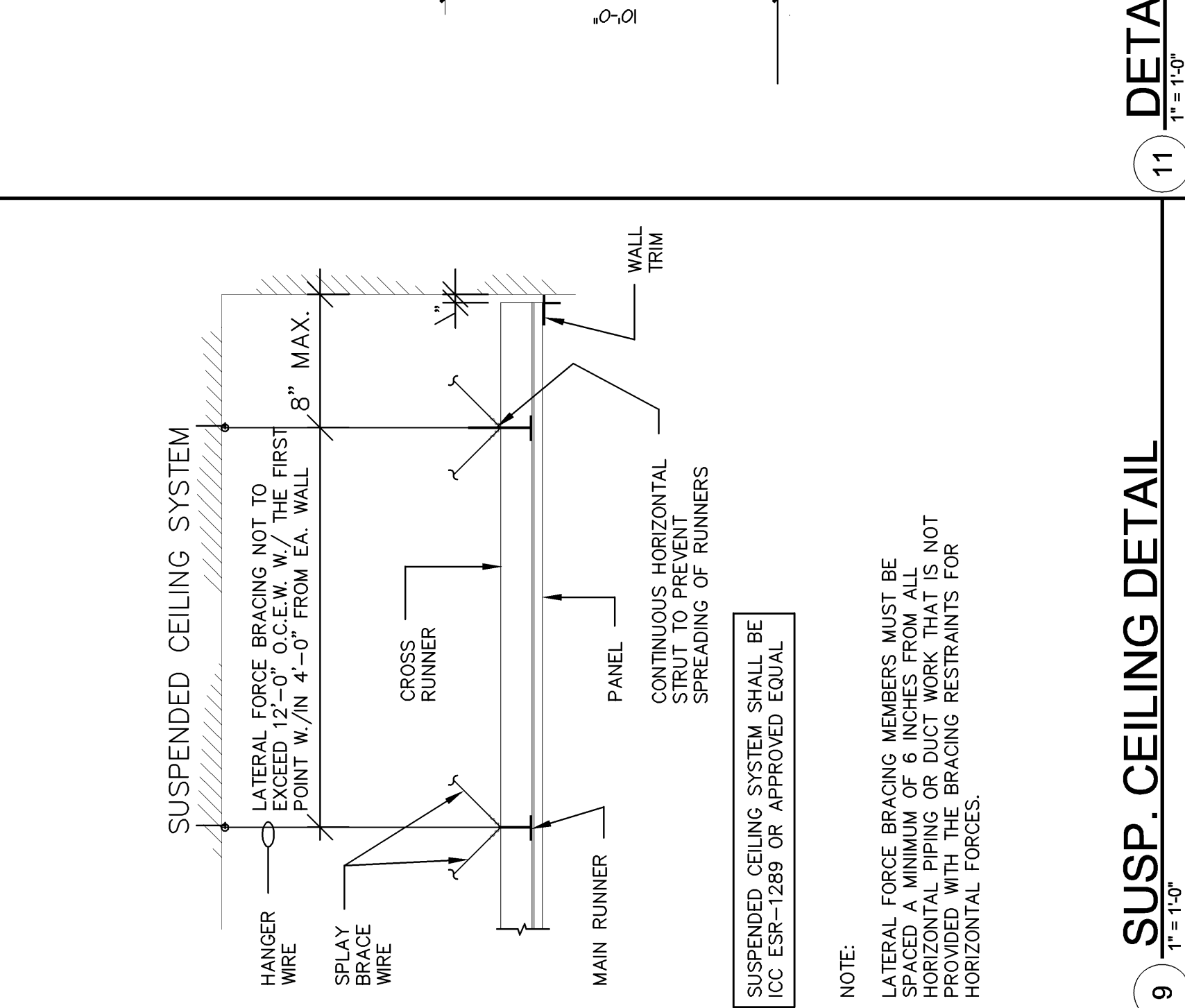
LEGEND:
WALL LEGEND
NEW 2x4 STUD PARTITION WALL
EXISTING WALLS TO REMAIN
SOUND BOARD
MECHANICAL LEGEND
NEW 2x2 SUPPLY AIR GRILL
EXISTING 2x2 RETURN AIR GRILL

NEW 2x4 SUSPENDED CEILING @ 11'-10" HIGH, ICC ESR-1284 OR APPROVED EQUAL
NEW 2x2 SUSPENDED CEILING @ 11'-10" HIGH, ICC ESR-1284 OR APPROVED EQUAL
DRYWALL CEILING, SOFFIT, SEE DETAILS

ELECTRICAL LEGEND
NOTE: REFER TO ELECTRICAL PLANS
ELECTRICAL SWITCH @ 48" AFF. (ICON)
THREE-WAY ELECTRICAL SWITCH @ 48" AFF. (ICON)
ELECTRICAL SWITCH WITH DIMMER CONTROL @ 48" AFF. (ICON)
WALL MOUNTED INTERIOR/EXTERIOR LIGHT FIXTURE (VER. INT)
RECESSED CEILING MOUNTED DOWN LIGHT
RECESSED EYEBALL CEILING FIXTURE
RECESSED CEILING MOUNTED MALL WASHER
SURFACE MOUNTED CEILING LIGHT FIXTURE
PENDANT LIGHT
2x4 FLOOR LIGHT FIXTURE
EMERGENCY EXIT LIGHT
EMERGENCY LIGHT MALL PACK
SPEAKER, VERIFY LOCATION
SPEAKER VOLUME CONTROL
EXHAUST FAN (5 AIR CHANGES



REFLECTED CEILING PLAN
3/16" = 1'-0"



7 1" = 1'-0"
6 1" = 1'-0"
5 1" = 1'-0"
4 1" = 1'-0"
3 1" = 1'-0"
2 1" = 1'-0"
1 1" = 1'-0"
1A WITH SOUND BOARD
1 1" = 1'-0"
9 1" = 1'-0"
10 1" = 1'-0"
11 1" = 1'-0"

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APPENDIX 5.2:
INSUL CALCULATION RESULTS

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Sound Insulation Prediction (v8.0.4)

Program copyright Marshall Day Acoustics 2014

- Key No. 2379



Margin of error is generally within STC +/- 3 dB

Job Name: Discount Tire Center

Job No.: 09809

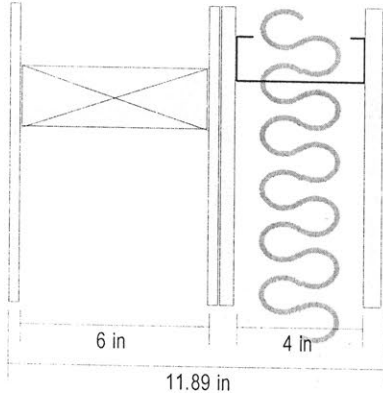
Page No.:

Notes:

Date: 25 Jun 15

Initials: Urban Crossroads, Inc.

File Name: insul



STC 48
OITC 30

System description

Panel 1 : 1 x 0.37 in Gypsum Board ($\rho:40.02 \text{ lbs/ft}^3, E:0.24\text{psi}\cdot 10^6, \eta:0.01$)

Cavity: Timber stud: Stud spacing 24 in

Panel 2 + 1 x 0.37 in Gypsum Board ($\rho:40.02 \text{ lbs/ft}^3, E:0.24\text{psi}\cdot 10^6, \eta:0.01$)

+ 1 x 0.51 in QuietRock 510 ($\rho:53.06 \text{ lbs/ft}^3, E:0.093\text{psi}\cdot 10^6, \eta:0.05$)

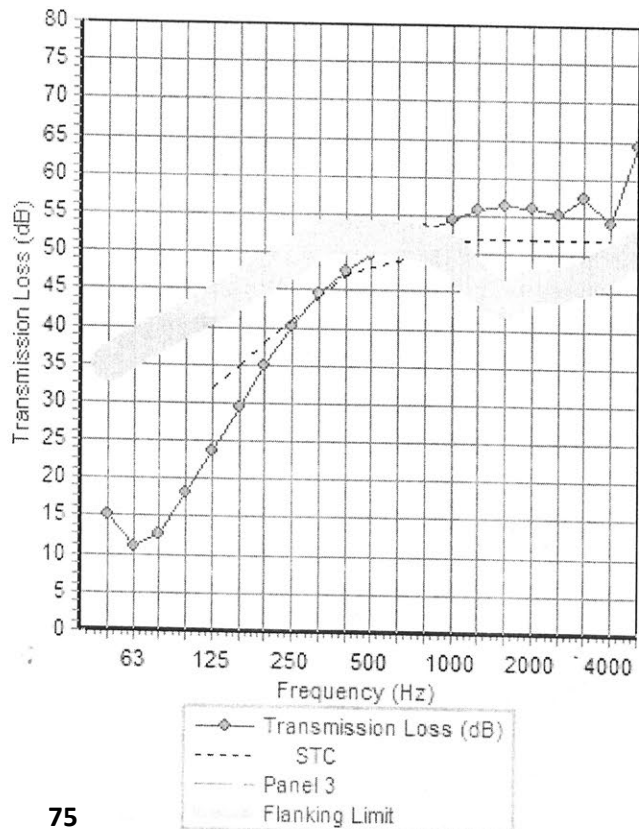
Cavity: Steel stud (25g): Stud spacing 24 in , Infill Fibreglass (10kg/m³) Thickness 2 in ($\rho:10 \text{ lbs/ft}^3, R_f:4000 \text{ Pa}\cdot\text{s/m}^2$)

Panel 3 + 1 x 0.63 in Type X Gypsum Board ($\rho:43.08 \text{ lbs/ft}^3, E:0.27\text{psi}\cdot 10^6, \eta:0.01$)

Mass-air-mass resonant frequency =64 Hz , 93 Hz

Panel Size 8.9x13 ft; Mass 7.1 lb/ft²

frequency (Hz)	TL(dB)	TL(dB)
50	15	
63	11	13
80	13	
100	18	
125	24	22
160	29	
200	35	
250	40	38
315	44	
400	47	
500	50	49
630	52	
800	53	
1000	55	54
1250	56	
1600	56	
2000	56	56
2500	55	
3150	58	
4000	54	57
5000	64	



Sound Insulation Prediction (v8.0.4)

Program copyright Marshall Day Acoustics 2014

- Key No. 2379



Margin of error is generally within STC +/- 3 dB

Job Name: Discount Tire Center

Job No.: 09809

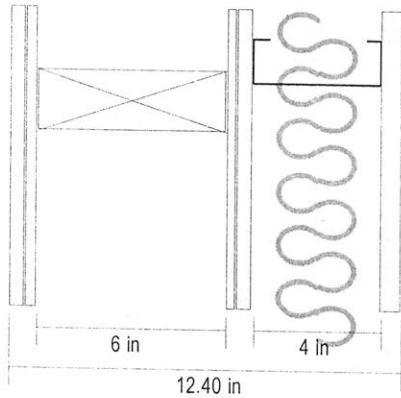
Page No.:

Notes:

Date: 25 Jun 15

Initials: Urban Crossroads, Inc.

File Name: Proposedinsul.txt



STC 55

OITC 37

System description

Panel 1 : 1 x 0.51 in QuietRock 510 ($\rho:53.06 \text{ lbs/ft}^3, E:0.093\text{psi}\cdot 10^6, \eta:0.05$)

+ 1 x 0.37 in Gypsum Board ($\rho:40.02 \text{ lbs/ft}^3, E:0.24\text{psi}\cdot 10^6, \eta:0.01$)

Cavity : Timber stud: Stud spacing 24 in

Panel 2 + 1 x 0.37 in Gypsum Board ($\rho:40.02 \text{ lbs/ft}^3, E:0.24\text{psi}\cdot 10^6, \eta:0.01$)

+ 1 x 0.51 in QuietRock 510 ($\rho:53.06 \text{ lbs/ft}^3, E:0.093\text{psi}\cdot 10^6, \eta:0.05$)

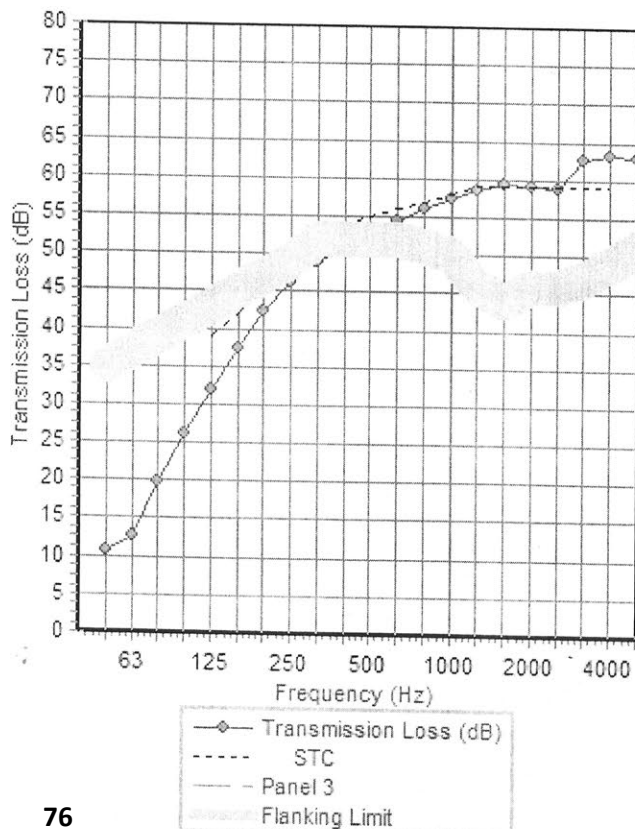
Cavity : Steel stud (25g): Stud spacing 24 in , Infill Fibreglass (10kg/m³) Thickness 2 in ($\rho:10 \text{ lbs/ft}^3, R_f:4000 \text{ Pa}\cdot\text{s/m}^2$)

Panel 3 + 1 x 0.63 in Type X Gypsum Board ($\rho:43.08 \text{ lbs/ft}^3, E:0.27\text{psi}\cdot 10^6, \eta:0.01$)

Mass-air-mass resonant frequency =50 Hz , 82 Hz

Panel Size 8.9x 13 ft, Mass 9.4 lb/ft²

frequency (Hz)	TL(dB)	TL(dB)
50	11	
63	13	13
80	20	
100	26	
125	32	30
160	37	
200	42	
250	46	45
315	49	
400	51	
500	53	52
630	54	
800	56	
1000	57	57
1250	59	
1600	59	
2000	59	59
2500	59	
3150	63	
4000	63	63
5000	63	



APPENDIX 5.3:

REFERENCE NOISE LEVEL MEASUREMENT PHOTOS

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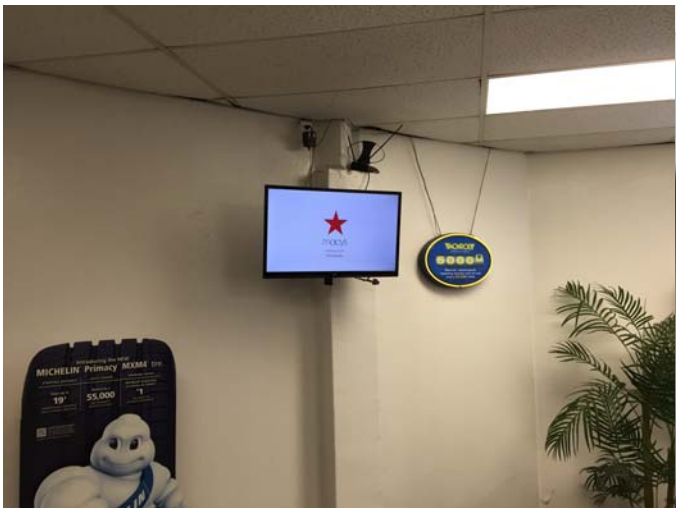
JN:09809 Discount Tire Oak Creek



Discount Tire Center Lake Forest Lobby



Discount Tire Center Lake Forest Lobby



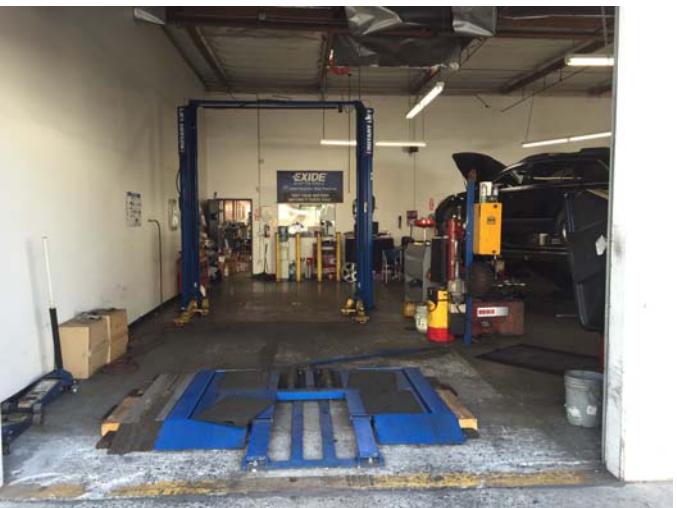
Discount Tire Center Lake Forest Lobby



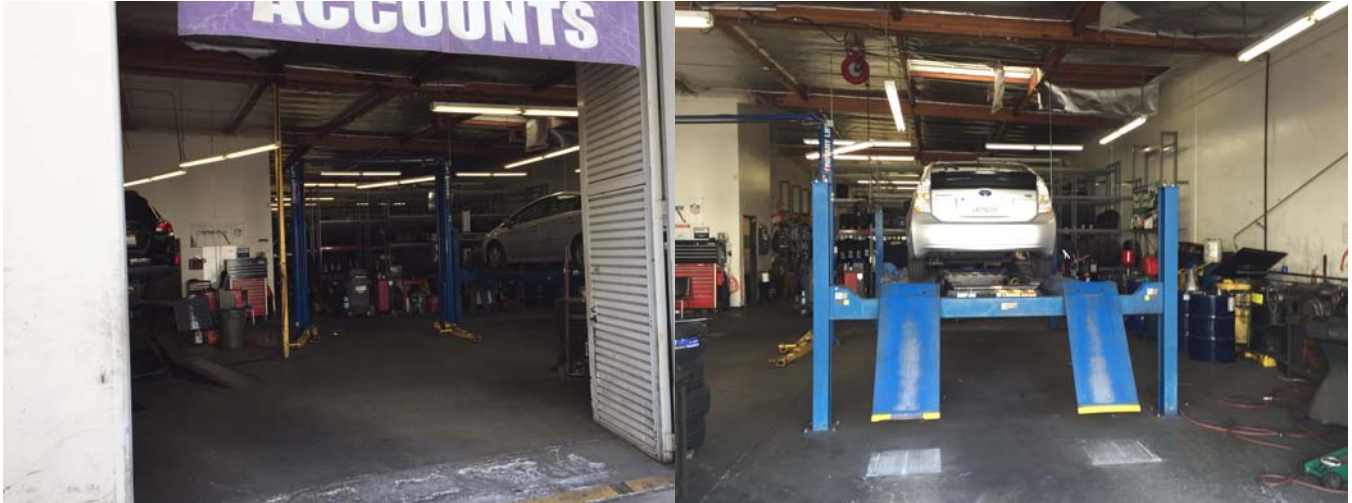
Discount Tire Center Lake Forest



Discount Tire Center Lake Forest



Discount Tire Center Lake Forest



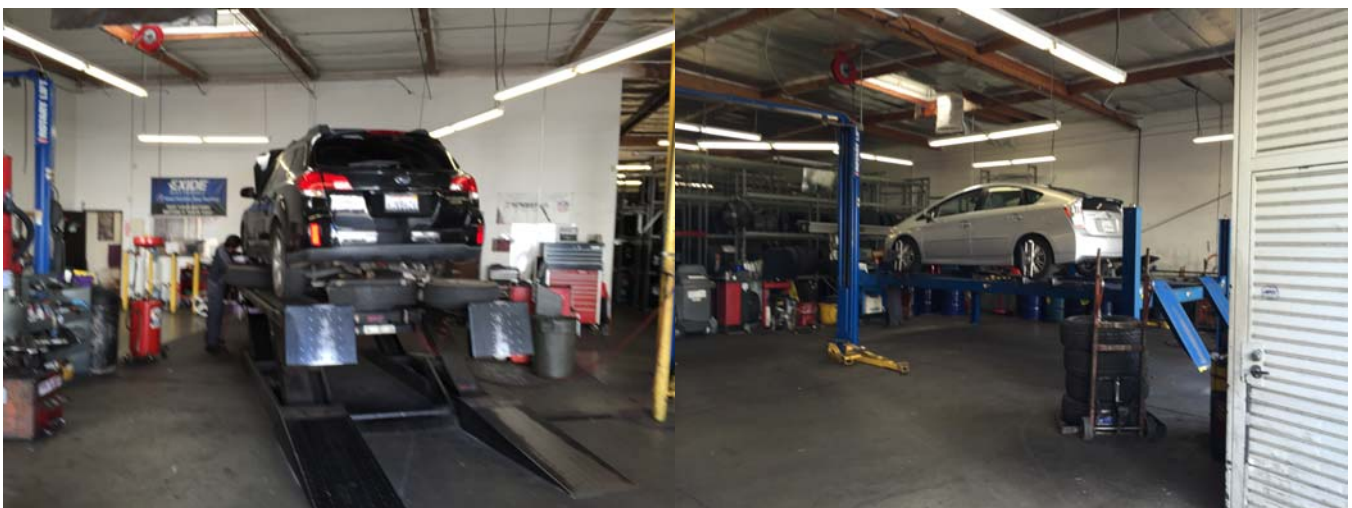
Discount Tire Center Lake Forest

Discount Tire Center Lake Forest Rotary Lift



Discount Tire Center Lake Forest Air Compressor

Discount Tire Center Lake Forest Air Compressor



Discount Tire Center Lake Forest Auto Lift

Discount Tire Center Lake Forest Auto Lift

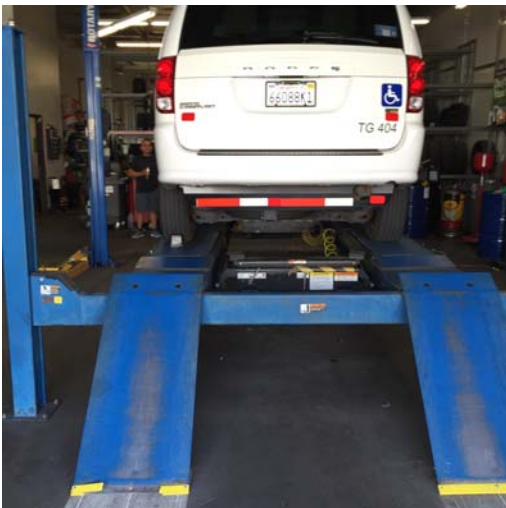
JN:09809 Discount Tire Oak Creek



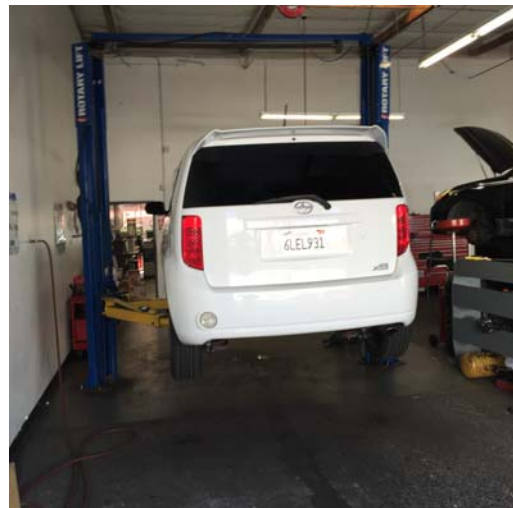
Discount Tire Center Lake Forest



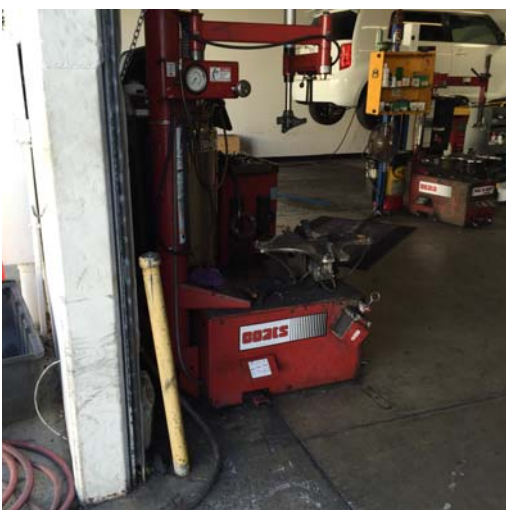
Discount Tire Center Lake Forest



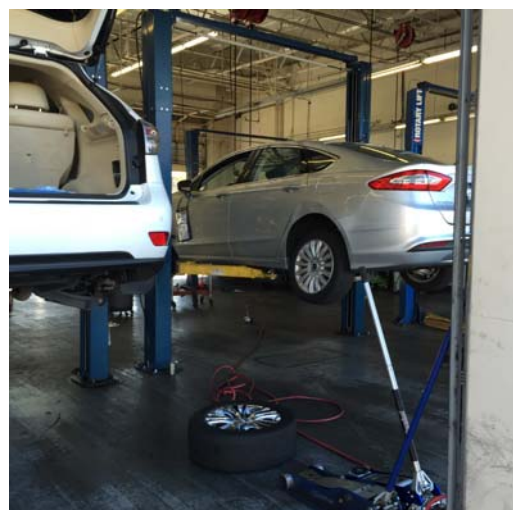
Discount Tire Center Lake Forest Auto Lift



Discount Tire Center Lake Forest



Discount Tire Center Lake Forest



Discount Tire Center Rancho Santa Margarita



Discount Tire Center Rancho Santa Margarita

Discount Tire Center Rancho Santa Margarita - Wheel Balancing



Discount Tire Center Rancho Santa Margarita - Wheel Balancing

Discount Tire Center Rancho Santa Margarita - Air Compressor



Discount Tire Center Rancho Santa Margarita - Air Compressor

Discount Tire Center Rancho Santa Margarita - Wheel Balancing



Discount Tire Center Rancho Santa Margarita - Wheel Balancing



Discount Tire Center Rancho Santa Margarita - Lobby



Discount Tire Center Rancho Santa Margarita - Lobby



Discount Tire Center Rancho Santa Margarita



Discount Tire Center Rancho Santa Margarita



Discount Tire Center Rancho Santa Margarita

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APPENDIX 5.4:

REFERENCE NOISE LEVEL MEASUREMENT WORKSHEETS

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General Information	
Serial Number	01146
Model	SoundTrack LxT®
Firmware Version	2.301
Filename	LxT_Data.001
User	Bill Lawson
Job Description	JN:09809 Oak Creek
Location	Discount Tire Center - Lake Forest Waiting Room TV, coffee machin

Measurement Description	
Start Time	Friday, 2015 June 19 08:14:32
Stop Time	Friday, 2015 June 19 08:15:32
Duration	00:01:00.5
Run Time	00:01:00.5
Pause	00:00:00.0
Pre Calibration	Friday, 2015 June 19 08:11:44
Post Calibration	None
Calibration Deviation	---

Note

Overall Data			
LASeq		61.0	dB
LASmax	2015 Jun 19 08:14:43	66.0	dB
LAPeak (max)	2015 Jun 19 08:14:38	84.9	dB
LASmin	2015 Jun 19 08:14:34	52.3	dB
LCSeq		63.5	dB
LASeq		61.0	dB
LCSeq - LASeq		2.6	dB
LASeq		64.9	dB
LAEq		60.9	dB
LASeq - LAEq		3.9	dB
Ldn		61.0	dB
LDay 07:00-22:00		61.0	dB
LNight 22:00-07:00		---	dB
Lden		61.0	dB
LDay 07:00-19:00		61.0	dB
LEvening 19:00-22:00		---	dB
LNight 22:00-07:00		---	dB
LASE		78.8	dB
EAS		8.432	µPa²h
EAS8		4.014	mPa²h
EAS40		20.07	mPa²h
# Overloads		0	
Overload Duration		0.0	s
# OBA Overloads		0	
OBA Overload Duration		0.0	s

Statistics			
LAS2.00		64.2	dBA
LAS8.00		62.6	dBA
LAS25.00		61.8	dBA
LAS50.00		61.1	dBA
LAS90.00		58.3	dBA
LAS99.00		53.1	dBA
LAS > 85.0 dB (Exceedence Counts / Duration)		0 / 0.0	s
LAS > 115.0 dB (Exceedence Counts / Duration)		0 / 0.0	s
LAPeak > 135.0 dB (Exceedence Counts / Duration)		0 / 0.0	s
LAPeak > 137.0 dB (Exceedence Counts / Duration)		0 / 0.0	s
LAPeak > 140.0 dB (Exceedence Counts / Duration)		0 / 0.0	s

Dose		
Name		OSHA-1
Dose		0.00 %
Projected Dose		0.13 %
TWA (Projected)		61.0 dBA
TWA (t)		34.2 dBA
Lep (t)		34.2 dBA

Settings			
Exchange Rate		3	dB
Threshold		-99.9	dBA
Criterion Level		90.0	dBA
Criterion Duration		8.0	h
RMS Weight		A Weighting	
Peak Weight		A Weighting	
Detector		Slow	
Preamp		PRMLxT1	
Microphone Correction		Off	
Integration Method		Exponential	
OBA Range		Low	
OBA Bandwidth		1/3 Octave	
OBA Freq. Weighting		A Weighting	
OBA Max Spectrum		Bin Max	
Under Range Limit		37.5	dB
Under Range Peak		101.1	dB
Noise Floor		24.7	dB
Overload		144.9	dB

1/3 Spectra												
Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LASeq	13.5	12.5	11.9	10.8	10.0	9.2	8.5	10.1	12.1	17.0	20.2	23.0
LASmax	13.5	12.5	11.9	10.8	10.0	9.2	8.5	17.8	21.7	22.8	34.5	35.1
LASmin	13.5	12.5	11.9	10.8	10.0	9.2	8.5	7.8	7.3	6.7	11.8	13.4
Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LASeq	28.0	29.7	31.1	44.6	47.6	45.2	43.3	46.5	47.3	49.8	49.7	50.4
LASmax	42.7	43.7	43.0	53.8	58.7	57.8	53.4	55.4	55.6	57.9	54.7	55.3
LASmin	16.0	16.2	20.3	28.7	33.8	34.4	35.1	36.7	38.8	40.3	38.6	41.5
Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LASeq	52.1	53.7	49.4	46.2	49.9	48.4	44.1	40.9	32.2	27.3	24.2	22.3
LASmax	56.1	57.7	55.7	52.0	54.3	53.5	48.9	46.4	38.0	37.4	36.5	33.5
LASmin	44.0	45.1	39.8	37.7	41.9	37.8	31.4	30.5	24.0	19.5	18.1	19.6

Calibration History			
Preamp		Date	dB re. 1V/Pa
PRMLxT1		19 Jun 2015 08:11:41	-51.1
PRMLxT1		16 Jun 2015 09:18:16	-51.2
PRMLxT1		15 Jun 2015 16:42:28	-51.1
PRMLxT1		28 May 2015 17:08:17	-51.3
PRMLxT1		22 May 2015 10:58:03	-51.0
PRMLxT1		21 May 2015 13:38:53	-50.9
PRMLxT1		21 May 2015 13:27:16	-49.1
PRMLxT1		21 May 2015 11:38:41	-49.0

General Information

Serial Number 01146
 Model SoundTrack LxT®
 Firmware Version 2.301
 Filename LxT_Data.002
 User Bill Lawson
 Job Description JN:09809 Oak Creek
 Location Discount Tire Center Lake Forest - Air Compressor

Measurement Description

Start Time Friday, 2015 June 19 08:19:32
 Stop Time Friday, 2015 June 19 08:20:40
 Duration 00:01:07.2
 Run Time 00:01:07.2
 Pause 00:00:00.0
 Pre Calibration Friday, 2015 June 19 08:11:41
 Post Calibration None
 Calibration Deviation ---

Note

Overall Data

LASeq		81.1	dB
LASmax	2015 Jun 19 08:20:05	82.1	dB
LApeak (max)	2015 Jun 19 08:20:17	98.2	dB
LASmin	2015 Jun 19 08:19:52	78.0	dB
LCSeq		84.9	dB
LASeq		81.1	dB
LCSeq - LASeq		3.8	dB
LASeq		82.0	dB
LAEq		81.2	dB
LASeq - LAeq		0.8	dB
Ldn		81.1	dB
LDay 07:00-22:00		81.1	dB
LNight 22:00-07:00		---	dB
Lden		81.1	dB
LDay 07:00-19:00		81.1	dB
LEvening 19:00-22:00		---	dB
LNight 22:00-07:00		---	dB
LASE		99.4	dB
EAS		967.9	µPa²h
EAS8		414.8	mPa²h
EAS40		2.0741	Pa²h
# Overloads		0	
Overload Duration		0.0	s
# OBA Overloads		0	
OBA Overload Duration		0.0	s

Statistics

LAS2.00	81.9	dBA
LAS8.00	81.8	dBA
LAS25.00	81.6	dBA
LAS50.00	81.5	dBA
LAS90.00	79.8	dBA
LAS99.00	78.2	dBA

LAS > 85.0 dB (Exceedence Counts / Duration)	0 /	0.0	s
LAS > 115.0 dB (Exceedence Counts / Duration)	0 /	0.0	s
LApeak > 135.0 dB (Exceedence Counts / Duration)	0 /	0.0	s
LApeak > 137.0 dB (Exceedence Counts / Duration)	0 /	0.0	s
LApeak > 140.0 dB (Exceedence Counts / Duration)	0 /	0.0	s

Dose

Name	OSHA-1	
Dose	0.03	%
Projected Dose	12.96	%
TWA (Projected)	81.1	dBA
TWA (t)	54.8	dBA
Lep (t)	54.8	dBA

Settings			
Exchange Rate		3	dB
Threshold		-99.9	dBA
Criterion Level		90.0	dBA
Criterion Duration		8.0	h
RMS Weight		A Weighting	
Peak Weight		A Weighting	
Detector		Slow	
Preamp		PRMLxT1	
Microphone Correction		Off	
Integration Method		Exponential	
OBA Range		Low	
OBA Bandwidth		1/3 Octave	
OBA Freq. Weighting		A Weighting	
OBA Max Spectrum		Bin Max	
Under Range Limit		37.5	dB
Under Range Peak		101.1	dB
Noise Floor		24.7	dB
Overload		144.9	dB

1/3 Spectra												
Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LASeq	13.5	12.5	11.9	11.7	10.0	11.9	24.8	27.9	26.3	40.2	43.8	46.6
LASmax	13.5	12.5	11.9	12.4	10.0	14.1	25.8	29.3	28.0	42.5	46.2	54.5
LASmin	13.5	12.5	11.9	10.8	10.0	9.2	23.4	24.2	22.1	37.2	40.8	39.4
Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LASeq	48.5	56.0	59.6	65.2	70.4	66.6	63.4	65.5	66.7	71.4	71.4	70.3
LASmax	50.7	57.3	61.3	66.9	71.7	67.8	64.7	67.6	68.3	73.0	72.9	71.9
LASmin	45.6	51.7	52.8	59.6	63.3	63.4	61.7	62.0	62.6	67.6	68.1	66.4
Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LASeq	69.8	70.2	70.5	71.2	67.6	68.2	62.4	59.5	57.6	61.7	59.4	48.2
LASmax	71.3	71.5	71.5	73.0	68.6	73.4	64.7	61.2	58.8	64.5	61.7	49.8
LASmin	64.9	66.4	68.2	68.3	65.1	64.4	60.4	57.1	55.1	59.8	57.5	47.1

Calibration History			
Preamp		Date	dB re. 1V/Pa
PRMLxT1		19 Jun 2015 08:11:41	-51.1
PRMLxT1		16 Jun 2015 09:18:16	-51.2
PRMLxT1		15 Jun 2015 16:42:28	-51.1
PRMLxT1		28 May 2015 17:08:17	-51.3
PRMLxT1		22 May 2015 10:58:03	-51.0
PRMLxT1		21 May 2015 13:38:53	-50.9
PRMLxT1		21 May 2015 13:27:16	-49.1
PRMLxT1		21 May 2015 11:38:41	-49.0

General Information	
Serial Number	01146
Model	SoundTrack LxT®
Firmware Version	2.301
Filename	LxT_Data.003
User	Bill Lawson
Job Description	JN:09809 Oak Creek
Location	Discount Tire Center Lake Forest - Air Wrench, Phone

Measurement Description	
Start Time	Friday, 2015 June 19 08:21:23
Stop Time	Friday, 2015 June 19 08:23:36
Duration	00:01:13.4
Run Time	00:01:13.4
Pause	00:00:00.0
Pre Calibration	Friday, 2015 June 19 08:11:41
Post Calibration	None
Calibration Deviation	---

Note

Overall Data			
LASeq		78.7	dB
LASmax	2015 Jun 19 08:23:31	86.7	dB
LApeak (max)	2015 Jun 19 08:23:29	103.3	dB
LASmin	2015 Jun 19 08:22:42	48.8	dB
LCSeq		79.4	dB
LASeq		78.7	dB
LCSeq - LASeq		0.7	dB
LAReq		84.7	dB
LAeq		78.7	dB
LAReq - LAeq		6.0	dB
Ldn		78.7	dB
LDay 07:00-22:00		78.7	dB
LNight 22:00-07:00		---	dB
Lden		78.7	dB
LDay 07:00-19:00		78.7	dB
LEvening 19:00-22:00		---	dB
LNight 22:00-07:00		---	dB
LASE		97.3	dB
EAS		600.3	µPa²h
EAS8		235.6	mPa²h
EAS40		1.1778	Pa²h
# Overloads		0	
Overload Duration		0.0	s
# OBA Overloads		0	
OBA Overload Duration		0.0	s

Statistics			
LAS2.00		85.9	dB
LAS8.00		83.7	dB
LAS25.00		80.4	dB
LAS50.00		74.8	dB
LAS90.00		52.9	dB
LAS99.00		49.3	dB
LAS > 85.0 dB (Exceedence Counts / Duration)		4 / 4.8	s
LAS > 115.0 dB (Exceedence Counts / Duration)		0 / 0.0	s
LApeak > 135.0 dB (Exceedence Counts / Duration)		0 / 0.0	s
LApeak > 137.0 dB (Exceedence Counts / Duration)		0 / 0.0	s
LApeak > 140.0 dB (Exceedence Counts / Duration)		0 / 0.0	s

Dose			
Name		OSHA-1	
Dose		0.02	%
Projected Dose		7.36	%
TWA (Projected)		78.7	dB
TWA (t)		52.7	dB
Lep (t)		52.7	dB

Settings			
Exchange Rate		3	dB
Threshold		-99.9	dBA
Criterion Level		90.0	dBA
Criterion Duration		8.0	h
RMS Weight		A Weighting	
Peak Weight		A Weighting	
Detector		Slow	
Preamp		PRMLxT1	
Microphone Correction		Off	
Integration Method		Exponential	
OBA Range		Low	
OBA Bandwidth		1/3 Octave	
OBA Freq. Weighting		A Weighting	
OBA Max Spectrum		Bin Max	
Under Range Limit		37.5	dB
Under Range Peak		101.1	dB
Noise Floor		24.7	dB
Overload		144.9	dB

1/3 Spectra												
Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LASeq	13.5	12.5	11.9	10.8	10.0	9.2	11.4	15.8	20.9	28.6	30.3	34.5
LASmax	13.5	12.5	11.9	10.8	10.0	9.2	17.7	21.0	25.6	35.4	35.9	46.3
LASmin	13.5	12.5	11.9	10.8	10.0	9.2	8.5	11.0	16.0	23.1	27.0	27.5
Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LASeq	39.4	44.9	48.4	53.4	59.0	59.5	61.6	67.3	66.7	65.4	67.6	69.9
LASmax	46.6	52.5	57.2	62.4	68.4	67.4	70.6	77.8	77.5	73.9	76.1	78.4
LASmin	32.5	35.4	33.4	33.3	33.3	31.0	33.3	36.3	36.4	37.7	37.6	36.4
Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LASeq	68.6	68.3	67.8	66.5	66.1	67.0	65.8	63.9	60.4	58.2	53.8	47.2
LASmax	77.4	76.3	76.7	74.3	74.2	75.4	74.7	72.6	69.1	67.2	62.5	56.2
LASmin	35.6	34.0	33.0	33.7	34.6	33.9	34.9	34.2	31.9	28.2	26.6	22.3

Calibration History			
Preamp		Date	dB re. 1V/Pa
PRMLxT1		19 Jun 2015 08:11:41	-51.1
PRMLxT1		16 Jun 2015 09:18:16	-51.2
PRMLxT1		15 Jun 2015 16:42:28	-51.1
PRMLxT1		28 May 2015 17:08:17	-51.3
PRMLxT1		22 May 2015 10:58:03	-51.0
PRMLxT1		21 May 2015 13:38:53	-50.9
PRMLxT1		21 May 2015 13:27:16	-49.1
PRMLxT1		21 May 2015 11:38:41	-49.0

General Information	
Serial Number	01146
Model	SoundTrack LxT®
Firmware Version	2.301
Filename	LxT_Data.004
User	Bill Lawson
Job Description	JN:09809 Oak Creek
Location	Discount Tire Center Lake Forest - Car Lift

Measurement Description	
Start Time	Friday, 2015 June 19 08:36:13
Stop Time	Friday, 2015 June 19 08:36:47
Duration	00:00:34.2
Run Time	00:00:34.2
Pause	00:00:00.0
Pre Calibration	Friday, 2015 June 19 08:11:41
Post Calibration	None
Calibration Deviation	---

Note

Overall Data			
LASeq		75.1	dB
LASmax	2015 Jun 19 08:36:41	81.0	dB
LAPeak (max)	2015 Jun 19 08:36:41	101.7	dB
LASmin	2015 Jun 19 08:36:14	51.0	dB
LCSeq		74.4	dB
LASeq		75.1	dB
LCSeq - LASeq		-0.8	dB
LASeq		83.1	dB
LAEq		75.5	dB
LASeq - LAEq		7.6	dB
Ldn		75.1	dB
LDay 07:00-22:00		75.1	dB
LNight 22:00-07:00		---	dB
Lden		75.1	dB
LDay 07:00-19:00		75.1	dB
LEvening 19:00-22:00		---	dB
LNight 22:00-07:00		---	dB
LASE		90.5	dB
EAS		123.4	µPa²h
EAS8		103.9	mPa²h
EAS40		519.6	mPa²h
# Overloads		0	
Overload Duration		0.0	s
# OBA Overloads		0	
OBA Overload Duration		0.0	s

Statistics			
LAS2.00		80.3	dBA
LAS8.00		79.6	dBA
LAS25.00		77.0	dBA
LAS50.00		72.6	dBA
LAS90.00		67.3	dBA
LAS99.00		51.5	dBA
LAS > 85.0 dB (Exceedence Counts / Duration)		0 / 0.0	s
LAS > 115.0 dB (Exceedence Counts / Duration)		0 / 0.0	s
LAPeak > 135.0 dB (Exceedence Counts / Duration)		0 / 0.0	s
LAPeak > 137.0 dB (Exceedence Counts / Duration)		0 / 0.0	s
LAPeak > 140.0 dB (Exceedence Counts / Duration)		0 / 0.0	s

Dose			
Name		OSHA-1	
Dose		0.00	%
Projected Dose		3.25	%
TWA (Projected)		75.1	dBA
TWA (t)		45.9	dBA
Lep (t)		45.9	dBA

Settings			
Exchange Rate		3	dB
Threshold		-99.9	dBA
Criterion Level		90.0	dBA
Criterion Duration		8.0	h
RMS Weight		A Weighting	
Peak Weight		A Weighting	
Detector		Slow	
Preamp		PRMLxT1	
Microphone Correction		Off	
Integration Method		Exponential	
OBA Range		Low	
OBA Bandwidth		1/3 Octave	
OBA Freq. Weighting		A Weighting	
OBA Max Spectrum		Bin Max	
Under Range Limit		37.5	dB
Under Range Peak		101.1	dB
Noise Floor		24.7	dB
Overload		144.9	dB

1/3 Spectra												
Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LASeq	13.5	12.5	11.9	10.8	10.0	9.2	9.0	15.4	18.3	24.5	29.1	30.2
LASmax	13.5	12.5	11.9	10.8	10.0	9.2	12.5	18.0	22.1	38.9	40.7	37.3
LASmin	13.5	12.5	11.9	10.8	10.0	9.2	8.5	12.9	15.6	21.5	25.7	27.1
Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LASeq	32.9	40.0	36.8	38.5	45.1	52.5	50.9	52.2	57.2	58.8	58.7	61.7
LASmax	40.9	44.8	51.0	51.7	56.3	61.4	63.7	63.0	63.5	66.6	67.1	68.7
LASmin	30.1	35.9	32.8	33.5	35.3	36.6	35.7	38.1	41.8	40.5	39.7	39.4
Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LASeq	64.8	65.0	68.4	65.6	66.6	66.3	63.5	58.4	54.2	47.4	43.2	35.1
LASmax	72.0	71.3	72.8	72.1	73.2	72.5	70.2	64.6	60.9	55.0	49.9	41.2
LASmin	37.4	35.9	39.3	35.5	34.7	34.6	35.9	36.3	34.4	33.4	32.7	28.5

Calibration History			
Preamp		Date	dB re. 1V/Pa
PRMLxT1		19 Jun 2015 08:11:41	-51.1
PRMLxT1		16 Jun 2015 09:18:16	-51.2
PRMLxT1		15 Jun 2015 16:42:28	-51.1
PRMLxT1		28 May 2015 17:08:17	-51.3
PRMLxT1		22 May 2015 10:58:03	-51.0
PRMLxT1		21 May 2015 13:38:53	-50.9
PRMLxT1		21 May 2015 13:27:16	-49.1
PRMLxT1		21 May 2015 11:38:41	-49.0

General Information

Serial Number	01146
Model	SoundTrack LxT®
Firmware Version	2.301
Filename	LxT_Data.005
User	Bill Lawson
Job Description	JN:09809 Oak Creek
Location	Discount Tire Center Lake Forest - Rotary Car Lift

Measurement Description

Start Time	Friday, 2015 June 19 08:39:15
Stop Time	Friday, 2015 June 19 08:39:38
Duration	00:00:23.1
Run Time	00:00:23.1
Pause	00:00:00.0
Pre Calibration	Friday, 2015 June 19 08:11:41
Post Calibration	None
Calibration Deviation	---

Note

Overall Data

LASeq		64.2	dB
LASmax	2015 Jun 19 08:39:28	67.2	dB
LApeak (max)	2015 Jun 19 08:39:17	81.8	dB
LASmin	2015 Jun 19 08:39:38	58.9	dB
LCSeq		68.5	dB
LASeq		64.2	dB
LCSeq - LASeq		4.3	dB
LASeq		65.2	dB
LAEq		64.2	dB
LASeq - LAEq		0.9	dB
Ldn		64.2	dB
LDay 07:00-22:00		64.2	dB
LNight 22:00-07:00		---	dB
Lden		64.2	dB
LDay 07:00-19:00		64.2	dB
LEvening 19:00-22:00		---	dB
LNight 22:00-07:00		---	dB
LASE		77.9	dB
EAS		6.789	µPa²h
EAS8		8.464	mPa²h
EAS40		42.32	mPa²h
# Overloads		0	
Overload Duration		0.0	s
# OBA Overloads		0	
OBA Overload Duration		0.0	s

Statistics

LAS2.00	67.2	dBA
LAS8.00	66.2	dBA
LAS25.00	64.5	dBA
LAS50.00	64.0	dBA
LAS90.00	62.3	dBA
LAS99.00	59.4	dBA

LAS > 85.0 dB (Exceedence Counts / Duration)	0 /	0.0	s
LAS > 115.0 dB (Exceedence Counts / Duration)	0 /	0.0	s
LApeak > 135.0 dB (Exceedence Counts / Duration)	0 /	0.0	s
LApeak > 137.0 dB (Exceedence Counts / Duration)	0 /	0.0	s
LApeak > 140.0 dB (Exceedence Counts / Duration)	0 /	0.0	s

Dose

Name	OSHA-1
Dose	0.00 %
Projected Dose	0.26 %
TWA (Projected)	64.2 dBA
TWA (t)	33.3 dBA
Lep (t)	33.3 dBA

Settings			
Exchange Rate		3	dB
Threshold		-99.9	dBA
Criterion Level		90.0	dBA
Criterion Duration		8.0	h
RMS Weight		A Weighting	
Peak Weight		A Weighting	
Detector		Slow	
Preamp		PRMLxT1	
Microphone Correction		Off	
Integration Method		Exponential	
OBA Range		Low	
OBA Bandwidth		1/3 Octave	
OBA Freq. Weighting		A Weighting	
OBA Max Spectrum		Bin Max	
Under Range Limit		37.5	dB
Under Range Peak		101.1	dB
Noise Floor		24.7	dB
Overload		144.9	dB

1/3 Spectra												
Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LASeq	13.5	12.5	11.9	10.8	10.0	9.2	10.3	16.4	20.1	26.5	30.8	31.0
LASmax	13.5	12.5	11.9	10.8	10.0	9.2	15.0	20.1	23.5	32.3	36.9	38.7
LASmin	13.5	12.5	11.9	10.8	10.0	9.2	8.5	11.9	15.8	24.1	26.0	25.7
Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LASeq	34.2	45.8	43.4	37.3	40.6	44.6	49.1	48.3	50.5	61.7	46.1	45.5
LASmax	38.3	49.2	46.9	41.9	43.0	47.5	51.6	52.6	54.1	66.1	47.9	48.3
LASmin	31.0	40.5	35.5	33.0	34.6	40.4	40.9	43.2	45.6	51.9	42.2	42.5
Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LASeq	53.4	50.5	54.1	44.5	43.9	43.5	47.2	39.2	37.8	33.9	32.2	23.2
LASmax	56.9	52.1	57.7	46.0	45.6	44.8	48.7	40.5	39.2	35.2	33.2	23.9
LASmin	49.8	45.6	48.6	40.3	39.6	38.6	40.1	36.0	30.8	26.7	23.3	19.6

Calibration History		
Preamp	Date	dB re. 1V/Pa
PRMLxT1	19 Jun 2015 08:11:41	-51.1
PRMLxT1	16 Jun 2015 09:18:16	-51.2
PRMLxT1	15 Jun 2015 16:42:28	-51.1
PRMLxT1	28 May 2015 17:08:17	-51.3
PRMLxT1	22 May 2015 10:58:03	-51.0
PRMLxT1	21 May 2015 13:38:53	-50.9
PRMLxT1	21 May 2015 13:27:16	-49.1
PRMLxT1	21 May 2015 11:38:41	-49.0

General Information

Serial Number 01146
 Model SoundTrack LxT®
 Firmware Version 2.301
 Filename LxT_Data.006
 User Bill Lawson
 Job Description JN:09809 Oak Creek
 Location Discount Tire Center Rancho Santa Margarita

Measurement Description

Start Time Friday, 2015 June 19 09:07:45
 Stop Time Friday, 2015 June 19 09:09:05
 Duration 00:01:20.2
 Run Time 00:01:20.2
 Pause 00:00:00.0
 Pre Calibration Friday, 2015 June 19 08:11:41
 Post Calibration None
 Calibration Deviation ---

Note

Overall Data

LASeq		73.0	dB
LASmax	2015 Jun 19 09:07:49	81.5	dB
LApeak (max)	2015 Jun 19 09:08:41	108.4	dB
LASmin	2015 Jun 19 09:08:30	60.5	dB
LCSeq		77.7	dB
LASeq		73.0	dB
LCSeq - LASeq		4.7	dB
LAReq		81.1	dB
LAeq		73.2	dB
LAReq - LAeq		7.9	dB
Ldn		73.0	dB
LDay 07:00-22:00		73.0	dB
LNight 22:00-07:00		---	dB
Lden		73.0	dB
LDay 07:00-19:00		73.0	dB
LEvening 19:00-22:00		---	dB
LNight 22:00-07:00		---	dB
LASE		92.0	dB
EAS		177.4	µPa²h
EAS8		63.69	mPa²h
EAS40		318.5	mPa²h
# Overloads		0	
Overload Duration		0.0	s
# OBA Overloads		0	
OBA Overload Duration		0.0	s

Statistics

LAS2.00	80.6	dB
LAS8.00	78.8	dB
LAS25.00	73.2	dB
LAS50.00	68.1	dB
LAS90.00	61.9	dB
LAS99.00	60.6	dB

LAS > 85.0 dB (Exceedence Counts / Duration)	0 /	0.0	s
LAS > 115.0 dB (Exceedence Counts / Duration)	0 /	0.0	s
LApeak > 135.0 dB (Exceedence Counts / Duration)	0 /	0.0	s
LApeak > 137.0 dB (Exceedence Counts / Duration)	0 /	0.0	s
LApeak > 140.0 dB (Exceedence Counts / Duration)	0 /	0.0	s

Dose

Name	OSHA-1	
Dose	0.01	%
Projected Dose	1.99	%
TWA (Projected)	73.0	dB
TWA (t)	47.4	dB
Lep (t)	47.4	dB

Settings			
Exchange Rate		3	dB
Threshold		-99.9	dBA
Criterion Level		90.0	dBA
Criterion Duration		8.0	h
RMS Weight		A Weighting	
Peak Weight		A Weighting	
Detector		Slow	
Preamp		PRMLxT1	
Microphone Correction		Off	
Integration Method		Exponential	
OBA Range		Low	
OBA Bandwidth		1/3 Octave	
OBA Freq. Weighting		A Weighting	
OBA Max Spectrum		Bin Max	
Under Range Limit		37.5	dB
Under Range Peak		101.1	dB
Noise Floor		24.7	dB
Overload		144.9	dB

1/3 Spectra												
Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LASeq	13.5	12.5	11.9	10.8	10.2	22.7	14.2	23.6	25.0	27.0	34.1	38.3
LASmax	13.5	12.5	11.9	10.8	16.6	27.1	22.2	36.3	30.2	34.4	42.4	48.3
LASmin	13.5	12.5	11.9	10.8	10.0	20.2	9.1	15.3	20.7	22.4	28.3	30.1
Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LASeq	47.0	50.1	52.7	59.1	58.6	58.8	58.8	60.4	60.6	62.1	63.0	63.5
LASmax	58.5	62.8	62.4	72.6	71.5	70.3	71.9	70.6	70.4	72.3	72.5	73.4
LASmin	29.9	34.9	39.1	39.9	39.5	40.2	39.9	42.4	44.3	45.5	46.1	47.1
Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LASeq	61.9	61.9	61.4	59.8	60.2	58.3	55.8	55.2	54.0	48.2	44.4	38.2
LASmax	70.8	71.2	71.5	69.6	70.4	68.1	65.7	64.4	62.1	57.4	52.4	46.6
LASmin	46.6	46.9	45.2	46.3	47.2	47.3	48.4	50.7	51.4	44.5	40.5	33.8

Calibration History			
Preamp		Date	dB re. 1V/Pa
PRMLxT1		19 Jun 2015 08:11:41	-51.1
PRMLxT1		16 Jun 2015 09:18:16	-51.2
PRMLxT1		15 Jun 2015 16:42:28	-51.1
PRMLxT1		28 May 2015 17:08:17	-51.3
PRMLxT1		22 May 2015 10:58:03	-51.0
PRMLxT1		21 May 2015 13:38:53	-50.9
PRMLxT1		21 May 2015 13:27:16	-49.1
PRMLxT1		21 May 2015 11:38:41	-49.0

General Information			
Serial Number			01146
Model		SoundTrack	LxT®
Firmware Version			2.301
Filename		LxT_Data.007	
User		Bill Lawson	
Job Description		JN:09809 Oak Creek	
Location	Discount Tire Center Rancho Santa Margarita - Air Wrench, Generat		

Measurement Description			
Start Time		Friday, 2015 June 19 09:11:08	
Stop Time		Friday, 2015 June 19 09:13:21	
Duration		00:02:13.6	
Run Time		00:01:05.0	
Pause		00:01:08.6	
Pre Calibration		Friday, 2015 June 19 08:11:41	
Post Calibration			None
Calibration Deviation			---

Note

Overall Data			
LASeq		80.6	dB
LASmax	2015 Jun 19 09:12:37	86.9	dB
LApeak (max)	2015 Jun 19 09:12:37	108.6	dB
LASmin	2015 Jun 19 09:11:21	66.1	dB
LCSeq		82.1	dB
LASeq		80.6	dB
LCSeq - LASeq		1.5	dB
LASeq		86.7	dB
LAeq		80.4	dB
LASeq - LAeq		6.3	dB
Ldn		80.6	dB
LDay 07:00-22:00		80.6	dB
LNight 22:00-07:00		---	dB
Lden		80.6	dB
LDay 07:00-19:00		80.6	dB
LEvening 19:00-22:00		---	dB
LNight 22:00-07:00		---	dB
LASE		98.8	dB
EAS		836.8	µPa²h
EAS8		370.8	mPa²h
EAS40		1.8538	Pa²h
# Overloads		0	
Overload Duration		0.0	s
# OBA Overloads		0	
OBA Overload Duration		0.0	s

Statistics			
LAS2.00		86.1	dBA
LAS8.00		84.8	dBA
LAS25.00		82.6	dBA
LAS50.00		78.4	dBA
LAS90.00		72.1	dBA
LAS99.00		67.9	dBA
LAS > 85.0 dB (Exceedence Counts / Duration)		8 / 10.3	s
LAS > 115.0 dB (Exceedence Counts / Duration)		0 / 0.0	s
LApeak > 135.0 dB (Exceedence Counts / Duration)		0 / 0.0	s
LApeak > 137.0 dB (Exceedence Counts / Duration)		0 / 0.0	s
LApeak > 140.0 dB (Exceedence Counts / Duration)		0 / 0.0	s

Dose			
Name		OSHA-1	
Dose		0.03	%
Projected Dose		11.59	%
TWA (Projected)		80.6	dBA
TWA (t)		54.2	dBA
Lep (t)		54.2	dBA

Settings			
Exchange Rate		3	dB
Threshold		-99.9	dBA
Criterion Level		90.0	dBA
Criterion Duration		8.0	h
RMS Weight		A Weighting	
Peak Weight		A Weighting	
Detector		Slow	
Preamp		PRMLxT1	
Microphone Correction		Off	
Integration Method		Exponential	
OBA Range		Low	
OBA Bandwidth		1/3 Octave	
OBA Freq. Weighting		A Weighting	
OBA Max Spectrum		Bin Max	
Under Range Limit		37.5	dB
Under Range Peak		101.1	dB
Noise Floor		24.7	dB
Overload		144.9	dB

1/3 Spectra												
Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LASeq	13.5	12.5	11.9	10.8	10.1	19.5	19.3	22.5	27.3	36.2	36.9	45.2
LASmax	13.5	12.5	11.9	10.8	14.3	22.1	29.8	34.4	33.6	40.5	41.1	47.2
LASmin	13.5	12.5	11.9	10.8	10.0	14.0	15.3	15.7	20.4	25.9	33.8	33.3
Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LASeq	47.2	52.4	57.9	56.3	58.4	60.1	64.5	69.1	67.8	67.2	68.7	70.7
LASmax	49.9	56.8	61.1	61.4	65.2	67.4	71.3	77.6	74.9	73.4	75.6	80.9
LASmin	35.6	40.7	44.5	45.1	45.8	48.2	49.0	55.9	54.7	51.7	52.6	56.5
Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LASeq	70.6	69.3	68.6	68.7	69.7	69.4	68.3	67.5	66.1	63.1	58.4	52.3
LASmax	81.0	76.6	75.5	75.8	77.6	76.6	75.6	75.2	73.5	70.9	65.7	59.5
LASmin	54.8	53.5	53.8	52.9	54.2	53.0	50.3	45.9	43.3	46.0	42.8	31.1

Calibration History			
Preamp		Date	dB re. 1V/Pa
PRMLxT1		19 Jun 2015 08:11:41	-51.1
PRMLxT1		16 Jun 2015 09:18:16	-51.2
PRMLxT1		15 Jun 2015 16:42:28	-51.1
PRMLxT1		28 May 2015 17:08:17	-51.3
PRMLxT1		22 May 2015 10:58:03	-51.0
PRMLxT1		21 May 2015 13:38:53	-50.9
PRMLxT1		21 May 2015 13:27:16	-49.1
PRMLxT1		21 May 2015 11:38:41	-49.0

APPENDIX 6.1:
EXTERIOR NOISE LEVEL MEASUREMENT WORKSHEET

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24-Hour Noise Level Measurement Summary

Project Name: Discount Tire Center

Duration: 5 minutes

Location:

Located at the exterior wall of the Albertson's building near the Project site.

JN: 9809

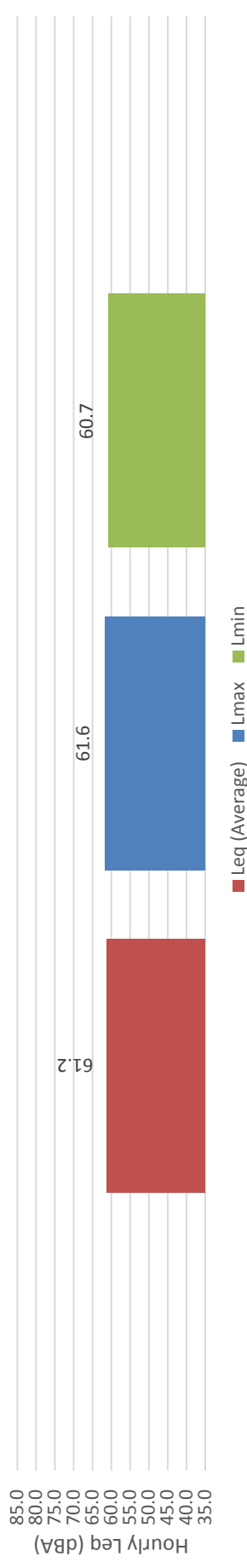
Analyst: A. Wolfe

Date: 6/18/2015

Energy Average (dBA)

Leq	Lmax	Lmin
61.2	61.6	60.7

Hourly Leq dBA Readings (unadjusted)



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APPENDIX 6.2:
CADNAA NOISE MODEL RESULTS

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Name	M. ID	Level Lr			Limit. Value			Land Use			Height		Coordinates		
		Day (dBA)	Night (dBA)	CNEL (dBA)	Day (dBA)	Night (dBA)	CNEL (dBA)	Type	Auto	Noise Type	(m)		X (m)	Y (m)	Z (m)
TherapyRoomNo4	2	45.7	45.7	52.1	0.0	0.0	0.0		x	Total	1.52	r	307.35	407.65	3.04
Residential	3	31.5	31.5	37.8	0.0	0.0	0.0		x	Total	1.52	r	666.54	497.07	3.04
MassageEnvyFront	1	28.0	28.0	34.3	0.0	0.0	0.0		x	Total	1.52	r	241.15	376.49	3.04



CITY OF WILDOMAR – PLANNING COMMISSION
Agenda Item #2.2
PUBLIC HEARING
Meeting Date: August 19, 2015

TO: Chairman and Members of the Planning Commission

FROM: Matthew C. Bassi, Planning Director

SUBJECT: **Elm Street Residential Project (Planning Application No. 08-0154):**
Planning Commission review and recommendation to the City Council for the adoption of a Mitigation Negative Declaration and Mitigation Monitoring & Reporting Program, approval of a Change of Zone and approval of a Tentative Tract Map (TTM No. 33840) for a 4.16 acre site located at the terminus of Elm Street between Gruwell Street and Central Street

STAFF RECOMMENDATION:

The Planning Department recommends that the Planning Commission take the following actions:

1. Adopt a Resolution entitled:

PC RESOLUTION NO. 2015-15

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF WILDOMAR, CALIFORNIA, RECOMMENDING CITY COUNCIL ADOPTION OF A MITIGATED NEGATIVE DECLARATION AND MITIGATION MONITORING & REPORTING PROGRAM IN ACCORDANCE WITH SECTION 15074 OF THE CEQA GUIDELINES FOR CHANGE OF ZONE NO. 08-0154 AND TENTATIVE TRACT MAP NO. 33840 (PLANNING APPLICATION NO. 08-0154) FOR A 4.16 ACRE PROJECT SITE LOCATED AT THE TERMINUS OF ELM STREET BETWEEN GRUWELL STREET AND CENTRAL STREET (APN: 376-043-027).

2. Adopt a Resolution entitled:

PC RESOLUTION NO. 2015-16

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF WILDOMAR, CALIFORNIA, RECOMMENDING CITY COUNCIL APPROVAL OF A CHANGE OF ZONE (PLANNING APPLICATION NO. 08-0154) FROM R-R (RURAL RESIDENTIAL) TO R-1 (ONE-FAMILY DWELLING) FOR A 4.16-ACRE SITE LOCATED AT THE TERMINUS OF ELM STREET BETWEEN GRUWELL STREET AND CENTRAL STREET (APN: 376-043-027).

3. Adopt a Resolution entitled:

PC RESOLUTION NO. 2015-17

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF WILDOMAR, CALIFORNIA, RECOMMENDING CITY COUNCIL APPROVAL OF TENTATIVE TRACT MAP NO. 33840 (PLANNING APPLICATION NO. 08-0154) FOR THE SUBDIVISION OF APPROXIMATELY 4.16 ACRES INTO 15 PARCELS, SUBJECT TO CONDITIONS, LOCATED AT THE TERMINUS OF ELM STREET BETWEEN GRUWELL STREET AND CENTRAL STREET (APN: 376-043-027).

PROJECT DESCRIPTION:

The applicant, Zareh Hookasian, is proposing a Change of Zone and a Tentative Tract Map for the development of 15 single-family residential dwelling units. The Elm Street project as it has been named consists of the following actions/applications:

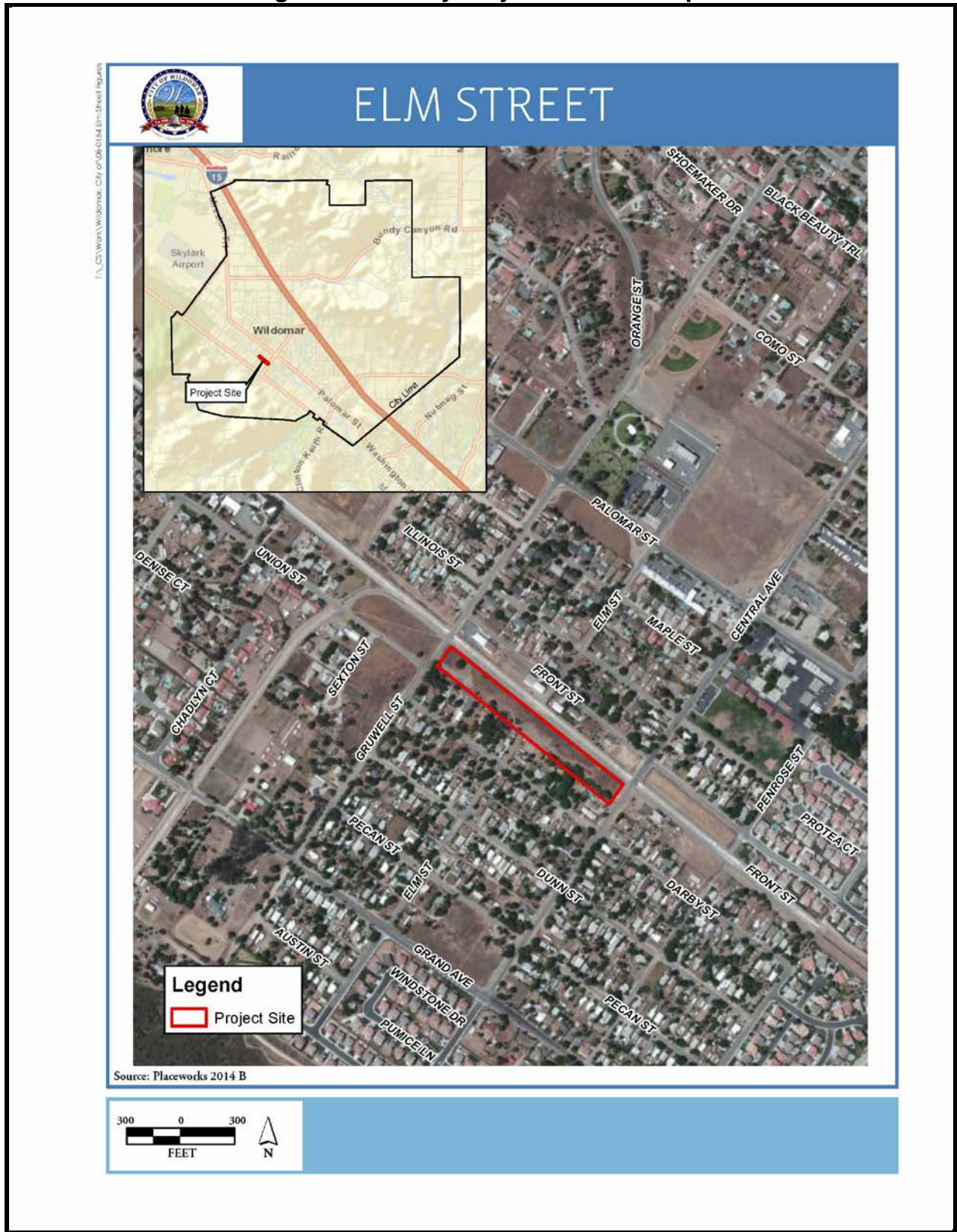
- Adoption of an MND and an MMRP
- Approval of a Change of Zone
- Approval of a 15-lot Tentative Tract Map (TTM 33840)

A more detailed description of each application is provided in the following sections.

Project Location/Vicinity

The project site encompasses approximately 4.16 acres and is located at the end of Elm Street between Central Street to the northeast and Gruwell Street to the southwest, with the Murrieta Creek Channel drainage course to the northeast. The Assessor's Parcel Number (APN) for the project site is 376-043-027. The project site is relatively flat; a cement-lined canal carrying Murrieta Creek is located near the northeastern boundary of the site. The aerial photo on the following page shows the project site and surrounding area (see **Figure 1**).

Figure 1 – Vicinity/Project Location Map



Surrounding Land Uses

The project site is surrounded by low- and medium-density residential uses and/or open space immediately to the west, east, and south and by Murrieta Creek Channel and residential uses to the north. **Table 1** lists the current land uses, General Plan designations, and zoning for the site and abutting properties. Staff has also provided two exhibits (on the following pages – see **Figure 2** and **Figure 3**) showing the General Plan land use designations and zoning.

Table 1 – Adjacent Land Use, General Plan, and Zoning

ADJACENT LAND USE, GENERAL PLAN AND ZONING			
Location	Current Land Use	General Plan Land Use Designation	Zoning
Subject Property	Vacant	MDR (Medium Density Residential)	R-R (Rural Residential)
North	Murrieta Creek Canal; Single-Family Residential; Open Space	MDR (Medium Density Residential); LDR (Low Density Residential)	R-1 (One-Family Dwelling)
South	Single-Family Residential	MDR (Medium Density Residential)	R-R (Rural Residential)
East	Single-Family Residential	MDR (Medium Density Residential)	R-R (Rural Residential)
West	Single-Family Residential; Open Space	MDR (Medium Density Residential); LDR (Low Density Residential)	R-R (Rural Residential)

Change of Zone No. 08-0154

The applicant is requesting approval of a Change of Zone from R-R (Rural Residential) to R-1 (One-Family Dwelling) to accommodate the proposed single family residential development. The site has a current General Plan land use designation of Medium Density Residential (MDR), which provides for a density range of 2 to 5 units per acre for detached single-family residences.

Further analysis of the Change of Zone is provided in the Project Analysis section of this report. On the following pages are figures showing the current General Plan land use designation and zoning (see **Figure 2** and **Figure 3**) along with the proposed zoning (see **Figure 4**).

Figure 2 – General Plan Land Use Designation

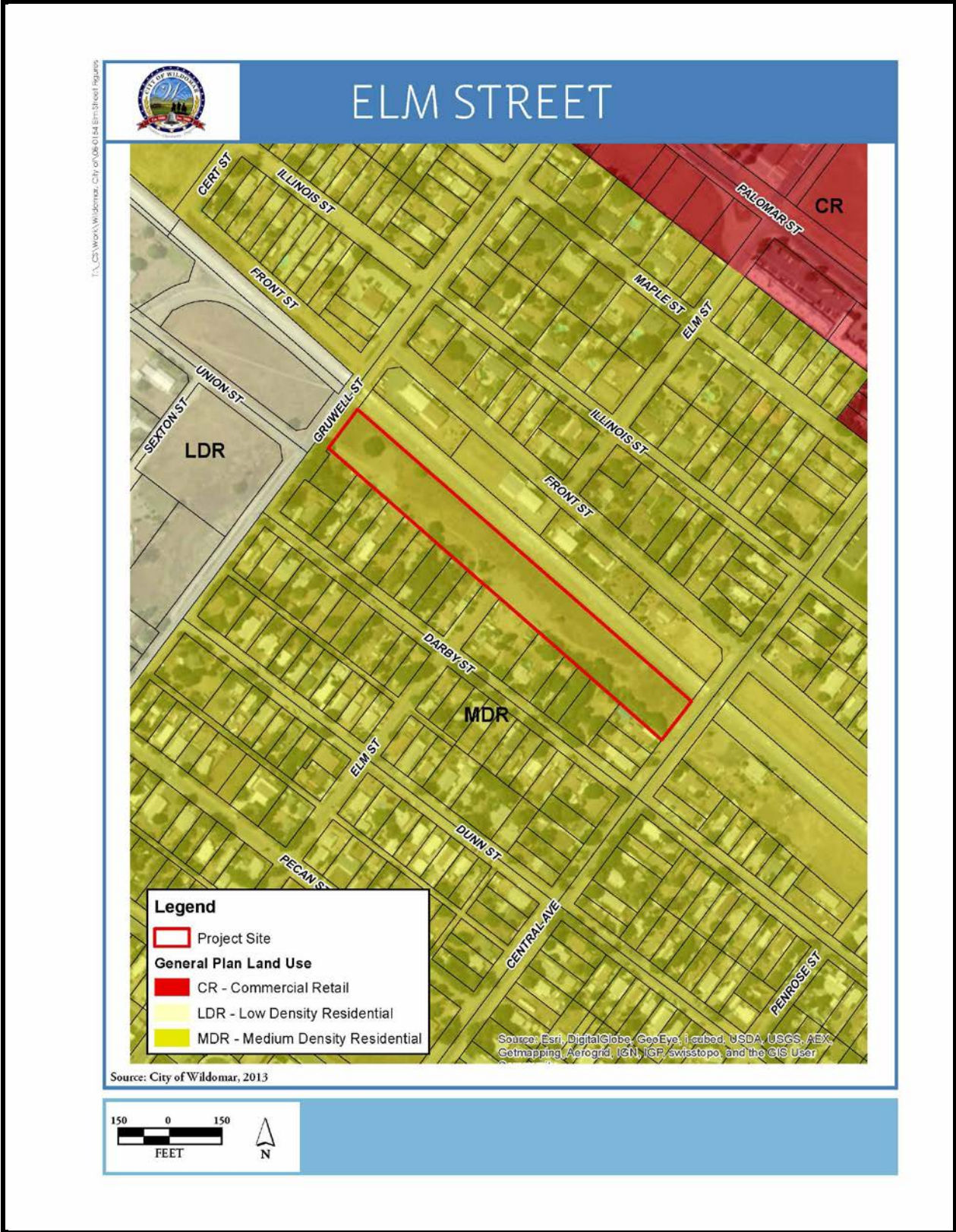


Figure 3 – Zoning

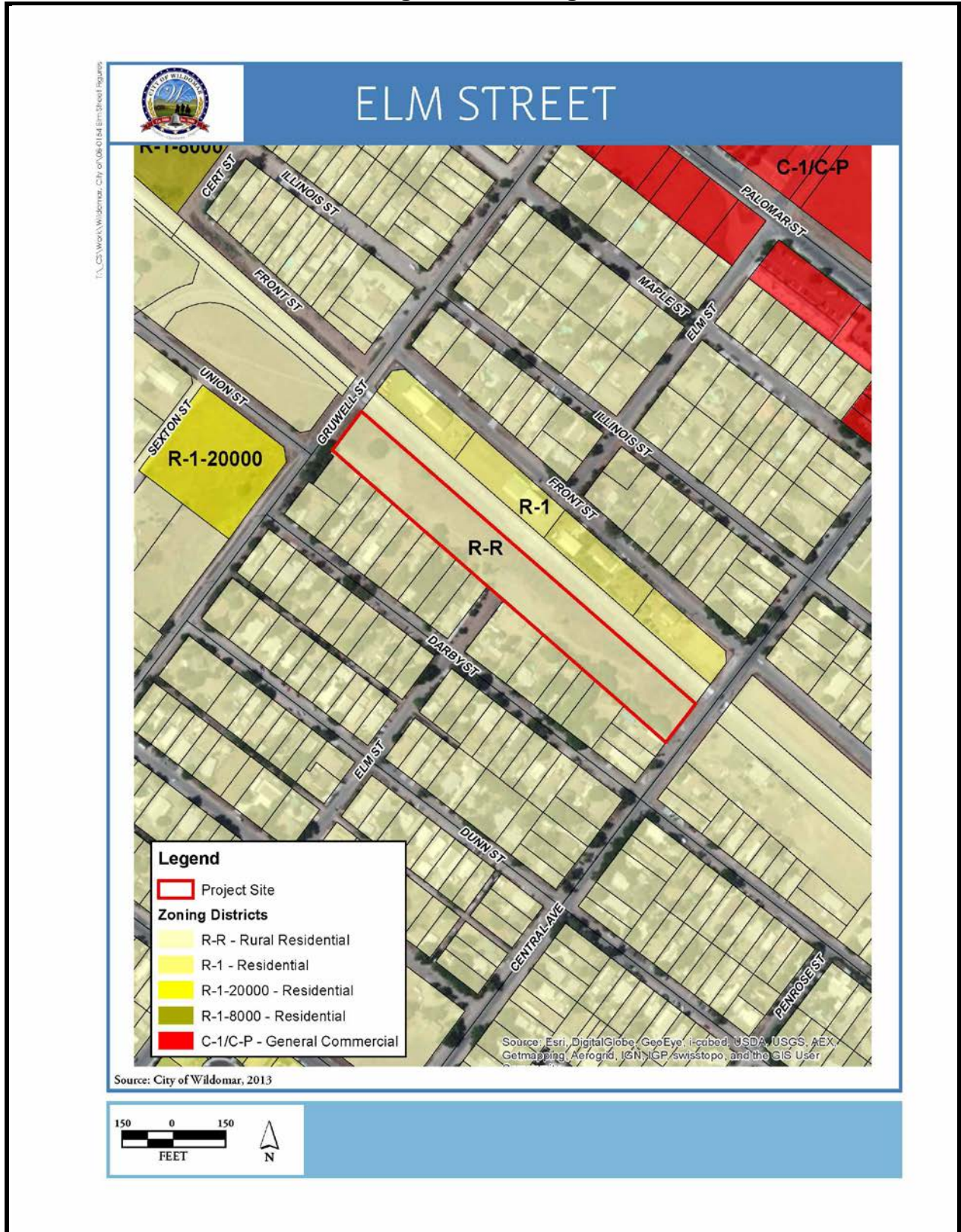
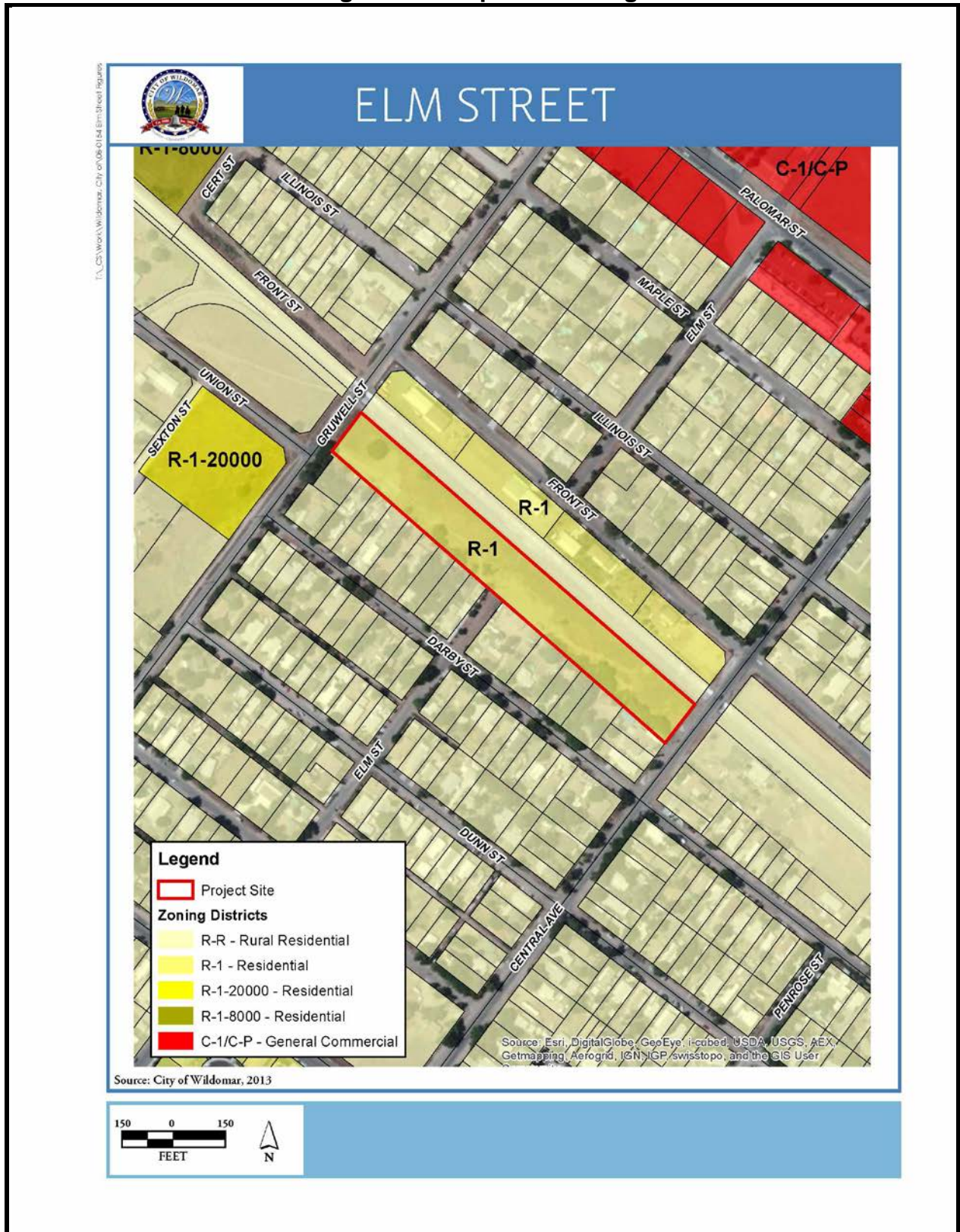


Figure 4 – Proposed Zoning



Tentative Tract Map No. 33840

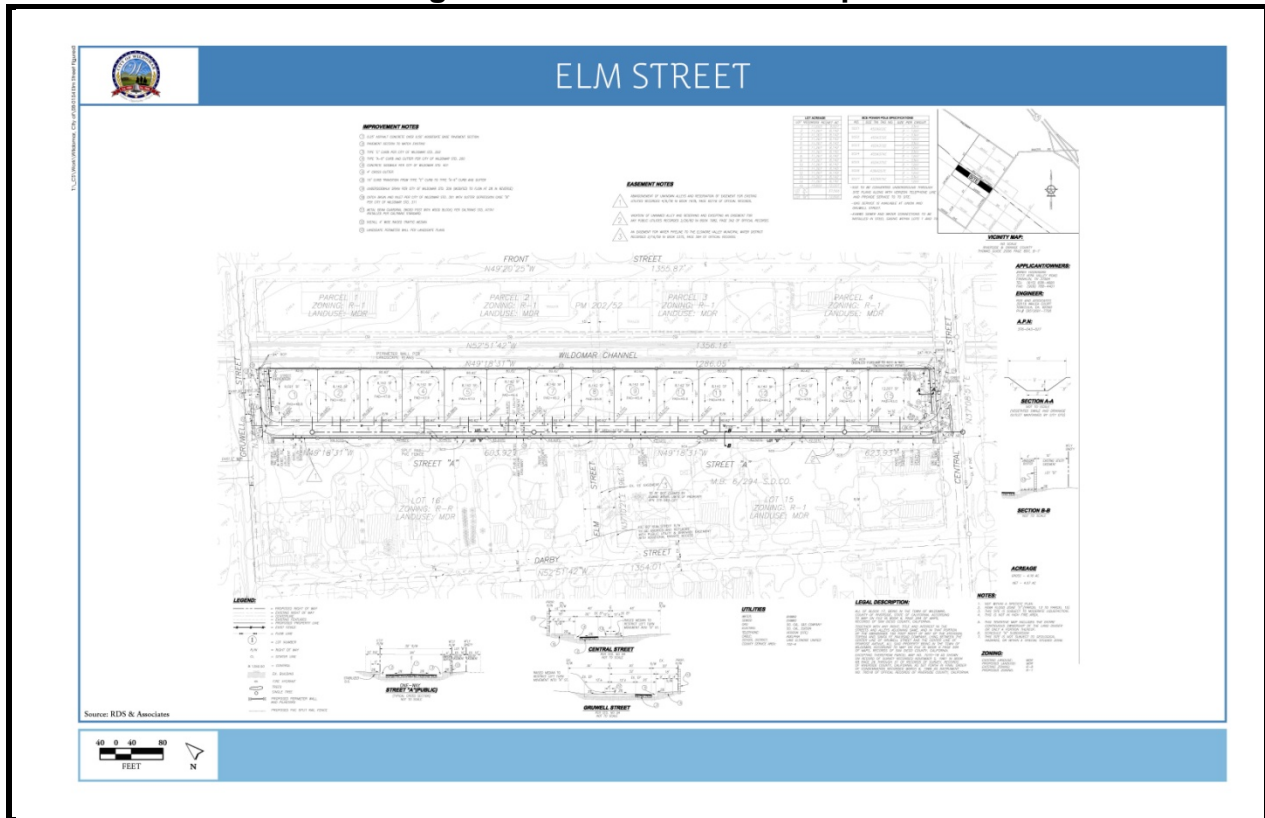
The applicant is proposing a Tentative Tract Map (TTM No. 33840) to subdivide the 4.16-acre site into 15 lots to accommodate the development of 15 single-family residential dwelling units. The proposed lot sizes range in size from 8,142 square feet (smallest size) to 12,007 square feet (largest size) which results in an average lot size of 8,458 square feet. The proposed lot sizes are consistent with the minimum lot size set forth in the R-1 zone standards. A full-size copy of the proposed tract map is provided in Attachment D. A reduced exhibit of the tract map is shown below as **Figure 5**. Table 1-1 shows the proposed gross lot sizes for each parcel.

**Table 1-1
Proposed Lot Acreage**

Lot Number	Gross Lot Sizes (square feet)
1	9,021
2	8,142
3	8,142
4	8,142
5	8,142
6	8,142
7	8,142
8	8,142
9	8,142
10	8,142
11	8,142
12	8,142
13	8,142
14	8,142
15	12,007

Source: RDS and Associates 2013d (TM 33840)

Figure 5 – Tentative Tract Map



Specifics of the proposed tract map are described below.

Roadway Access

Direct access to each of the lots created by the proposed project will be via a proposed one-way street (shown as A Street on the tract map) that will be accessed via Central Street to the northeast and Gruwell Street to the southwest. The traffic will flow from Central Street through A Street and onto Gruwell Street.

Water

The proposed project will receive potable water service from the Elsinore Valley Municipal Water District (EVMWD). Connections to the EVMWD water supply will occur at existing water lines in Central Street.

Wastewater

The proposed project will receive wastewater service from the Elsinore Valley Municipal Water District. Connection to the EVMWD wastewater system will occur at an existing 8-inch sewer line in Central Street.

Stormwater

Stormwater currently flows on the surface from the northeast border of the project site at Gruwell Street to the southwest to Central Street. Central Street drains directly into the Murrieta Creek Channel. Stormwater from the proposed project will be directed to flow

southwesterly along the proposed A Street to the vegetated swale in Lot 15 adjacent to Central Street. Flows within A Street will be directed to a low point fronting Lot 15. Flows from the low point in Street A will be conveyed through a vegetated swale in Lot 15. The filtered flows from the vegetated swale will then drain to the Murrieta Creek Channel.

Other Utilities and Services

Electric, gas, cable, and telecommunications services would be extended underground onto the site from existing lines along Central Street. Electricity would be provided by Southern California Edison, natural gas service by the Southern California Gas Company, telecommunications by Verizon, and solid waste removal by Waste Management. The site is located within the boundaries of the Lake Elsinore Unified School District. Local government services are provided by the City of Wildomar. Fire and law enforcement services are provided by the City of Wildomar through contracts with the Riverside County Fire Department and the Riverside County Sheriff's Department.

An analysis is provided in the Project Analysis section of this report.

Environmental/CEQA

In accordance with the California Environmental Quality Act (CEQA) Guidelines, the proposed project required the preparation and processing of an Initial Study/Mitigated Negative Declaration (IS/MND) and a Mitigation Monitoring and Reporting Program (MMRP). The MND and MMRP must be reviewed by the Planning Commission as part of its recommendation to the City Council. A detailed analysis of the MND process, etc., is provided in the Environmental Analysis section of this report. Copies of the IS/MND and the MMRP (with technical studies/appendices) are provided for Commission consideration (Attachment A, Exhibits 1–3).

PROJECT ANALYSIS:

Environmental/CEQA Analysis

In accordance with the California Environmental Quality Act (CEQA; Public Resources Code Sections 21000–21178.1), an Initial Study is required to analyze the proposed Change of Zone and Tentative Tract Map to determine whether any potential significant impacts on the environment that would result from implementation of the project. The Initial Study is intended to inform the Planning Commission, responsible agencies, and the general public of potential environmental impacts associated with the proposed project and is key to determining whether a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report is required.

IS/MND #1:

An Initial Study was first prepared and circulated from July 9, 2014, through August 7, 2014 (SC#: 2014071028). In the original circulated Initial Study, the applicant proposed a tentative tract map (TTM No. 33840) to subdivide a 4.16 acre site into 12 parcels, ranging in size from 9,292 square-feet to 13,409 square-feet. Three (3) comment letters

were received during the 30-day review/comment period. These comments have been addressed and are incorporated into the current IS/MND document (dated March 2015) and responses to these comments are included Attachment A, Exhibit 3.

IS/MND #2:

A 2nd Initial Study/MND was prepared due to 1st review comments and changes to the proposed project by the Applicant. The updated IS/MND evaluated the environmental impacts resulting from the development of the proposed Tentative Tract Map (TTM No. 33840) to subdivide 4.16 acres into 15 parcels (instead of the original 12 parcels). The proposed Change of Zone from the existing zoning of R-R (Rural Residential) to the R-1 (One-Family Dwelling) remained the same.

The only substantive change to the original mitigation measures was the elimination of one mitigation measure (formerly TRA-1) relating to the maintenance and design of the Ben and Fanny Taylor Regional Trail (HT-W-13). As this trail segment is actually located within the Murrieta Creek channel, it is not a project specific impact, and therefore, does need a mitigation measure.

The recirculated IS/MND was released for the 30-day public and agency review on March 25, 2015 and concluded on April 23, 2015. The City received six (6) comments during the 2nd review period. Each comment has been responded to, including the comments received during the 1st review period (Attachment A, Exhibit 3). The required findings supporting adoption of the IS/MND are discussed in the findings section below. The IS/MND, supporting technical studies/appendices and Mitigation Monitoring and Reporting Program (MMRP) is attached for Commission consideration (Attachment A, Exhibits 1–3). Based on the findings below, the Planning Commission may recommend City Council adoption of the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the proposed project.

Change of Zone No. 08-0154:

Staff has evaluated the proposed Change of Zone from the current zoning of R-R (Rural Residential) to R-1 (One-Family Dwelling) to determine consistency with the General Plan. The site has a General Plan land use designation of Medium Density Residential (MDR), which allows between two and five detached single-family residences per acre on lots ranging from 5,500 to 20,000 square feet in size. The R-1 zone allows single-family dwellings on lot areas not less than 7,200 square feet. The adjacent parcels on Darby Street also have a land use designation of Medium Density Residential (MDR) with the R-R zoning designation.

In reviewing the applicant's Change of Zone request and development proposal, the project density is proposed at 3.6 units per acre with lot sizes ranging from 8,142 to 12,007 square feet, which falls within the permitted density range and lot sizes and thus is consistent with the General Plan. It should be noted that surrounding zone districts are primarily R-R (with the MDR land use designation) to the south, east, and west.

These minimum lot sizes are larger (minimum of one-half (1/2) acre) in comparison to R-1 zone district. In this case, the surrounding R-R parcels are on lots that range from less than 1/2 acre to over 1 acre. The parcels in the project site are less than one-half (1/2) acre and will be developed in accordance with Chapter 17.24 of the Wildomar Municipal Code (R-1 standards).

While the General Plan Land Use designation of MDR is applicable to the project site and surrounding neighborhood, the proposed project and surrounding areas range in density from 2 – 5 units per acre. Therefore, the density of the proposed project is similar to that of the surrounding residential land uses. As such, the project is compatible with the surrounding uses

Tentative Tract Map No. 33840

The applicant is proposing a Tentative Tract Map (TTM No. 33840) to subdivide 4.16 acres into 15 lots, which will accommodate the future development of 15 single-family residential dwelling units. The tract map will be subdivided under the provisions and development standards of the R-1 (One-Family Dwelling) zone. In accordance with Wildomar Municipal Code Section 17.24.020 (Development Standards), the minimum lot area (i.e., lot size) for each dwelling unit is 7,200 square feet.

In review of the proposed tract map, the minimum lot size will be 8,142 square feet, which exceeds the minimum standards. The average lot size for the tract map is 8,458 square feet. **Table 2** discusses the City of Wildomar’s Municipal Code development standards as outlined in Section 17.24.020 for the R-1 zone and the project’s consistency with these regulations.

Table 2: Lot Summary Table

Parcel Number	Minimum Required Lot Area (gross sq. ft.)	Proposed Lot Area (sq. ft.)	Minimum Required Lot Width/Depth (sq. ft.)	Proposed Lot Width / Depth (ft.) (Per TM 36519)	Meets or Exceeds Standards
1	7,200	9,021	Width = 60 feet Depth = 100 feet	Width = 73.60 Depth = 101	YES
2	7,200	8,142	Width = 60 feet Depth = 100 feet	Width = 80.62 Depth = 101	YES
3	7,200	8,142	Width = 60 feet Depth = 100 feet	Width = 80.62 Depth = 101	YES
4	7,200	8,142	Width = 60 feet Depth = 100 feet	Width = 80.62 Depth = 101	YES
5	7,200	8,142	Width = 60 feet Depth = 100 feet	Width = 80.62 Depth = 101	YES
6	7,200	8,142	Width = 60 feet Depth = 100 feet	Width = 80.62 Depth = 101	YES

7	7,200	8,142	Width = 60 feet Depth = 100 feet	Width = 80.62 Depth = 101	YES
8	7,200	8,142	Width = 60 feet Depth = 100 feet	Width = 80.62 Depth = 101	YES
9	7,200	8,142	Width = 60 feet Depth = 100 feet	Width = 80.62 Depth = 101	YES
10	7,200	8,142	Width = 60 feet Depth = 100 feet	Width = 80.62 Depth = 101	YES
11	7,200	8,142	Width = 60 feet Depth = 100 feet	Width = 80.62 Depth = 101	YES
12	7,200	8,142	Width = 60 feet Depth = 100 feet	Width = 80.62 Depth = 101	YES
13	7,200	8,142	Width = 60 feet Depth = 100 feet	Width = 80.62 Depth = 101	YES
14	7,200	8,142	Width = 60 feet Depth = 100 feet	Width = 80.62 Depth = 101	YES
15	7,200	12,007	Width=60 feet Depth=100 feet	Width = 116 Depth = 101	YES

Neighborhood Meetings:

As part of the tract map process, the city hosted two separate neighborhood meetings with residents living in the Elm Street/Darby Street area. These meetings were held on February 24, 2014 (8 residents spoke) and July 21, 2014 (4 residents spoke). The intent of both neighborhood meetings was to introduce the proposed residential project, receive input from residents and address concerns raised by the residents.

The following list summarizes the main comments raised by the Darby Street/Elm Street residents, and how those concerns have been addressed with project design changes.

- 1) The proposed project is too dense with 15 parcels and residents felt a 7 or 8 lot subdivision under the R-R zone standards was more compatible and appropriate with their neighborhood. Staff suggested a compromise at 10 lots with the R-1 zone standards.
 - The Applicant has chosen to keep the proposed tract map at 15 lots subdivided under the R-1 zone standards (proposed with the change of zone application) as permitted by the existing MDR land use designation (2 to 5 units/acre). This results in a density of 3.6 units per acre which is within the allowable MDR density range. The Applicant felt that with the improvements being conditioned on the project, 15 lots was better suited to their development needs. This number of lots also match the number of lots adjacent to the project site along Darby Street.

- 2) Traffic generated by the project would significantly impact Elm Street and Darby Street. How would this be addressed?
 - The tract map has been redesigned to provide a one-way through street within the proposed tract map subdivision. Access would come from Central Street and exit onto Gruwell Street (“right-in & right-out” concept). Originally, Elm Street was a proposed access road into the project site. However, this has since changed and Elm Street has been vacated. Instead, access into the project site will be via Gruwell Street and Central Avenue.
- 3) How is emergency access to the site achieved?
 - The tract map has been redesigned to provide a one-way through street within the proposed tract map subdivision. Emergency access would come from Central Street and exit onto Gruwell Street (“right-in & right-out” concept). No emergency traffic would come through the Elm Street/Darby Street neighborhood.
- 4) Questions about sewer availability for surrounding homes (i.e., Elm/Darby neighborhood) were presented.
 - EVMWD is requiring a sewer line along the “one-way” street within the proposed subdivision from Central Avenue (existing sewer line) to serve the project site. No additional sewer lines are being required to serve the Elm Street/Darby Street neighborhood via the proposed project.
- 5) Concern was raised about the location of the western boundary wall and how Darby Street residents will get access to the rear yards.
 - The proposed project has been modified to include a 10-foot easement area (Lot B) for residents to use to gain access to their rear yards adjacent to the proposed tract. On the eastern edge of the easement, the Applicant will provide a 4-foot landscape buffer to include a 6-foot decorative block wall, landscaping and rolled curbs. This modification is reflected as Cross Section “B-B” on the tract map plans.
- 6) Questions were asked if the Applicant was going to establish a Homeowners Association (HOA)?
 - Yes the Applicant intends to set up a homeowners association.
- 7) Concerns were raised on how “storm run off” was being handled and possible impacts on the Darby Street properties.
 - During site preparation and grading and as future development is proposed, soil erosion may result during construction, as grading and construction can

loosen surface soils and make soils susceptible to the effects of wind and water movement across the surface. The City of Wildomar's standard conditions and requirements applied to the proposed project will require compliance with the National Pollutant Discharge Elimination System (NPDES) and the State Water Quality Control Board's construction permit, as well as the submittal of detailed erosion control plans with any grading plans. A draft water quality management plan for the project site is included as **Appendix 8** of the recirculated IS/MND (Attachment A; Exhibit 3). Implementation of standard conditions and requirements of the City of Wildomar will also address any erosion issues associated with the future grading of the site.

- 8) Concern was raised by the Darby & Elm Street residents about having two-story homes built on the project site.

To address this concern, the Applicant has agreed to build only one-story homes and has agreed to be conditioned as such. Before building permits are issued for this tract development, the Applicant is required to submit a Final Site Plan of Development for Planning Department review and approval.

REQUIRED FINDINGS OF FACT:

CEQA/IS/MND Findings of Fact:

Staff recommends that the Planning Commission, in light of the whole record before it, including but not limited to the staff report, proposed Initial Study/Mitigated Negative Declaration, and Mitigation Monitoring and Reporting Program (attached hereto as Attachment A, Exhibits 1–3), documents incorporated herein by reference, written comments received and responses provided, and other substantial evidence (within the meaning of Public Resources Code Sections 21080(e) and 21082.2) within the record and/or provided at the public hearing, recommend that the City Council find and determine as follows:

- A. Review Period: That the City has provided the public review period for the Initial Study/Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program for the required 30-day public review period required by CEQA Guidelines Sections 15073 and 15105.
- B. Compliance with Law: That the Initial Study/Mitigated Negative Declaration and the 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.) and the CEQA Guidelines (14 California Code of Regulations Section 15000 et seq.).

- C. Independent Judgment: That the Initial Study/Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program reflect the independent judgment and analysis of the City.
- D. 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.
- E. No Significant Effect: That revisions made to the project as 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 with the proposed mitigation measures and the Mitigation Monitoring and Reporting Program.

Change of Zone Finding of Fact:

In accordance with California Government Code Sections 65853–65857 and Wildomar Zoning Ordinance Section 17.280, staff recommends that the Planning Commission, 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 herein, the City’s General Plan and any other evidence within the record or provided at the public hearing of this matter, recommend that the City Council find and determine as follows:

- A. Finding: The proposed Change of Zone is in conformance with the adopted General Plan for the City of Wildomar.

Evidence: Staff has evaluated the proposed change of zone from the current zoning of R-R (Rural Residential) to R-1 (One-Family Dwelling) to determine consistency with the General Plan. The site has a General Plan land use designation of Medium Density Residential (MDR), which allows between two and five detached single-family residences per acre on lots ranging from 5,500 to 20,000 square feet in size. The R-1 zone allows single-family dwellings on lot areas not less than 7,200 square feet.

In reviewing the applicant’s Change of Zone request and development proposal, the project density is proposed at 3.6 units per acre with lot sizes ranging from 8,142 to 12,007 square feet, which falls within the permitted density range and lot sizes and thus is consistent with the General Plan. **Table 2** above discusses the

City of Wildomar's Municipal Code development standards as outlined in Section 17.24.020 for the R-1 zone and the project's consistency with these regulations. As discussed above, the project is consistent with the City of Wildomar's General Plan and the City's R-1 zoning standards.

Tentative Tract Map No. 33840 Findings of Fact:

In accordance with Wildomar Municipal Code Title 16 and Title 17, and Government Code Sections 66473.1, 66473.5, and 66474, staff recommends that the Planning Commission, 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, recommend that the City Council find and determine as follows:

- A. Finding: The proposed tract map is consistent with the City's General Plan and any applicable specific plan as specified in Government Code Section 65451.

Evidence: The applicant is proposing a Tentative Tract Map (TTM No. 33840) to subdivide 4.16 acres into 15 lots, which will accommodate the development of 15 single-family residential dwelling units. Staff has evaluated the proposed Change of Zone from the current zoning of R-R (Rural Residential) to R-1 (One-Family Dwelling) to determine consistency with the General Plan. The site has a General Plan land use designation of Medium Density Residential (MDR), which allows between two and five detached single-family residences per acre on lots ranging from 5,500 to 20,000 square feet in size. The R-1 zone allows single-family dwellings on lot areas not less than 7,200 square feet. In review of the proposed tract map, the project density is proposed at 3.6 units per acre with lot sizes ranging from 8,142 to 12,007 square feet, which falls within the permitted density range and lot sizes and thus is consistent with the General Plan.

There is no specific plan governing this project. In terms of specific land use policies related to this project, the proposed tract map promotes (and is consistent with) the following residential land use policies:

LU 3.1 (Community Design) – “Accommodate land use development in accordance with the patterns and distribution of uses and density depicted on the General Plan Land Use map.”

LU 6.1 (Land Use Compatibility) – “Require land uses to develop in accordance with the General Plan and area plans to ensure compatibility and minimize impacts.”

LU 12.6 (Circulation) – “Require that adequate and accessible circulation facilities exist to meet the demands of a proposed land use.”

LU 22.1 (Community Development) – “Accommodate the development of single and multi family residential units in areas appropriately designated by the General Plan and area plan land use maps.”

LU 22.3 (Community Development) – “Require that adequate and available circulation facilities, water resources and sewer facilities exist to meet the demands of the proposed residential land use.”

- B. Finding: The design or improvement of the proposed subdivision is consistent with the City’s General Plan and any applicable specific plan.

Evidence: The proposed subdivision has been designed to meet all City standards applicable to residential subdivisions, which are designed to provide satisfactory pedestrian and vehicular circulation, including emergency vehicle access and on-and off-site public improvements. Further, all streets, utilities, and drainage facilities have been designed and are required to be constructed in conformance with City standards. There is no specific plan governing this project.

- C. Finding: The site is physically suitable for the type and proposed density of development.

Evidence: The project site encompasses 4.16 acres. The Tentative Tract Map proposes to subdivide the project area into 15 lots for single-family residential development. The density allowed by the MDR designation allows between two and five detached single-family residences per acre on lots ranging from 5,500 to 20,000 square feet in size. The R-1 zone allows single-family dwellings on lot areas not less than 7,200 square feet. In review of the proposed tract map, the project density is proposed at 3.6 units per acre with lot sizes ranging from 8,142 to 12,007 square feet, which falls within the permitted density range and lot sizes and thus is consistent with the General Plan. Therefore, the proposed tract map is physically suitable for the type and proposed density of development.

- D. Finding: The design of the subdivision or proposed improvements is not likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.

Evidence: The City prepared an Initial Study that resulted in the preparation, processing, and review of an Initial Study/Mitigated Negative Declaration for Tentative Tract Map No. 33840. The IS/MND analyzed the environmental issues required by CEQA related to fish and wildlife, including their respective habitats. The IS/MND was circulated for public review and made available for a 30-day public review period in accordance with CEQA. Thus, it has been determined that the design of the subdivision and proposed improvements will not likely cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat with implementation of the proposed mitigation measures as

outlined in the IS/MND and the Mitigation Monitoring and Report Program (MMRP). Therefore, the proposed tract map meets this finding.

- E. Finding: The design of the subdivision or type of improvements is not likely to cause serious public health problems.

Evidence: The design of the subdivision is in conformance with the City's General Plan, Zoning Code, and Subdivision Ordinance. The design and construction of all improvements to accommodate the project have been conditioned in accordance with all applicable City of Wildomar ordinances, codes, and standards including but not limited to the California Uniform Building Code, the City's ordinances relating to stormwater runoff management, and adopted public works standards. As 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, the proposed tract map meets this finding.

- F. Finding: The design of the subdivision or the type of improvements will not conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision.

Evidence: The project contains an abandonment of unknown alleys and reservation of easement for existing utilities, a vacation of an unnamed alley and reserving and excepting an easement for any public utilities, and an easement for a water pipeline to the Elsinore Valley Municipal Water District. The design of the subdivision or the type of improvements will not conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision.

PUBLIC NOTICING/COMMUNICATION:

In accordance with Wildomar Municipal Code sections 16.12.140(A) and 17.280.040, the Planning Department on August 5, 2015, mailed a public hearing notice to all property owners within a 600-foot radius of the proposed project boundaries notifying them of the August 19, 2015 Planning Commission meeting. In addition, on August 7, 2015, a legal notice was published in the Press Enterprise, a local newspaper of general circulation, notifying the general public of the August 19, 2015 Planning Commission meeting. Lastly, in accordance with Section 16.12.140(A), a public hearing notice was also provided on August 5, 2015 to the Elsinore Valley Municipal Water District (EVMWD) and the Lake Elsinore Unified School District, notifying the general public of the August 19, 2015 Planning Commission meeting.

Respectfully Submitted,
Matthew C. Bassi
Planning Director

Reviewed by,
Erica L. Vega
Assistant City Attorney

ATTACHMENTS

- A. PC Resolution No. 2015-15 for IS/MND/MMRP
 - Exhibit 1 – Initial Study/Mitigated Negative Declaration
 - Exhibit 1-A Technical Appendices/Studies
 - Exhibit 2 – Mitigation Monitoring and Reporting Program
 - Exhibit 3 – IS/MND “Responses to Comments”
- B. PC Resolution No. 2015-16 for Change of Zone No. 08-0154
 - Exhibit 1 – Draft City Council Ordinance
- C. PC Resolution No. 2015-17 for Tentative Tract Map No. 33840
 - Exhibit 1 – Conditions of Approval Matrix
- D. Tentative Tract Map No. 33840 Plans (full-size plans – under separate cover)

INCORPORATED HEREIN BY REFERENCE THE FOLLOWING

- City of Wildomar General Plan and EIR
- City of Wildomar Zoning Ordinance (Title 17 of the WMC)
- City of Wildomar Subdivision Ordinance (Title 16 of the WMC)

ATTACHMENT A

PC Resolution No. 2015-15

PC RESOLUTION NO. 2015-15

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF WILDOMAR, CALIFORNIA, RECOMMENDING CITY COUNCIL ADOPTION OF A MITIGATED NEGATIVE DECLARATION AND MITIGATION MONITORING & REPORTING PROGRAM IN ACCORDANCE WITH SECTION 15074 OF THE CEQA GUIDELINES FOR CHANGE OF ZONE NO. 08-0154 AND TENTATIVE TRACT MAP NO. 33840 (PLANNING APPLICATION NO. 08-0154) FOR A 4.16 ACRE PROJECT SITE LOCATED AT THE TERMINUS OF ELM STREET BETWEEN GRUWELL STREET AND CENTRAL STREET (APN: 376-043-027).

WHEREAS, an application for Change of Zone No. 08-0154 from R-R to R-1 and Tentative Tract Map No. 33840 for the subdivision 4.16 acres into 15 lots has been filed by:

Applicant/Owner:	Zareh Hookasian
Authorized Agent:	Rich Soltysiak, PE, RDS and Associates
Project Location:	End of Elm Street between Central Street to the northeast and Gruwell Street to the southwest
APN:	376-043-027
Lot Area:	4.16 acres

WHEREAS, the proposed Change of Zone and Tentative Tract Map applications are considered a “project” as defined by the California Environmental Quality Act, Public Resources Code Section 21000 et seq. (CEQA); and

WHEREAS, the Planning Director determined the project may have one or more significant effects on the environment and that preparation of an Initial Study/Mitigated Negative Declaration was therefore warranted under Public Resources Code Section 21080(c); and

WHEREAS, after completion of an Initial Study, the Planning Director determined that it did not identify any potentially significant effects on the environment nor was there any substantial evidence from which it could be fairly argued that the project would have a significant effect on the environment. Therefore, staff has recommended to the Planning Commission adoption of a Mitigated Negative Declaration and a Mitigation Monitoring and Reporting Program for this project; and

WHEREAS, the proposed Mitigated Negative Declaration consists of the following documents: Initial Study/Mitigated Negative Declaration (July 2014), Recirculated Initial Study/Mitigated Negative Declaration (March 2015), Mitigation Monitoring and Reporting Program, and applicable technical appendices; and

WHEREAS, on July 9, 2014, using a method required under CEQA Guidelines Section 15072, the City provided a Notice of Intent (NOI) to the Riverside County Clerk, the Press Enterprise, a local newspaper of general circulation, and the City 's local distribution list regarding the adoption of a proposed Initial Study/Mitigated Negative Declaration and a Mitigation Monitoring and Reporting Program for the project; and

WHEREAS, on July 9, 2014, the draft Initial Study/Mitigated Negative Declaration were made available for public review for a period of not less than 30 days commencing on July 9, 2014, and concluding on August 7, 2014, as required by CEQA Guidelines Section 15087. Said document was posted in two public places for review at the following locations: Wildomar City Hall and the City of Wildomar website; and

WHEREAS, during the 30-day public review period, the City received three (3) written comment concerning the proposed Initial Study/Mitigated Negative Declaration, at which time the Planning Department decided to revise the draft Initial Study/Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program and recirculate the document in accordance with CEQA; and

WHEREAS, on March 25, 2015, using a method required under CEQA Guidelines Section 15072, the City provided a Notice of Intent (NOI) to the Riverside County Clerk, the Press Enterprise, a local newspaper of general circulation, and the City's local distribution list regarding the adoption of a proposed Initial Study/Mitigated Negative Declaration and a Mitigation Monitoring and Reporting Program for the project; and

WHEREAS, on March 25, 2015, the recirculated draft Initial Study/Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program were made available for public review for a period of not less than 30 days commencing on March 25, 2015, and concluding on April 23, 2015, as required by CEQA Guidelines Section 15087. Said document was posted in two public places for review at the following locations: Wildomar City Hall and the City of Wildomar website; and

WHEREAS, during the 30-day public review period, the City received six (6) written comment concerning the proposed Initial Study/Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program; and

WHEREAS, in accordance with Wildomar Municipal Code Sections 16.12.140(A) and 17.280.040, the City of Wildomar Planning Department, on August 5, 2015 gave public notice by mailing a public hearing notice to all property owners within a 600-foot radius of the project boundaries notifying said property owners of the date and time of the public hearing for the Initial Study/Mitigated Negative Declaration that would be considered by the Planning Commission.

WHEREAS, in accordance with Wildomar Municipal Code Sections 16.12.140(A) and 17.280.040, the City of Wildomar Planning Department, on August 7, 2015

published a legal notice in the Press Enterprise, a local newspaper of general circulation, in compliance with state law notifying the general public of the public hearing for the Initial Study/Mitigated Negative Declaration that would be considered by the Planning Commission; and

WHEREAS, in accordance with Wildomar Municipal Code Sections 16.12.140 and 17.280.040, the City of Wildomar Planning Commission on August 19, 2015 held said public hearing, at which time the Planning Commission received public testimony from interested persons in support of, or opposition to, Initial Study/Mitigated Negative Declaration that would be considered by the Planning Commission.

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

SECTION 1. CEQA FINDINGS

The Planning Commission, in light of the whole record before it including but not limited to the staff report, proposed Initial Study/Mitigated Negative Declaration, the Mitigation Monitoring and Reporting Program, and the Response to Comments (attached hereto as Attachment A, Exhibits 1–3), documents incorporated herein by reference, and other substantial evidence (within the meaning of Public Resources Code Sections 21080(e) and 21082.2) within the record and/or provided at the public hearing, recommends that the City Council find and determine as follows:

- A. Review Period: That the City has provided the public review period for the Initial Study/Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program for the required 30-day public review period required by CEQA Guidelines Sections 15073 and 15105.
- B. Compliance with Law: That the Initial Study/Mitigated Negative Declaration and the 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.) and the CEQA Guidelines (14 California Code of Regulations Section 15000 et seq.).
- C. Independent Judgment: That the Initial Study/Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program reflect the independent judgment and analysis of the City.
- D. 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.

- E. No Significant Effect: That revisions made to the project as 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 with the proposed mitigation measures and Mitigation Monitoring and Reporting Program.

SECTION 2. MULTIPLE SPECIES HABITAT CONSERVATION PLAN (MSHCP)

The Planning Commission recommends that the City Council find the project is 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 3. PLANNING COMMISSION ACTIONS

The Planning Commission hereby takes the following actions:

1. Recommend Adoption of a Mitigated Negative Declaration/MMRP:
The Planning Commission hereby recommends that the City Council adopt the Initial Study/Mitigated Negative Declaration (with appendices) and the Mitigation Monitoring and Reporting Program for Change of Zone No. 08-0154 and Tentative Tract Map No. 33840 (Planning Application No. 08-0154) attached hereto this Resolution as Attachment A, Exhibits 1–3.
2. Recommend Filing a Notice of Determination:
In compliance with Public Resources Code Section 21152 and CEQA Guidelines Section 15075, the Planning Commission hereby recommends that the City Council of the City of Wildomar direct the Planning Director to prepare a Notice of Determination (NOD) with the Riverside County Clerk for posting concerning the approval and adoption of the Initial Study/Mitigated Negative Declaration within five (5) working days of project approval.
3. Location:
The Planning Commission recommends that the Initial Study/Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program for Change of Zone No. 08-0154 and Tentative Tract Map No. 33840 (Planning Application No. 08-0154), and all documents incorporated therein or forming the record of decision therefor, shall be filed with the Wildomar Planning Department at City Hall, 23873 Clinton Keith Road, Suite 201, Wildomar, CA 92595 and shall be made available for public review upon request.

PASSED, APPROVED AND ADOPTED this 19th day of August, 2015, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAINED:

Veronica Langworthy
Planning Commission Chair

ATTEST:

Matthew C. Bassi
Planning Director/Minutes Secretary

APPROVED AS TO FORM:

Erica L. Vega, Assistant City Attorney

ATTACHMENT A – EXHIBIT 1

Initial Study/Mitigated Negative Declaration

ATTACHMENT A – EXHIBIT 1-A

Technical Appendices/Studies

ATTACHMENT A – EXHIBIT 2

Mitigated Monitoring and Reporting Program (MMRP)

MITIGATION MONITORING AND REPORTING PROGRAM

1 INTRODUCTION

This document is the Mitigation Monitoring and Reporting Program (MMRP) for the **Elm Street Project (Tentative Tract Map No. 33840)** (Planning Application No. 08-0154) project. This MMRP has been prepared pursuant to Section 21081.6 of the California Public Resources Code, which requires public agencies to “adopt a reporting and monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment.” An MMRP is required for the proposed project because the Initial Study/Mitigated Negative Declaration (IS/MND) identified significant adverse impacts, and measures have been identified to mitigate those impacts.

2 MITIGATION MONITORING AND REPORTING PROGRAM

As the lead agency, the City of Wildomar will be responsible for monitoring compliance with all mitigation measures. Different departments within the City are responsible for aspects of the project. The MMRP identifies the department with the responsibility for ensuring the measure is completed; however, it is expected that one or more departments will coordinate efforts to ensure compliance.

The MMRP is presented in tabular form on the following pages. The components of the MMRP are described briefly below.

- **Mitigation Measure:** The mitigation measures are taken from the Initial Study/Mitigated Negative Declaration, in the same order that they appear in the IS/MND.
- **Timing:** Identifies at which stage of the project the mitigation must be completed.
- **Monitoring Responsibility:** Identifies the department within the City with responsibility for mitigation monitoring.
- **Verification (Date and Initials):** Provides a contact who reviewed the mitigation measure and the date the measure was determined complete.

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
3.1 Aesthetics– none required	N/A	N/A	N/A
3.2 Agricultural Resources – none required	N/A	N/A	N/A
3.3 Air Quality – none required	N/A	N/A	N/A
3.4 Biological Resources			
<p>BIO-1 All developers of the proposed project site shall conduct construction and clearing activities outside of the avian nesting season (January 15–August 31), where feasible. If clearing and/or construction activities occur during the nesting season, preconstruction surveys for nesting raptors, migratory birds, and special-status resident birds (e.g., coastal California gnatcatcher) shall be conducted by a qualified biologist, up to 14 days before initiation of construction activities. The qualified biologist shall survey the construction zone and a 250-foot radius surrounding the construction zone to determine whether the activities may have the potential to disturb or otherwise harm nesting birds. If an active nest is located within 100 feet (250 feet for raptors) of construction activities, the project applicant shall establish an exclusion zone (no ingress of personnel or equipment at a minimum radius of 100 feet or 250 feet, as appropriate, around the nest). Alternative exclusion zones may be established through consultation with the CDFW and the USFWS, as necessary. The exclusion zones shall remain in force until all young have fledged. Reference to this requirement and to the Migratory Bird Treaty Act shall be included in the construction specifications. If construction activities or tree removal are proposed to occur during the non-breeding season (September 1–January 14), a survey is not required, no further studies are necessary, and no mitigation is required.</p>	<p>The project applicant shall incorporate requirements into all rough and/or precise grading plan documents. The project applicant’s construction inspector shall monitor to ensure that measures are implemented during construction.</p>	<p>City of Wildomar Planning and Public Works Departments</p>	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
<p>BIO-2 Per MSHCP Species-Specific Objective 6, reconstruction presence/absence surveys for burrowing owl within the survey area, where suitable habitat is present, will be conducted for all covered activities through the life of the building permit. Surveys will be conducted 30 days prior to disturbance. Take of active nests will be avoided. Passive relocation (use of one-way doors and collapse of burrows) will occur when owls are present outside the nesting season. If construction is delayed or suspended for more than 30 days after the survey, the area shall be resurveyed. Surveys shall be completed for occupied burrowing owl burrows within all construction areas and within 150 meters (500 feet) of the project work areas (where possible and appropriate based on habitat). All occupied burrows will be mapped on an aerial photo.</p>	<p>Thirty days prior to any vegetation removal or ground-disturbing activities</p>	<p>City of Wildomar Planning and Public Works Departments</p>	
<p>BIO-3 If burrowing owls are identified during the survey period, the City shall require the project applicant to take the following actions to offset impacts prior to ground disturbance: Active nests within the areas scheduled for disturbance or degradation shall be avoided from February 1 through August 31, and a minimum 75-meter (250-foot) buffer shall be provided until fledging has occurred. Following fledging, owls may be passively relocated (use of one way doors and collapse of burrows) by a qualified biologist. If impacts on occupied burrows in the non-nesting period are unavoidable, on-site passive relocation techniques may be used if approved by the CDFW to encourage owls to move to alternative burrows outside of the impact area. However, no occupied burrows shall be disturbed during the nesting season. A qualified biologist must verify through noninvasive methods that the burrow is no longer occupied. If relocation of the owls is approved for the site by the</p>	<p>Prior to any vegetation removal or ground-disturbing activities</p>	<p>City of Wildomar Planning and Public Works Departments</p>	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
<p>CDFW, the City shall require the developer to hire a qualified biologist to prepare a plan for relocating the owls to a suitable site. The relocation plan must include all of the following:</p> <ul style="list-style-type: none"> • The location of the nest and owls proposed for relocation. • The location of the proposed relocation site. • The number of owls involved and the time of year when the relocation is proposed to take place. • The name and credentials of the biologist who will be retained to supervise the relocation. • The proposed method of capture and transport for the owls to the new site. • A description of site preparation at the relocation site (e.g., enhancement of existing burrows, creation of artificial burrows, one-time or long-term vegetation control). • A description of efforts and funding support proposed to monitor the relocation. <p>If paired owls are present within 50 meters (160 feet) of a temporary project disturbance (e.g., parking areas), active burrows shall be protected with fencing/cones/flagging and monitored by a qualified biologist throughout construction to identify losses from nest abandonment and/or loss of reproductive effort. Any identified loss shall be reported to the CDFW.</p>			
3.5 Cultural Resources			
<p>CUL-1 If during grading or construction activities cultural resources are discovered on the project site, work shall be halted immediately within 50 feet of the discovery and the</p>	<p>As a condition of future development approval, and implemented during ground-disturbing construction</p>	<p>City of Wildomar Building & Safety and Planning</p>	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
<p>resources shall be evaluated by a qualified archeologist and the Pechanga Tribe (Tribe). Any unanticipated cultural resources that are discovered shall be evaluated in the final report prepared by the qualified archeologist. The report shall include a list of the resources discovered, documentation of each site/locality, and interpretation of the resources identified, and the method of preservation and/or recovery for identified resources. In the event the significant resources are recovered and if the qualified archaeologist and the Tribe determines the resources to be historic or unique, avoidance and/or mitigation would be required pursuant to and consistent with CEQA Guidelines Sections 15064.5 and 15126.4 and Public Resources Code Section 21083.2 and the Cultural Resources Treatment and Monitoring Agreement required by mitigation measure CUL-2.</p>	<p>activities</p>	<p>Departments</p>	
<p>CUL-2 At least 30 days prior to seeking a grading permit, the project applicant(s) shall contact the Pechanga Tribe to notify the Tribe of grading, excavation, and the monitoring program and to coordinate with the City of Wildomar and the Tribe to develop a Cultural Resources Treatment and Monitoring Agreement. The agreement shall include, but not be limited to, outlining provisions and requirements for addressing the treatment of cultural resources; project grading and development scheduling; terms of compensation for the monitors; treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site; and establishing on-site monitoring provisions and/or requirements for professional Tribal monitors during all ground-disturbing activities. A copy of this signed agreement shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit.</p>	<p>Prior to the issuance of a grading permit</p>	<p>City of Wildomar Public Works and Planning Departments</p>	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
<p>CUL-3 If human remains are encountered, California Health and Safety Code Section 7050.5 requires that no further disturbance occur until the Riverside County Coroner has made the necessary findings as to origin. Further, 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. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within 24 hours. Subsequently, the Native American Heritage Commission shall identify the “most likely descendant” within 24 hours of receiving notification from the coroner. The most likely descendant shall then have 48 hours to make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.</p>	<p>As a condition of project approval, and implemented during ground-disturbing construction</p>	<p>City of Wildomar Public Works and Planning Departments</p>	
<p>CUL-4 All cultural materials, with the exception of sacred items, burial goods, and human remains, which will be addressed in the Cultural Resources Treatment and Monitoring Agreement required by mitigation measure CUL-2, that are collected during the grading monitoring program and from any previous archeological studies or excavations on the project site shall be curated according to the current professional repository standards. The collections and associated records shall be transferred, including title, to the Pechanga Tribe’s curation facility, which meets the standards set forth in 36 CRF Part 79 for federal repositories.</p>	<p>As a condition of project approval, and implemented during ground-disturbing construction activities</p>	<p>City of Wildomar Public Works and Planning Departments</p>	
<p>CUL-5 All sacred sites, should they be encountered within the project site, shall be avoided and preserved as the preferred mitigation, if feasible as determined by a qualified professional in consultation with the Pechanga Tribe. To the extent that a sacred site cannot be feasibly</p>	<p>As a condition of project approval, and implemented during ground-disturbing construction activities</p>	<p>City of Wildomar Public Works and Planning Departments</p>	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
preserved in place or left in an undisturbed state, mitigation measures shall be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.			
<p>CUL-6 If inadvertent discoveries of subsurface archaeological resources are discovered during grading, work shall be halted immediately within 50 feet of the discovery. The developer, the project archeologist, and the Tribe shall assess the significance of such resources and shall meet and confer regarding the mitigation for such resources. If the developer and the Tribe cannot agree on the significance of or the mitigation for such resources, these issues will be presented to the City of Wildomar Planning Director. The Planning Director shall make the determination based on the provisions of CEQA with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the Pechanga Tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the City of Wildomar. In the event the significant resources are recovered and if the qualified archaeologist determines the resources to be historic or unique as defined by relevant state and local law, avoidance and mitigation would be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.</p>	As a condition of future development approval, and implemented during ground-disturbing construction activities	City of Wildomar Public Works and Planning Departments	
<p>CUL-7 To address the possibility that cultural resources may be encountered during grading or construction, a qualified professional archeologist shall monitor all construction activities that could potentially impact archaeological deposits (e.g., grading, excavation, and/or trenching). However, monitoring may be discontinued as soon the qualified professional is satisfied that</p>	As a condition of future development approval, and implemented during ground-disturbing construction activities	City of Wildomar Engineering and Planning Departments	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
<p>construction will not disturb cultural and/or paleontological archaeological resources. A final mitigation monitoring report shall be prepared by the archaeologist documenting any resources found, their treatment, ultimate disposition, new or updated site records and any other pertinent information associated with the project. Final copies of the report will be submitted to the City of Wildomar, the developer, the Eastern Information Center, and the Pechanga Tribe.</p>			
3.6 Geology and Soils			
<p>GEO-1 Prior to the construction of any home on the proposed project site, the soils below the building areas and for a horizontal distance beyond the building areas at least equal to the depth of over-excavation below the final ground surface or 5 feet, whichever distance is greater, should be over-excavated to a depth of at least 5 feet below the final ground surface, whichever is deeper. Should competent natural soil be encountered before a depth of 5 feet is reached, the over-excavation can be terminated at that depth as long as there is at least 24 inches of compacted fill below all footings. Competent natural soil is defined as undisturbed material exhibiting a relative compaction of at least 85 percent (ASTM D 1557).</p>	<p>Prior to the issuance of a grading permit</p>	<p>City of Wildomar Public Works and Planning Departments</p>	
<p>GEO-2 The project applicant shall incorporate the recommendations of the Soils Investigation conducted by John R. Byerly, Inc. (2013; Appendix 6) into project plans. The project's building plans shall demonstrate that they incorporate all applicable recommendations of the soils investigation and comply with all applicable requirements of the latest adopted version of the California Building Code. A licensed professional engineer shall prepare the plans, including those that pertain to soil engineering, structural foundations, and installation. All</p>	<p>Prior to the issuance of a grading permit</p>	<p>City of Wildomar Public Works and Planning Departments</p>	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
on-site soil engineering activities shall be conducted under the supervision of a licensed geotechnical engineer or certified engineering geologist.			
3.7 Greenhouse Gas Emissions – none required	N/A	N/A	N/A
3.8 Hazards and Hazardous Materials – none required	N/A	N/A	N/A
3.9 Hydrology and Water Quality – none required	N/A	N/A	N/A
3.10 Land Use and Planning – none required	N/A	N/A	N/A
3.11 Mineral Resources – none required	N/A	N/A	N/A
3.12 Noise			
<p>NOI-1 The applicant shall require by contract specifications that the following construction best management practices (BMPs) be implemented by contractors to reduce construction noise levels:</p> <p>a) Notification shall be mailed to owners and occupants of all developed land uses immediately bordering the project site, immediately across the Murrieta Creek Channel from the project site, and directly across the street from the project site providing a schedule for major construction activities that will occur for the duration of the construction period. In addition, the notification will include the identification of and contact number for a community liaison and a designated construction manager who would be available on-site to monitor construction activities. The construction manager will be located at the on-site construction office during construction hours for the duration of all construction activities. Contact information for the community liaison and the construction manager will be located at the construction office, City Hall, and the police department.</p>	Prior to any earth movement permit or activity	City of Wildomar Building and Planning Departments	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
<ul style="list-style-type: none"> b) Site grading and excavation activity shall be limited to weekdays between 9:00 a.m. and 4:00 p.m., and no construction activities shall occur on Saturdays, Sundays, or federally recognized holidays. c) The construction contractor shall utilize grading and excavation equipment that is certified to generate noise levels of no more than 85 dBA at a distance of 50 feet. d) All construction equipment shall be properly maintained with operating mufflers and air intake silencers as effective as those installed by the original manufacturer. e) The construction contractor shall erect a temporary noise construction barrier along the southwestern, northwestern, and western perimeters of the project site. If a temporary construction barrier is deemed technically infeasible, the contractor shall construct a masonry wall along the southern and western perimeters of the project prior to any other phase of construction activity, including site grading. The applicant shall demonstrate that the temporary barrier achieves a noise reduction of at least 5 decibels during construction activities. f) The construction contractor shall evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets, for example, and implement such measures if such measures are feasible and would noticeably reduce noise impacts. g) The construction contractor shall monitor the effectiveness of noise attenuation measures by taking noise measurements. 			

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
3.13 Population and Housing – none required	N/A	N/A	N/A
3.14 Public Services – none required	N/A	N/A	N/A
3.15 Recreation – none required	N/A	N/A	N/A
3.16 Transportation/Traffic – none required	N/A	N/A	N/A
3.17 Utilities and Service Systems – none required	N/A	N/A	N/A

ATTACHMENT A – EXHIBIT 3

MND Responses to Comments

ATTACHMENT B

PC Resolution No. 2015-16

PC RESOLUTION NO. 2015-16

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF WILDOMAR, CALIFORNIA, RECOMMENDING CITY COUNCIL APPROVAL OF A CHANGE OF ZONE (PLANNING APPLICATION NO. 08-0154) FROM R-R (RURAL RESIDENTIAL) TO R-1 (ONE-FAMILY DWELLING) FOR A 4.16-ACRE SITE LOCATED AT THE TERMINUS OF ELM STREET BETWEEN GRUWELL STREET AND CENTRAL STREET (APN: 376-043-027).

WHEREAS, an application for Change of Zone No. 08-0154 from the current zoning designation of R-R (Rural Residential) to R-1 (One-Family Dwelling) to accommodate the development of 15 single family residential dwelling units on 4.16 acres located at the end of Elm Street between Central Street to the northeast and Gruwell Street to the southwest has been filed by:

Applicant/Owner:	Zareh Hookasian
Authorized Agent:	Rich Soltysiak, PE, RDS and Associates
Project Location:	End of Elm Street between Central Street to the northeast and Gruwell Street to the southwest
APN:	376-043-027
Lot Area:	4.16 acres

WHEREAS, the Planning Commission of the City of Wildomar, California, has the authority and has reviewed the proposed Change of Zone requested by the applicant, in accordance with California Government Code Sections 65853–65857 and the City of Wildomar Municipal Code, Title 17; and

WHEREAS, the proposed Change of Zone application is considered a “project” as defined by the California Environmental Quality Act, Public Resources Code Section 21000 et seq. (CEQA); and

WHEREAS, the Planning Director determined that the proposed project may have one or more significant effects on the environment and that preparation of an Initial Study/Mitigated Negative Declaration was therefore warranted under Public Resources Code Section 21080(c); and

WHEREAS, after completion of an Initial Study, the Planning Director determined that it did not identify any potentially significant effects on the environment, nor was there any substantial evidence from which it could be fairly argued that the project would have a significant effect on the environment. Therefore, staff has recommended to the Planning Commission adoption of a Mitigated Negative Declaration and a Mitigation Monitoring and Reporting Program for this project; and

WHEREAS, the proposed Mitigated Negative Declaration consists of the following documents: Initial Study, Mitigated Negative Declaration, Mitigation Monitoring and Reporting Program, and applicable technical appendices; and

WHEREAS, on July 9, 2014, using a method required under CEQA Guidelines Section 15072, the City provided a Notice of Intent (NOI) to the Riverside County Clerk, the Press Enterprise, a local newspaper of general circulation, and the City 's local distribution list regarding the adoption of a proposed Initial Study/Mitigated Negative Declaration and a Mitigation Monitoring and Reporting Program for the project; and

WHEREAS, on July 9, 2014, the draft Initial Study/Mitigated Negative Declaration were made available for public review for a period of not less than 30 days commencing on July 9, 2014, and concluding on August 7, 2014, as required by CEQA Guidelines Section 15087. Said document was posted in two public places for review at the following locations: Wildomar City Hall and the City of Wildomar website; and

WHEREAS, during the 30-day public review period, the City received three (3) written comment concerning the proposed Initial Study/Mitigated Negative Declaration, at which time the Planning Department decided to revise the draft Initial Study/Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program and recirculate the document in accordance with CEQA; and

WHEREAS, on March 25, 2015, using a method required under CEQA Guidelines Section 15072, the City provided a Notice of Intent (NOI) to the Riverside County Clerk, the State Clearinghouse, the Press Enterprise, a local newspaper of general circulation, and the City's local distribution list regarding the adoption of a proposed Initial Study/Mitigated Negative Declaration and a Mitigation Monitoring and Reporting Program for the project; and

WHEREAS, on March 25, 2015, the revised/updated draft Initial Study/Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program were made available for public review for a period of not less than 30 days commencing on March 25, 2015, and concluding on April 23, 2015, as required by CEQA Guidelines Section 15087. Said document was posted in two public places for review at the following locations: Wildomar City Hall and the City of Wildomar website; and

WHEREAS, during the 30-day public review period, the City received six (6) written comments concerning the revised/updated Initial Study/Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program; and

WHEREAS, in accordance with Wildomar Municipal Code sections 16.12.140(A) and 17.280.040, the City of Wildomar Planning Department, on August 5, 2015 mailed a public hearing notice to all property owners within a 600-foot radius of the project boundaries notifying said property owners of the date and time of the August 19, 2015 public hearing for which Change of Zone No. 08-0154 would be considered by the Planning Commission; and

WHEREAS, in accordance with Wildomar Municipal Code sections 16.12.140(A) and 17.280.040, the City of Wildomar Planning Department, on August 7, 2015 published a legal notice in the Press Enterprise, a local newspaper of general circulation, in compliance with state law notifying the general public of the August 19, 2015 public hearing for which Change of Zone No. 08-0154 would be considered by the Planning Commission; and

WHEREAS, in accordance with Wildomar Municipal Code sections 16.12.140 and 17.280.040, the City of Wildomar Planning Commission on August 19, 2015 held said public hearing, at which time the Planning Commission received public testimony from interested persons in support of, or opposition to, the proposed Change of Zone No. 08-0154.

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

SECTION 1. CEQA FINDINGS

The Planning Commission recommends that the City Council find that the approval of Change of Zone No. 08-0154 is in compliance with requirements of the California Environmental Quality Act, in that on August 19, 2015 at a duly noticed public hearing, the Planning Commission recommended to the City Council adoption of the Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program reflecting its independent judgment and analysis and documenting the environmental impacts and mitigation measures related to the project. The documents comprising the City's environmental review for the project are on file and available for public review at Wildomar City Hall, 23873 Clinton Keith Road, Suite 201, Wildomar, CA 92595.

SECTION 2. ZONE CHANGE FINDINGS

In accordance with California Government Code Sections 65853–65857 and Wildomar Zoning Ordinance Section 17.280, the Planning Commission, 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 herein, the City's General Plan, and any other evidence within the record or provided at the public hearing of this matter, recommends that the City Council find and determine as follows:

- A. Finding: The proposed Change of Zone is in conformance with the adopted General Plan for the City of Wildomar.

Evidence: Staff has evaluated the proposed Change of Zone from the current zoning of R-R (Rural Residential) to R-1 (One-Family Dwelling) to determine consistency with the General Plan. The site has a General Plan land use designation of Medium Density Residential (MDR), which allows between two and five detached single-family residences per acre on lots ranging from 5,500 to 20,000 square feet in size. The R-1 zone allows single-family dwellings on lot areas not less than 7,200 square feet.

In reviewing the applicant's Change of Zone request and development proposal, the project density is proposed at 3.6 units per acre with lot sizes ranging from 8,142 to 12,007 square feet, which falls within the permitted density range and lot sizes and thus is consistent with the General Plan. The project is also consistent with the City's Municipal Code development standards in Section 17.24.020 (R-1 zone).

SECTION 3. PLANNING COMMISSION ACTION

The Planning Commission, based on the findings above, hereby adopts PC Resolution No. 2015-16 recommending City Council adoption of an Ordinance, attached hereto and incorporated herein by reference as Exhibit 1, approving Change of Zone No. 08-0154 from the current zoning of R-R (Rural Residential) to R-1 (One-Family Dwelling) for the proposed project site (APN: 376-043-027).

PASSED, APPROVED AND ADOPTED this 19th day of August, 2015, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAINED:

Veronica Langworthy
Planning Commission Chair

ATTEST:

Matthew C. Bassi
Planning Director/Minutes Secretary

APPROVED AS TO FORM:

Erica L. Vega, Assistant City Attorney

EXHIBIT 1
of ATTACHMENT B

**Draft City Council Ordinance for
Change of Zone No. 08-0154**

DRAFT ORDINANCE NO. _____

AN ORDINANCE OF CITY COUNCIL OF THE CITY OF WILDOMAR, CALIFORNIA, APPROVING A CHANGE OF ZONE (PLANNING APPLICATION NO. 08-0154) FROM R-R (RURAL RESIDENTIAL) TO R-1 (ONE-FAMILY DWELLING) FOR A 4.16-ACRE SITE LOCATED AT THE END OF ELM STREET BETWEEN CENTRAL STREET TO THE NORTHEAST AND GRUWELL STREET TO THE SOUTHWEST, WITH THE MURRIETA CREEK CHANNEL DRAINAGE COURSE TO THE NORTHEAST. THE ASSESSOR'S PARCEL NUMBER (APN) FOR THE PROJECT SITE IS 376-043-027.

THE WILDOMAR CITY COUNCIL DOES ORDAIN AS FOLLOWS:

SECTION 1. CEQA Determination

The approval of this Change of Zone is in compliance with requirements of the California Environmental Quality Act (CEQA), in that on _____, 2015, at a duly noticed public hearing, the City Council adopted a Mitigated Negative Declaration and a Mitigation Monitoring and Reporting Program for Change of Zone No. 08-0154 reflecting its independent judgment and analysis and documenting the environmental impacts and mitigation measures related to the project. The documents comprising the City's environmental review for the project are on file and available for public review at Wildomar City Hall, 23873 Clinton Keith Road, Suite 201, Wildomar, CA 92595.

SECTION 2. Change of Zone Findings

In accordance with California Government Code Sections 65853–65857 and Wildomar Zoning Ordinance Section 17.280, the City Council hereby makes the following finding for proposed Change of Zone No. 08-0154.

- A. The proposed Change of Zone is in conformance with the adopted General Plan for the City of Wildomar.

Staff has evaluated the proposed change of zone from the current zoning of R-R (Rural Residential) to R-1 (One-Family Dwelling) to determine consistency with the General Plan. The site has a General Plan land use designation of Medium Density Residential (MDR), which allows between two and five detached single-family residences per acre on lots ranging from 5,500 to 20,000 square feet in size. The R-1 zone allows single-family dwellings on lot areas not less than 7,200 square feet.

In reviewing the applicant's Change of Zone request and development proposal, the project density is proposed at 3.6 units per acre with lot sizes ranging from 8,142 to 12,007 square feet, which falls within the permitted density range and lot sizes and thus is consistent with the general plan. The project is also consistent with the City of Wildomar's Municipal development standards outlined in Section

17.24.020 (R-1 zone). As discussed above, the project is consistent with the City of Wildomar's General Plan and the City's R-1 zoning standards.

SECTION 3: Amendment to the Zoning Map

The City Council, based on the findings above, hereby approves a change to the City of Wildomar Zoning Map for Change of Zone No. 08-0154 from the current zoning designation of R-R (Rural Residential) to R-1 (One-Family Dwelling), as described herein and illustrated below.

Legal Description

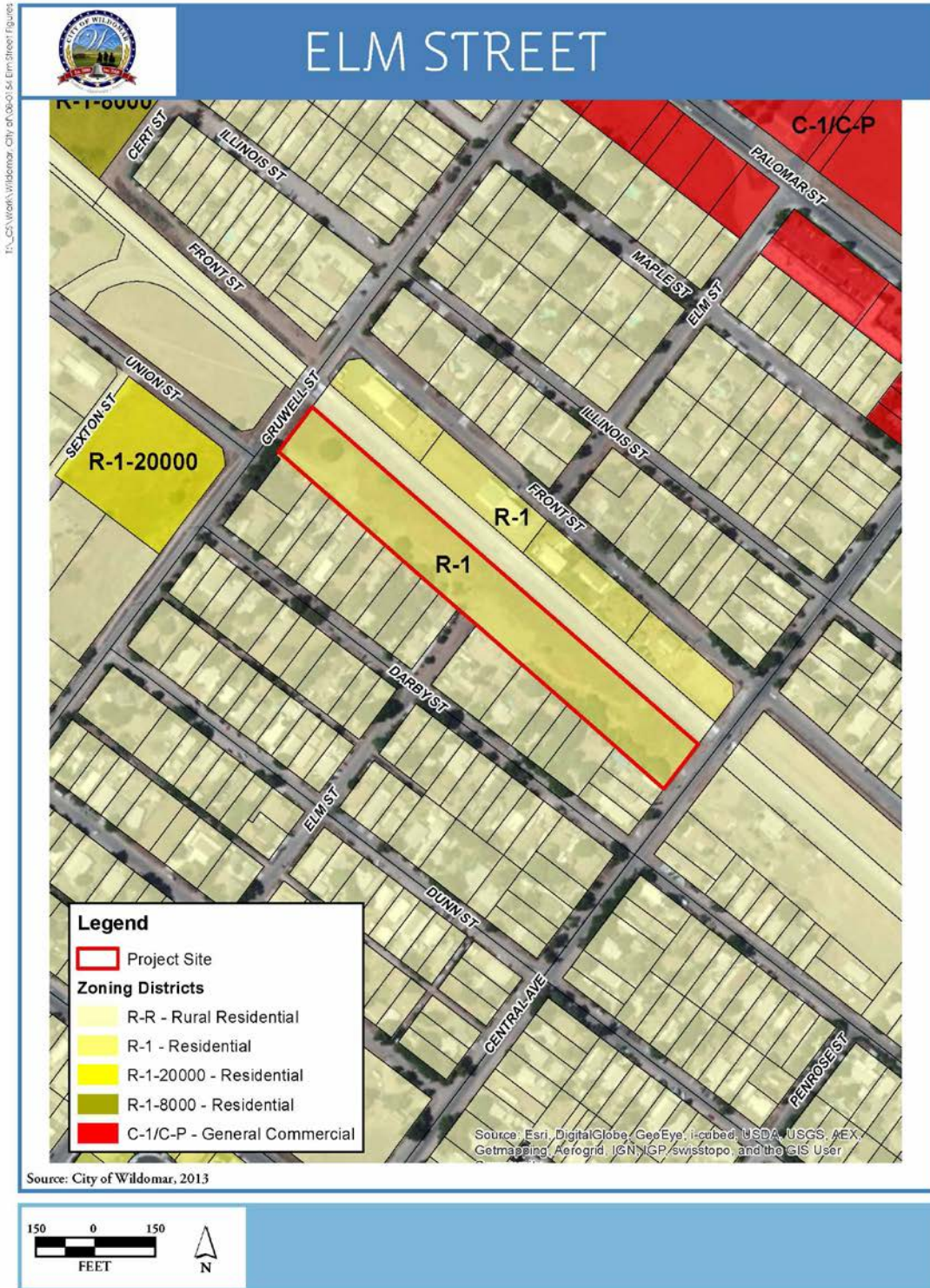
APN: 376-043-027

All of Block 17, being in the town of Wildomar, County of Riverside, State of California. According to Map on file in Book 6, Page 294 of Maps, Records of San Diego County, California.

Together with any right, title, and interest in the streets and alleys adjoining same, and in that portion of the abandoned 100-foot right-of-way of the Atchison Topeka and Santa Fe Railroad Company, lying between the center line of Gruwell Street and the center line of Penrose Avenue, all said property being in the town of Wildomar, according to map on file in Book 6 page 294 of Maps, Records of San Diego County, California.

Excepting therefrom parcel map no. 7070-18 as shown on record of survey recorded November 5, 1981, in Book 68 page 26 through 31 of records of survey, records of Riverside County, California, as set forth in final order of condemnation recorded March 6, 1986, as instrument no. 76518 of official Records of Riverside County, California.

Figure 1 – Proposed Zoning



SECTION 4. Effective Date of the Ordinance

This Ordinance shall take effect and be in full force and operation thirty (30) days after its second reading and adoption.

SECTION 5. Severability

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

SECTION 6. City Clerk Action

The City Clerk is authorized and directed to cause this Ordinance to be published within fifteen (15) days after its passage in a newspaper of general circulation and circulated within the city in accordance with Government Code Section 36933(a) or, to cause this Ordinance to be published in the manner required by law using the alternative summary and pasting procedure authorized under Government Code Section 39633(c).

PASSED, APPROVED AND ADOPTED this _____ day of _____, 2015.

Ben J. Benoit
Mayor

APPROVED AS TO FORM:

ATTEST:

Thomas D. Jex,
City Attorney

Debbie A. Lee, CMC
City Clerk

ATTACHMENT C

**PC Resolution No. 2015-17
Tentative Tract Map No. 33840**

PC RESOLUTION NO. 2015-17

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF WILDOMAR, CALIFORNIA, RECOMMENDING CITY COUNCIL APPROVAL OF TENTATIVE TRACT MAP NO. 33840 (PLANNING APPLICATION NO. 08-0154) FOR THE SUBDIVISION OF APPROXIMATELY 4.16 ACRES INTO 15 PARCELS, SUBJECT TO CONDITIONS, LOCATED AT THE TERMINUS OF ELM STREET BETWEEN GRUWELL STREET AND CENTRAL STREET (APN: 376-043-027).

WHEREAS, an application for Tentative Tract Map No. 33840 (Planning Application No. 08-0154) to subdivide 4.16 acres into 15 single-family residential lots, including a private park has been filed by:

Applicant/Owner:	Zareh Hookasian
Authorized Agent:	Rich Soltysiak, PE, RDS and Associates
Project Location:	End of Elm Street between Central Street to the northeast and Gruwell Street to the southwest
APN:	376-043-027
Lot Area:	4.16 acres

WHEREAS, in accordance with California Government Code Sections 66452–66452.22 (Subdivision Map Act), the City of Wildomar Subdivision Ordinance (Title 16), and the City of Wildomar Zoning Ordinance (Title 17), the Planning Commission of the City of Wildomar, California, has the authority and has reviewed proposed Tentative Tract Map No. 33840 for the Elm Street Project; and

WHEREAS, in accordance with Government Code Section 66452.3, the City has provided the applicant with a copy of the Planning Department staff report and resolutions for Tentative Tract Map No. 33840 containing staff’s recommendation to the Planning Commission at least three (3) days prior to the below-referenced noticed public hearing; and

WHEREAS, proposed Tentative Tract Map No. 33840 for the Elm Street Project is considered a “project” as defined by the California Environmental Quality Act, Public Resources Code Section 21000 et seq. (CEQA); and

WHEREAS, the Planning Director determined that the proposed project may have one or more significant effects on the environment and that preparation of an Initial Study/Mitigated Negative Declaration was therefore warranted under Public Resources Code Section 21080(c); and

WHEREAS, after completion of an Initial Study, the Planning Director determined that it did not identify any potentially significant effects on the environment nor was there any substantial evidence from which it could be fairly argued that the project would have

a significant effect on the environment. Therefore, staff has recommended to the Planning Commission adoption of a Mitigated Negative Declaration and a Mitigation Monitoring and Reporting Program for this project; and

WHEREAS, the proposed Mitigated Negative Declaration consists of the following documents: Initial Study/Mitigated Negative Declaration, Mitigation Monitoring and Reporting Program, and applicable technical appendices; and

WHEREAS, on July 9, 2014, using a method required under CEQA Guidelines Section 15072, the City provided a Notice of Intent (NOI) to the Riverside County Clerk, the Press Enterprise, a local newspaper of general circulation, and the City 's local distribution list regarding the adoption of a proposed Initial Study/Mitigated Negative Declaration and a Mitigation Monitoring and Reporting Program for the project; and

WHEREAS, on July 9, 2014, the draft Initial Study/Mitigated Negative Declaration were made available for public review for a period of not less than 30 days commencing on July 9, 2014, and concluding on August 7, 2014, as required by CEQA Guidelines Section 15087. Said document was posted in two public places for review at the following locations: Wildomar City Hall and the City of Wildomar website; and

WHEREAS, during the 30-day public review period, the City received three (3) written comment concerning the proposed Initial Study/Mitigated Negative Declaration, at which time the Planning Department decided to revise the draft Initial Study/Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program and recirculate the document in accordance with CEQA; and

WHEREAS, on March 25, 2015, using a method required under CEQA Guidelines Section 15072, the City provided a Notice of Intent (NOI) to the Riverside County Clerk, the State Clearinghouse, the Press Enterprise, a local newspaper of general circulation, and the City's local distribution list regarding the adoption of a proposed Initial Study/Mitigated Negative Declaration and a Mitigation Monitoring and Reporting Program for the project; and

WHEREAS, on March 25, 2015, the revised/updated draft Initial Study/Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program were made available for public review for a period of not less than 30 days commencing on March 25, 2015, and concluding on April 23, 2015, as required by CEQA Guidelines Section 15087. Said document was posted in two public places for review at the following locations: Wildomar City Hall and the City of Wildomar website; and

WHEREAS, during the 30-day public review period, the City received six written comments concerning the revised/updated Initial Study/Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program; and

WHEREAS, in accordance with Wildomar Municipal Code Sections 16.12.140(A) and 17.280.040, the City of Wildomar Planning Department, on August 5, 2015 mailed a

public hearing notice to all property owners within a 600-foot radius of the project boundaries notifying said property owners of the date and time of the August 19, 2015 public hearing for which Tentative Tract Map No. 33840 would be considered by the Planning Commission; and

WHEREAS, in accordance with Wildomar Municipal Code Sections 16.12.140(A) and 17.280.040, the City of Wildomar Planning Department, on August 7, 2015 published a legal notice in the Press Enterprise, a local newspaper of general circulation, in compliance with state law notifying the general public of the August 19, 2015 public hearing for which Tentative Tract Map No. 33840 would be considered by the Planning Commission; and

WHEREAS, in accordance with Wildomar Municipal Code Sections 16.12.140(A) and 17.280.040, the City of Wildomar Planning Commission on August 19, 2015 held said public hearing, at which time the Planning Commission received public testimony from interested persons in support of, or opposition to, proposed Tentative Tract Map No. 33840.

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

SECTION 1. CEQA FINDINGS

The Planning Commission recommends the City Council find the approval of Tentative Tract Map No. 33840 is in compliance with requirements of the California Environmental Quality Act, in that on August 19, 2015, at a duly noticed public hearing, the Planning Commission recommended City Council adoption of a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program reflecting its independent judgment and analysis and documenting the environmental impacts and mitigation measures related to the project. The documents comprising the City's environmental review for the project are on file and available for public review at Wildomar City Hall, 23873 Clinton Keith Road, Suite 201, Wildomar, CA 92595.

SECTION 2. TENTATIVE TRACT MAP FINDINGS

The Planning Commission, in light of the whole record before it including but not limited to the staff report, Initial Study/Mitigated Negative Declaration, Mitigation Monitoring and Reporting Program, Response to Comments, and documents incorporated herein by reference, and other substantial evidence (within the meaning of Public Resources Code Sections 21080(e) and 21082.2) within the record and/or provided at the public hearing, recommends that the City Council find and determine as follows:

- A. Finding: The proposed tract map is consistent with the City's General Plan and any applicable specific plan as specified in Government Code Section 65451.

Evidence: The applicant is proposing a Tentative Tract Map (TTM No. 33840) to subdivide 4.16 acres into 15 lots, which will accommodate the development of 15

single-family residential dwelling units. Staff has evaluated the proposed Change of Zone from the current zoning of R-R (Rural Residential) to R-1 (One-Family Dwelling) to determine consistency with the General Plan. The site has a General Plan land use designation of Medium Density Residential (MDR), which allows between two and five detached single-family residences per acre on lots ranging from 5,500 to 20,000 square feet in size. The R-1 zone allows single-family dwellings on lot areas not less than 7,200 square feet. In review of the proposed tract map, the project density is proposed at 3.6 units per acre with lot sizes ranging from 8,142 to 12,007 square feet, which falls within the permitted density range and lot sizes and thus is consistent with the General Plan.

There is no specific plan governing this project. In terms of specific land use policies related to this project, the proposed tract map promotes (and is consistent with) the following residential land use policies:

LU 3.1 (Community Design) – “Accommodate land use development in accordance with the patterns and distribution of uses and density depicted on the General Plan Land Use map.”

LU 6.1 (Land Use Compatibility) – “Require land uses to develop in accordance with the General Plan and area plans to ensure compatibility and minimize impacts.”

LU 12.6 (Circulation) – “Require that adequate and accessible circulation facilities exist to meet the demands of a proposed land use.”

LU 22.1 (Community Development) – “Accommodate the development of single and multi family residential units in areas appropriately designated by the General Plan and area plan land use maps.”

LU 22.3 (Community Development) – “Require that adequate and available circulation facilities, water resources and sewer facilities exist to meet the demands of the proposed residential land use.”

- B. Finding: The design or improvement of the proposed subdivision is consistent with the City’s General Plan and any applicable specific plan.

Evidence: The proposed subdivision has been designed to meet all City standards applicable to residential subdivisions, which are designed to provide satisfactory pedestrian and vehicular circulation, including emergency vehicle access and on-and off-site public improvements. Further, all streets, utilities, and drainage facilities have been designed and are required to be constructed in conformance with City standards. There is no specific plan governing this project.

- C. Finding: The site is physically suitable for the type and proposed density of development.

Evidence: The project site encompasses 4.16 acres. The Tentative Tract Map proposes to subdivide the project area into 15 lots for single-family residential development. The density allowed by the MDR designation allows between two and five detached single-family residences per acre on lots ranging from 5,500 to 20,000 square feet in size. The R-1 zone allows single-family dwellings on lot areas not less than 7,200 square feet. In review of the proposed tract map, the project density is proposed at 3.6 units per acre with lot sizes ranging from 8,142 to 12,007 square feet, which falls within the permitted density range and lot sizes and thus is consistent with the General Plan. Therefore, the proposed tract map is physically suitable for the type and proposed density of development.

- D. Finding: The design of the subdivision or proposed improvements is not likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.

Evidence: The City prepared an Initial Study that resulted in the preparation, processing, and review of an Initial Study/Mitigated Negative Declaration for Tentative Tract Map No. 33840. The IS/MND analyzed the environmental issues required by CEQA related to fish and wildlife, including their respective habitats. The IS/MND was circulated for public review and made available for a 30-day public review period in accordance with CEQA. Thus, it has been determined that the design of the subdivision and proposed improvements will not likely cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat with implementation of the proposed mitigation measures as outlined in the IS/MND and the Mitigation Monitoring and Report Program (MMRP). Therefore, the proposed tract map meets this finding.

- E. Finding: The design of the subdivision or type of improvements is not likely to cause serious public health problems.

Evidence: The design of the subdivision is in conformance with the City's General Plan, Zoning Code, and Subdivision Ordinance. The design and construction of all improvements to accommodate the project have been conditioned in accordance with all applicable City of Wildomar ordinances, codes, and standards including but not limited to the California Uniform Building Code, the City's ordinances relating to stormwater runoff management, and adopted public works standards. As 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, the proposed tract map meets this finding.

- F. Finding: The design of the subdivision or the type of improvements will not conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision.

Evidence: The project contains an abandonment of unknown alleys and reservation of easement for existing utilities, a vacation of an unnamed alley and reserving and excepting an easement for any public utilities, and an easement for a water pipeline to the Elsinore Valley Municipal Water District. The design of the subdivision or the type of improvements will not conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision.

SECTION 4. PLANNING COMMISSION ACTION

The Planning Commission hereby adopts PC Resolution No. 2015-17 recommending City Council approval of Tentative Tract Map No. 33840 (Planning Application No. 08-0154), subject to conditions, as provided herein and attached hereto as Exhibit 1.

PASSED, APPROVED AND ADOPTED this 19th day of August, 2015, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAINED:

Veronica Langworthy
Planning Commission Chair

ATTEST:

Matthew C. Bassi
Planning Director/Minutes Secretary

APPROVED AS TO FORM:

Erica L. Vega, Assistant City Attorney

**ATTACHMENT D – EXHIBIT 1
ELM STREET PROJECT – CONDITIONS OF APPROVAL**

Project No.: Change of Zone & TTM No. 33840 (Planning Application No. 08-0154)

APN: 376-043-027

<u>Tentative Tract Map Approval Date (City Council):</u>	<u>Tentative Tract Map Expiration Date</u>		
September 9, 2015	September 9, 2018		
<u>Conditions of Approval</u>	<u>Timing/ Implementation</u>	<u>Enforcement/ Monitoring</u>	<u>Verification (Date and Signature)</u>

PLANNING DEPARTMENT CONDITIONS

Standard / General Conditions

1.	<p>In compliance with Section 15094 of the CEQA Guidelines, a Notice of Determination (NOD) shall be filed with the Riverside County Clerk within five (5) working days of project approval by the City Council. The notice shall include the required California Department of Fish and Wildlife (Fish and Game Code Section 711.4.d.3) fee, and the Riverside County Clerk administrative fee (paid by the applicant) in the amount of <u>\$2,260.00</u>. Failure to pay the required fee will result in the project being deemed null and void (California Fish and Game Code Section 711.4(c)). The above fee shall be provided to the Planning Department no later than <u>September 9, 2015</u> and is broken down as follows:</p> <p style="margin-left: 20px;">a. California Department of Fish and Wildlife = \$2,210.00 b. Riverside County Clerk Administrative Fee = \$50.00</p>	Sept. 9, 2015	Planning Department	
2.	<p>The applicant shall review and sign below verifying the "Acceptance of the Conditions of Approval" and return the signed page to the Wildomar Planning Department within two weeks of the City Council approval.</p>	Sept. 23, 2015	Planning Department	
	<p>Applicant Signature _____ Date _____</p>			

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3.	<p>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, law suits, 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 any 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 Subdivision 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 court of competent jurisdiction. City shall promptly notify the applicant of any Action brought and request that applicant defend the City. It is expressly agreed that applicant may select legal counsel providing the applicant’s defense and the City shall have the right to approve separate legal counsel providing the City’s defense. The applicant shall reimburse City for any attorneys’ fees, costs and expenses directly and necessarily incurred by the City in the course of the defense. Applicant agrees that City will forward monthly invoices to Applicant for attorneys’ fees, costs and expenses it has incurred related to its defense of any Action</p>	Ongoing	Planning Department	
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	and applicant agrees to timely payment within thirty (30) days of receipt of the invoice. Within fourteen (14) days of an Action being filed, applicant agrees to post adequate security or a cash deposit with City in an amount to cover the City's estimated attorneys' fees, costs and expenses incurred by City in the course of the defense in order to ensure timely payment of the City's invoices. The amount of the security or cash deposit shall be determined by the City. City shall cooperate with applicant in the defense of any Action.			
4.	Approval of Tentative Tract Map No. 33840 shall expire on September 9, 2018 (3 years after approval by the City Council) if the tract map has not been recorded. The applicant may submit a request for a one-year Extension of Time (EOT) with the Planning Department as permitted by the Wildomar Subdivision Ordinance provided the written request is made 60 days prior to the expiration date and accompanied by the required EOT application and fee.	Sept. 9, 2018	Planning Department	
5.	In accordance with Section 66020.d.1 of the Government Code, the applicant has 90 days from project approval to file a protest of the imposition of fees, dedications, reservations, or other exactions being imposed on this project. Notice is hereby to the Applicant that the 90-day appeal hereby begins with approval of this project.	December 9, 2015	Planning Department	
6.	Within 60 days of approval of Tentative Tract Map No. 33840 by the City Council, the applicant shall pay any outstanding deposit account balances. Failure to pay the outstanding balance by the due date will result in delays in the processing of the final tract map & improvement plans.	November 9, 2015	Planning Department	

**ATTACHMENT D – EXHIBIT 1
ELM STREET PROJECT – CONDITIONS OF APPROVAL**

Project No.: Change of Zone & TTM No. 33840 (Planning Application No. 08-0154)

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7.	Tentative Tract Map No. 33840 shall not become effective until 30 days after the second reading of proposed Change of Zone No. 08-0154 by the City Council. No recordation of the final map shall occur until after this date.	November 14, 2015		
8.	The project shall be subdivided and developed in accordance with the Tentative Tract Map approved by the City Council on September 9, 2015. The applicant may request a modification/revision to the approved project as outlined in Sections 16.12.210 and 16.12.220 of the Wildomar Subdivision Ordinance.	Ongoing	Planning Department	

CEQA IS/MND Mitigation Measures

9.	<p><u>BIO-1</u> All developers of the proposed project site shall conduct construction and clearing activities outside of the avian nesting season (January 15–August 31), where feasible. If clearing and/or construction activities occur during the nesting season, preconstruction surveys for nesting raptors, migratory birds, and special-status resident birds (e.g., coastal California gnatcatcher) shall be conducted by a qualified biologist, up to 14 days before initiation of construction activities. The qualified biologist shall survey the construction zone and a 250-foot radius surrounding the construction zone to determine whether the activities may have the potential to disturb or otherwise harm nesting birds. If an active nest is located within 100 feet (250 feet for raptors) of construction activities, the project applicant shall establish an exclusion zone (no ingress of personnel or equipment at a minimum radius of 100 feet or 250 feet, as appropriate, around the nest). Alternative exclusion zones may be established through consultation with the CDFW and the USFWS, as</p>	<p>The project applicant shall incorporate requirements into all rough and/or precise grading plan documents. The project applicant's construction inspector shall monitor to ensure that measures are implemented during construction.</p>	<p>City of Wildomar Planning and Public Works Departments</p>	
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	necessary. The exclusion zones shall remain in force until all young have fledged. Reference to this requirement and to the Migratory Bird Treaty Act shall be included in the construction specifications. If construction activities or tree removal are proposed to occur during the non-breeding season (September 1–January 14), a survey is not required, no further studies are necessary, and no mitigation is required.			
10.	BIO-2 Per MSHCP Species-Specific Objective 6, reconstruction presence/absence surveys for burrowing owl within the survey area, where suitable habitat is present, will be conducted for all covered activities through the life of the building permit. Surveys will be conducted 30 days prior to disturbance. Take of active nests will be avoided. Passive relocation (use of one-way doors and collapse of burrows) will occur when owls are present outside the nesting season. If construction is delayed or suspended for more than 30 days after the survey, the area shall be resurveyed. Surveys shall be completed for occupied burrowing owl burrows within all construction areas and within 150 meters (500 feet) of the project work areas (where possible and appropriate based on habitat). All occupied burrows will be mapped on an aerial photo.	Thirty days prior to any vegetation removal or ground-disturbing activities	City of Wildomar Planning and Public Works Departments	
11.	BIO-3 If burrowing owls are identified during the survey period, the City shall require the project applicant to take the following actions to offset impacts prior to ground disturbance: Active nests within the areas scheduled for disturbance or degradation shall be avoided from February 1 through August 31, and a minimum 75-meter (250-foot) buffer shall be provided until fledging has occurred. Following fledging, owls may be passively relocated (use of oneway doors and collapse of	Prior to any vegetation removal or ground-disturbing activities	City of Wildomar Planning and Public Works Departments	

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<p>burrows) by a qualified biologist. If impacts on occupied burrows in the non-nesting period are unavoidable, on-site passive relocation techniques may be used if approved by the CDFW to encourage owls to move to alternative burrows outside of the impact area. However, no occupied burrows shall be disturbed during the nesting season. A qualified biologist must verify through noninvasive methods that the burrow is no longer occupied. If relocation of the owls is approved for the site by the CDFW, the City shall require the developer to hire a qualified biologist to prepare a plan for relocating the owls to a suitable site. The relocation plan must include all of the following:</p> <ul style="list-style-type: none"> • The location of the nest and owls proposed for relocation. • The location of the proposed relocation site. • The number of owls involved and the time of year when the relocation is proposed to take place. • The name and credentials of the biologist who will be retained to supervise the relocation. • The proposed method of capture and transport for the owls to the new site. • A description of site preparation at the relocation site (e.g., enhancement of existing burrows, creation of artificial burrows, one-time or long-term vegetation control). • A description of efforts and funding support proposed to monitor the relocation. <p>If paired owls are present within 50 meters (160 feet) of a temporary project disturbance (e.g., parking areas), active burrows shall be protected with fencing/cones/flagging and monitored by a qualified</p>			
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	biologist throughout construction to identify losses from nest abandonment and/or loss of reproductive effort. Any identified loss shall be reported to the CDFW.			
12.	<u>CUL-1</u> If during grading or construction activities cultural resources are discovered on the project site, work shall be halted immediately within 50 feet of the discovery and the resources shall be evaluated by a qualified archeologist and the Pechanga Tribe (Tribe). Any unanticipated cultural resources that are discovered shall be evaluated in the final report prepared by the qualified archeologist. The report shall include a list of the resources discovered, documentation of each site/locality, and interpretation of the resources identified, and the method of preservation and/or recovery for identified resources. In the event the significant resources are recovered and if the qualified archaeologist and the Tribe determines the resources to be historic or unique, avoidance and/or mitigation would be required pursuant to and consistent with CEQA Guidelines Sections 15064.5 and 15126.4 and Public Resources Code Section 21083.2 and the Cultural Resources Treatment and Monitoring Agreement required by mitigation measure CUL-2.	As a condition of future development approval, and implemented during ground-disturbing construction activities	City of Wildomar Building & Safety and Planning Departments	
13.	<u>CUL-2</u> At least 30 days prior to seeking a grading permit, the project applicant(s) shall contact the Pechanga Tribe to notify the Tribe of grading, excavation, and the monitoring program and to coordinate with the City of Wildomar and the Tribe to develop a Cultural Resources Treatment and Monitoring Agreement. The agreement shall include, but not be limited to, outlining provisions and requirements for addressing the treatment of cultural resources; project grading and development scheduling; terms of compensation	Prior to the issuance of a grading permit	City of Wildomar Public Works and Planning Departments	

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	for the monitors; treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site; and establishing on-site monitoring provisions and/or requirements for professional Tribal monitors during all ground-disturbing activities. A copy of this signed agreement shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit.			
14.	<u>CUL-3</u> If human remains are encountered, California Health and Safety Code Section 7050.5 requires that no further disturbance occur until the Riverside County Coroner has made the necessary findings as to origin. Further, 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. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within 24 hours. Subsequently, the Native American Heritage Commission shall identify the “most likely descendant” within 24 hours of receiving notification from the coroner. The most likely descendant shall then have 48 hours to make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.	As a condition of project approval, and implemented during ground-disturbing construction	City of Wildomar Public Works and Planning Departments	
15.	<u>CUL-4</u> All cultural materials, with the exception of sacred items, burial goods, and human remains, which will be addressed in the Cultural Resources Treatment and Monitoring Agreement required by mitigation measure CUL-2, that are collected during the grading monitoring program and from any previous archeological studies or	As a condition of project approval, and implemented during ground-disturbing	City of Wildomar Public Works and Planning Departments	

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	excavations on the project site shall be curated according to the current professional repository standards. The collections and associated records shall be transferred, including title, to the Pechanga Tribe's curation facility, which meets the standards set forth in 36 CRF Part 79 for federal repositories.	construction activities		
16.	<u>CUL-5</u> All sacred sites, should they be encountered within the project site, shall be avoided and preserved as the preferred mitigation, if feasible as determined by a qualified professional in consultation with the Pechanga Tribe. To the extent that a sacred site cannot be feasibly preserved in place or left in an undisturbed state, mitigation measures shall be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.	As a condition of project approval, and implemented during ground-disturbing construction activities	City of Wildomar Public Works and Planning Departments	
17.	<u>CUL-6</u> If inadvertent discoveries of subsurface archaeological resources are discovered during grading, work shall be halted immediately within 50 feet of the discovery. The developer, the project archeologist, and the Tribe shall assess the significance of such resources and shall meet and confer regarding the mitigation for such resources. If the developer and the Tribe cannot agree on the significance of or the mitigation for such resources, these issues will be presented to the City of Wildomar Planning Director. The Planning Director shall make the determination based on the provisions of CEQA with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the Pechanga Tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the City of Wildomar. In the event the significant resources are recovered and if	As a condition of future development approval, and implemented during ground-disturbing construction activities	City of Wildomar Public Works and Planning Departments	

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	<p>the qualified archaeologist determines the resources to be historic or unique as defined by relevant state and local law, avoidance and mitigation would be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.</p>			
18.	<p><u>CUL-7</u> To address the possibility that cultural resources may be encountered during grading or construction, a qualified professional archeologist shall monitor all construction activities that could potentially impact archaeological deposits (e.g., grading, excavation, and/or trenching). However, monitoring may be discontinued as soon the qualified professional is satisfied that construction will not disturb cultural and/or paleontological archaeological resources. A final mitigation monitoring report shall be prepared by the archaeologist documenting any resources found, their treatment, ultimate disposition, new or updated site records and any other pertinent information associated with the project. Final copies of the report will be submitted to the City of Wildomar, the developer, the Eastern Information Center, and the Pechanga Tribe.</p>	<p>As a condition of future development approval, and implemented during ground-disturbing construction activities</p>	<p>City of Wildomar Engineering and Planning Departments</p>	
19.	<p><u>GEO-1</u> Prior to the construction of any home on the proposed project site, the soils below the building areas and for a horizontal distance beyond the building areas at least equal to the depth of over-excavation below the final ground surface or 5 feet, whichever distance is greater, should be over-excavated to a depth of at least 5 feet below the final ground surface, whichever is deeper. Should competent natural soil be encountered before a depth of 5 feet is reached, the over-excavation can be terminated at that depth as long</p>	<p>Prior to the issuance of a grading permit</p>	<p>City of Wildomar Public Works and Planning Departments</p>	

**ATTACHMENT D – EXHIBIT 1
ELM STREET PROJECT – CONDITIONS OF APPROVAL**

Project No.: Change of Zone & TTM No. 33840 (Planning Application No. 08-0154)

APN: 376-043-027

<u>Tentative Tract Map Approval Date (City Council):</u>	<u>Tentative Tract Map Expiration Date</u>		
September 9, 2015	September 9, 2018		
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	<p>as there is at least 24 inches of compacted fill below all footings. Competent natural soil is defined as undisturbed material exhibiting a relative compaction of at least 85 percent (ASTM D 1557).</p>			
20.	<p><u>GEO-2</u> The project applicant shall incorporate the recommendations of the Soils Investigation conducted by John R. Byerly, Inc., (2013; Appendix 6) into project plans. The project’s building plans shall demonstrate that they incorporate all applicable recommendations of the soils investigation and comply with all applicable requirements of the latest adopted version of the California Building Code. A licensed professional engineer shall prepare the plans, including those that pertain to soil engineering, structural foundations, and installation. All on-site soil engineering activities shall be conducted under the supervision of a licensed geotechnical engineer or certified engineering geologist.</p>	<p>Prior to the issuance of a grading permit</p>	<p>City of Wildomar Public Works and Planning Departments</p>	
21.	<p><u>NOI-1</u> The applicant shall require by contract specifications that the following construction best management practices (BMPs) be implemented by contractors to reduce construction noise levels:</p> <p>a) Notification shall be mailed to owners and occupants of all developed land uses immediately bordering the project site, immediately across the Murrieta Creek Channel from the project site, and directly across the street from the project site providing a schedule for major construction activities that will occur for the duration of the construction period. In addition, the notification will include the identification of and contact number for a community liaison and a designated construction manager who would be available on-site to monitor construction activities. The construction manager will be located at the on-site construction office during</p>	<p>Prior to any earth movement permit or activity</p>	<p>City of Wildomar Building and Planning Departments</p>	

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<p>construction hours for the duration of all construction activities. Contact information for the community liaison and the construction manager will be located at the construction office, City Hall, and the police department.</p> <p>b) Site grading and excavation activity shall be limited to weekdays between 9:00 a.m. and 4:00 p.m., and no construction activities shall occur on Saturdays, Sundays, or federally recognized holidays.</p> <p>c) The construction contractor shall utilize grading and excavation equipment that is certified to generate noise levels of no more than 85 dBA at a distance of 50 feet.</p> <p>d) All construction equipment shall be properly maintained with operating mufflers and air intake silencers as effective as those installed by the original manufacturer.</p> <p>e) The construction contractor shall erect a temporary noise construction barrier along the southwestern, northwestern, and western perimeters of the project site. If a temporary construction barrier is deemed technically infeasible, the contractor shall construct a masonry wall along the southern and western perimeters of the project prior to any other phase of construction activity, including site grading. The applicant shall demonstrate that the temporary barrier achieves a noise reduction of at least 5 decibels during construction activities.</p> <p>f) The construction contractor shall evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets, for example, and implement such measures if such measures are feasible and would noticeably reduce noise impacts.</p>			
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	g) The construction contractor shall monitor the effectiveness of noise attenuation measures by taking noise measurements.			
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Prior to Final Map Approval / Recordation of the Final Map

22.	Prior to approval of the final tract map for TTM No. 33840, a copy of the proposed Covenants, Conditions, and Restrictions (CC&Rs) shall be submitted to the Planning Director and City Attorney for review and approval. The CC&Rs shall include liability insurance and methods of maintaining landscaping, parking areas, private roads, exterior of all buildings (if applicable), and all landscaped and open areas including parkways, as well as a provisions indicating that the homeowners association may not be terminated or dissolved without the permission of the City. The CC&Rs shall be in the form and content approved by the Planning Director and City Attorney and shall include such provisions as are required by this approval and as said officials deem necessary to protect the interests of the City and its residents.	Prior to Final Map Approval	Planning Department	
23.	Prior to recordation of the final tract map, all Riverside County Fire Department conditions shall be complied with. The applicant shall provide written verification that all applicable conditions have been met.	Prior to Recordation of Final Map	Planning Department	

Prior to Issuance of Building Permits

24.	Prior to the development of any homes within the boundaries of Tentative tract Map No. 33840, the applicant shall submit a Final Site Plan of Development (FSPOD) for review and approval by the Planning Department. As proposed by the Applicant, Tentative Tract Map No. 33840 shall only include one-story single family residential	Prior to Issuance of a Building Permit	Planning Department.	
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<p>dwelling. The FSPOD shall be accompanied by the applicable application and processing review fee and include all the required information including 2 sets of detailed landscape and irrigation plans (which shall be designed to meet all requirements of Section 17.276 - Water Efficient Landscapes, and any future water conservation measures adopted by the City prior to development of the site). Further, the FSPOD landscaping plans shall be prohibited from using front yard turf and shall be required to utilize drought-tolerant landscaping and drip irrigation in accordance with city requirements.</p>			
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PUBLIC WORKS/ENGINEERING/BUILDING DEPARTMENT CONDITIONS

General Requirements/Conditions

1.	The developer shall obtain City approval for any modifications or revisions to the approval of this project. Deviations not identified on the plans may not be approved by the City, potentially resulting in the need for the project to be redesigned. Amended entitlement approvals may be necessary as a result.	On-Going	Engineering Dept.	
2.	No grading shall be performed without the prior issuance of a grading permit by the City.	On-Going	Engineering Dept.	
3.	Written permission shall be obtained from the affected property owners allowing the proposed grading and/or facilities to be installed outside of the project boundaries.	On-Going	Engineering Dept.	
4.	The developer/owner or contractor shall apply for an Encroachment Permit for work performed within the public right of way. Compliance with current environmental regulations applies and additional studies and/or permits may be required.	On-Going	Public Works	

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5.	The developer's contractor is required to submit for a haul route permit for the hauling of material to and from the project site. Said permit will include limitations of haul hours, number of loads per day and the posting of traffic control personnel at all approved entrances/exits onto public roads.	On-Going	Public Works	
6.	Storm water and non-storm water discharges from the project site shall be mitigated in conformance with the applicable Regional Water Quality Control Board permit(s) and/or site specific SWPPP prior to entering into the MS4s.	On-Going	Engineering Dept.	
7.	The developer / applicant shall provide all tenants / employees / homeowners with educational materials regarding Best Management Practices for Stormwater Pollution Prevention. Educational materials are available on the Riverside County Flood Control and Water Conservation District's website. .	On-Going	Engineering Dept.	
8.	The developer/owner/tenant shall comply with all applicable laws and regulations regarding the proper disposal of waste materials generated from the construction of the development.	On-Going	Engineering Dept.	
9.	The Developer shall dedicate, design and construct all improvements in accordance the City of Wildomar Road Improvement Standards & Specification, Improvement Plan Check Policies and Guidelines, as further conditioned herein and to the satisfaction of the City Engineer.	On-Going	Engineering Dept.	
10.	The Developer shall be responsible for all costs associated with off-site right-of-way acquisition, including any costs associated with the eminent domain process, if necessary.	On-Going	Engineering Dept.	
11.	All grading shall conform to the California Building Code, including Appendix J, and all other relevant laws, rules, and regulations	On-Going	Engineering Dept.	

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	governing grading in the City of Wildomar. Prior to commencing any grading which includes 50 or more cubic yards, the developer shall obtain a grading permit from the Building Department.			
12.	All necessary measures to control dust shall be implemented by the developer during grading shall comply with SCAQMD fugitive dust rules and regulations and to the satisfaction of the City Engineer.	On-Going	Engineering Dept.	
13.	Graded slopes shall be limited to a maximum steepness ratio of 2:1 (horizontal to vertical) unless otherwise approved by the City Engineer.	On-Going	Engineering Dept.	
14.	Grading in excess of 199 cubic yards will require performance security to be posted with the City.	On-Going	Engineering Dept.	
15.	All retaining walls shall require a separate permit from the Building Department.	On-Going ALL PHASES	Building Dept.	
16.	Erosion control – landscape plans, required for manufactured slopes greater than 3 feet in vertical height, are to be signed by a registered landscape architect and bonded. The soils engineer shall review the erosion control plans for conformance with the Geotechnical Report's Findings and Recommendations. Erosion control shall be placed within 30 days of meeting final grades to minimize erosion and to ensure slope coverage prior to the rainy season. The Developer shall plant & irrigate all manufactured slopes steeper than a 4:1 (horizontal to vertical) ratio and 3 feet or greater in vertical height with soil stabilizers and ground cover; slopes 15 feet or greater in vertical height shall be planted with additional shrubs or trees or as approved by the City Engineer and Planning Director.	On-Going	Engineering Dept. Planning Dept.	ALL PHASES

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17.	Should this project lie within any assessment/benefit district, the project proponent shall, prior to acceptance of improvements, make application for and pay for their reapportionment of the assessments or pay the unit fees in the benefit district unless said fees are otherwise deferred or covered under the City's Community Facility District (CFD Services).	On-Going	Engineering Dept.	
18.	The developer shall annex into the City's Community Facility District (CFD Services) and pay associated costs for annexation. Should this project lie within any assessment/benefit district that duplicates the services to be covered under CFD Services then the developer shall de-annex from said assessment/benefit district.	Prior to Map Recordation	Engineering Dept.	
19.	The developer shall design and construct all driveways in accordance with the City of Wildomar Improvement Standards.	On-Going	Engineering Dept.	
20.	The improvement plans for the required public improvements must be prepared and shall be based upon a design profile extending a minimum of 300 feet beyond the project boundaries at a grade and alignment as approved by the City Engineer.	On-Going	Engineering Dept.	
21.	All above-ground utilities, including but not limited to communication and power that are 33KV in size or less, shall be undergrounded by the developer in accordance with City requirements. The undergrounding of utilities shall be reflected on the project improvement plans.	On-Going	Engineering Dept.	
22.	All flood control plans to be reviewed by the City or the Riverside County Flood Control District (RCFCD) shall be submitted through the City of Wildomar, unless otherwise directed by the City Engineer. For	On-Going	Engineering Dept.	

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	projects requiring RCFCDD review the developer shall pay the appropriate fees to RCFCDD.			
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Prior to the Issuance of Grading Permits

23.	The developer shall submit a geotechnical soils reports to the City Engineer for review and approval prior to issuance of grading permit. The findings and recommendations shall reflect current conditions and the report shall be no older than one (1) year. All grading shall be in conformance with the recommendations of the geotechnical/soils reports as approved by City of Wildomar.	Prior to Issuance of a Grading Permit	Engineering Dept.	
24.	The developer shall obtain any and all easements and/or permissions necessary to perform the grading required for the project. A notarized letter of permission from all affected property owners or easement holders, or encroachment permit, is required for all off-site grading.	Prior to Issuance of a Grading Permit	Engineering Dept.	
25.	The project specific SWPPP and an Erosion/Sediment Control plan shall be approved by the City Engineer.	Prior to Issuance of a Grading Permit	Engineering Dept.	
26.	The Developer shall provide the Engineering Department evidence of compliance with the National Pollutant Discharge Elimination System (NPDES); obtain a construction permit from the State Water Resource Control Board (SWRRCB); and, reference the WDID number on the improvement/grading plans.	Prior to Issuance of a Grading Permit	Engineering Dept.	
27.	The developer shall have obtained approval for the import/export location from the City of Wildomar. Additionally, if either location was not previously approved by an Environmental Assessment, prior to issuing a grading permit, a Grading Environmental Assessment shall	Prior to Issuance of a Grading Permit	Engineering Dept.	

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	be submitted to the Planning Director for review and comment and to the City Engineer for approval.			
28.	A licensed engineer shall prepare and submit a Water Quality Management Plan (WQMP) Applicability Checklist; determine if a WQMP is applicable for this project; and, sign and stamp the WQMP checklist with their license seal.	Prior to Issuance of a Grading Permit	Engineering Dept.	
29.	If the WQMP is required, a Final Water Quality Management Plan (WQMP) conforming to the Preliminary WQMP shall be prepared and submitted for review, in conformance with the requirements of the San Diego and/or Santa Ana Regional Water Quality Control Board. Applicant shall confirm the watershed requirements relative to their project location. The Final WQMP shall be approved by the City Engineer prior to issuance of a grading permit. All stormwater quality treatment devices shall be located outside of the ultimate public right of way. The developer shall design the stormwater quality treatment devices to accommodate all project runoff, ensuring post-construction flows and volumes do not exceed pre-construction levels, in accordance with City of Wildomar's Hydrology Manual, Stormwater Quality Best Management Practice Design Handbook, Improvement Standards, and to the satisfaction of the City Engineer. These BMPs shall be consistent with the Final WQMP and installed and maintained to the satisfaction of the City Engineer.	Prior to Issuance of a Grading Permit	Engineering Dept.	
30.	A Storm Water Management Facilities Agreement shall be approved by the City Engineer and/or City Council.	Prior to Issuance of a Grading Permit	Engineering Dept.	
31.	A Grading Agreement shall be approved by the City Council and/or City Council.	Prior to Issuance of a Grading Permit	Engineering Dept.	

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32.	<p>The developer shall prepare and submit a comprehensive drainage study and plan that includes, but is not limited to: definition with mapping of the existing watersheds; a detailed pre- and post-project hydrologic and hydraulic analysis of the project and project impacts; definition of the local controlling 100-year frequency water levels existing and with project; the proposed method of flow conveyance to mitigate the potential project impacts with adequate supporting calculations; any proposed improvements to mitigate the impacts of increased runoff from the project and any change in runoff; including quality, quantity, volume, and duration in accordance with City of Wildomar’s Hydrology Manual, Improvement Standards, and to the satisfaction of the City Engineer. If the development requires Basins, the study shall also:</p> <ol style="list-style-type: none"> a. Analyze the detention basin drainage area for a project using the Rational Method 100-year storm event for the pre-project and post-project. b. Analyze 4 hydrographs for the detention basin drainage area for a project using the Unit Hydrograph 100-year storm event for the 1-hour, 3-hour, 6-hour, and 24-hour storm durations for post-project condition. c. Using the Unit Hydrographs determine which duration provides the highest flow rate. Adjust parameters such as lag time, flow line roughness coefficient or other parameters to calibrate Unit Hydrograph model to provide results similar to the Rational Method. d. Using the calibrated Unit Hydrograph for the detention basin drainage area perform basin routing analysis to demonstrate 	Prior to Issuance of a Grading Permit	Engineering Dept.	
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	that the outflow is less than the pre-project Rational Method flow rate.			
33.	The developer shall show all easements per the Title Report to the satisfaction of Public Works. Any conflict with existing easements resulting in the site being redesigned potentially requires a minor change or amendment approval by Planning Commission.	Prior to the 1st Improvement Plan submittal	Engineering Dept.	
<u>Prior to Final Map Approval / Recordation of the Final Map</u>				
34.	Improvement plans shall be prepared, processed, and approved. Construct the improvements; or execute an Improvement Agreement and Improvement Security. This condition shall be in conformance with local regulations and the Subdivision Map Act.	Prior to Final Map Approval ALL PHASES	Engineering Dept.	
35.	The developer shall dedicate, design and construct the northern half - section of Central Avenue, measured, fifty feet (50') from the approved centerline. Right of way will be based on a one-hundred foot (100') secondary highway, Standard No. 94, in accordance with the City of Wildomar Improvement Standards & Specifications and to the satisfaction of the City Engineer. Modify eighteen foot (18') parkway strip to accommodate a curb adjacent eight foot (8') wide sidewalk and a right of way adjacent eight foot (8') wide D.G. multiuse trail. The sidewalk and trail shall be separated by a lodge pine two rail fence. Improvements may be satisfied by an in-lieu cash payment based on City of Wildomar Bond Unit costs.	Prior to Recordation of Final Map or First Building Permit	Engineering Dept.	
36.	The developer shall dedicate, design and construct the southern half - section of Gruwell Street, measured, fifty feet (50') from the approved centerline. Right of way will be based on a one-hundred foot (100') secondary highway, Standard No. 94, in accordance with the City of	Prior to Recordation of Final Map or First Building Permit	Engineering Dept.	

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	Wildomar Improvement Standards & Specifications and to the satisfaction of the City Engineer. Modify eighteen foot (18') parkway strip to accommodate a curb adjacent eight foot (8') wide sidewalk and a right of way adjacent eight foot (8') wide D.G. multiuse trail. The sidewalk and trail shall be separated by a lodge pine two rail fence. Improvements may be satisfied by an in-lieu cash payment based on City of Wildomar Bond Unit costs.			
37.	Access from Central Avenue to "A" Street is limited to right in only with appropriate traffic control measures to the satisfaction of the City Engineer.	Prior to Recordation of Final Map or First Building Permit	Engineering Dept.	
38.	Access to Gruwell Street from "A" Street is limited to right out only with appropriate traffic control measures to the satisfaction of the City Engineer.	Prior to Recordation of Final Map or First Building Permit	Engineering Dept.	
39.	Appropriate offsite transitions shall be designed on Central Avenue and Gruwell Street to accommodate the interim improvements at "A" Street in accordance with the City of Wildomar Improvement Standards & Specifications and to the satisfaction of the City Engineer.	Prior to Recordation of Final Map or First Building Permit	Engineering Dept.	
40.	The developer shall dedicate, design and construct "A" Street as a one-way street from Central Avenue to Gruwell Street based on a thirty foot (30') right of way; twenty-six foot (26') wide curb to curb; concrete rolled curbs; and, a four foot (4') wide landscaped parkway, in accordance with the City of Wildomar Road Improvement Standards & Specification to the satisfaction of the City Engineer. Pavement design shall be based on a TI of 5.5.	Prior to Recordation of Final Map or First Building Permit	Engineering Dept.	

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41.	The developer shall dedicate, design and construct streetlights at the intersection(s) of “A” Street with Central Avenue and Gruwell Street in accordance with the City of Wildomar Road Improvement Standards & Specification, Improvement Plan Check Policies and Guidelines, City Ordinances and to the satisfaction of the City Engineer.	Prior to Recordation of Final Map or First Building Permit	Engineering Dept.	
42.	The developer shall dedicate a public utility easement adjacent to all public and private streets for overhead and/or underground facilities and appurtenances to the satisfaction of the City Engineer.	Prior to Recordation of Final Map or First Building Permit	Engineering Dept.	
43.	The developer shall design the underground utilities in “A” street to accommodate a future forty-eight inch (48”) diameter storm drain from Elm Street to Central Avenue . The developer shall dedicate a thirty-six foot (36’) wide storm drainage easement along the southerly boundary of Lot 15 for a future forty-eight inch (48”) diameter storm drain.	Prior to Recordation of Final Map or First Building Permit	Engineering Dept.	
44.	The developer shall submit landscaping and irrigation plans within the public right-of-way to the Planning Department. These plans shall include water usage calculations, estimate of irrigation and the location of all existing trees that will remain. All plans and calculations shall be designed and calculated per the City of Wildomar Road Improvement Standards & Specification, Improvement Plan Check Policies and Guidelines, City Codes and to the satisfaction of the City Engineer. Improvements on Central and Gruwell may be satisfied by an in-lieu cash payment based on City of Wildomar Bond Unit costs.	Prior to Recordation of Final Map or First Building Permit	Engineering Dept. Planning Dept.	

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45.	The developer shall submit to the City Engineer traffic control plans along Central Avenue and Gruwell Street to ensure the continued flow of traffic during construction.	Prior to Recordation of Final Map or First Building Permit	Engineering Dept. Public Works Dept.	
46.	The developer shall execute a maintenance agreement for the stormwater quality control treatment device to the satisfaction of the City Engineer. The condition is satisfied if the Developer includes the maintenance of the related facilities in the CFD Services District.	Prior to Recordation of Final Map or First Building Permit	Engineering Dept.	
<u>Prior to Issuance of Building Permits</u>				
47.	The developer/owner shall obtain a grading permit and/or approval to construct from the City Engineer.	Prior to Issuance of a Building Permit	Building Dept. Engineering Dept.	
48.	Improvement plans shall be approved by the City Engineer and all improvements to be constructed shall be secured by the Developer.	Prior to Issuance of a Building Permit	Building Dept. Engineering Dept.	
49.	The developer shall provide will serve letters from the appropriate water and sewer agencies.	Prior to Issuance of a Building Permit	Building Dept.	
50.	The developer shall provide approval letter from Fire Department for fire water service	Prior to Issuance of a Building Permit	Building Dept. Fire Dept.	
51.	The developer shall install all street name signs at intersections adjacent to the project, public or private and/or replace street name signs in accordance with the City of Wildomar Standard Details and to the satisfaction of the City Engineer.	Prior to Issuance of a Building Permit	Public Works Dept.	
52.	The developer shall annex into the CFD Services District to offset development related costs for maintenance and services.	Prior to Issuance of a Building Permit	Engineering Dept.	

**ATTACHMENT D – EXHIBIT 1
ELM STREET PROJECT – CONDITIONS OF APPROVAL**

Project No.: Change of Zone & TTM No. 33840 (Planning Application No. 08-0154)

APN: 376-043-027

<u>Tentative Tract Map Approval Date (City Council):</u>	<u>Tentative Tract Map Expiration Date</u>		
September 9, 2015	September 9, 2018		
<u>Conditions of Approval</u>	<u>Timing/ Implementation</u>	<u>Enforcement/ Monitoring</u>	<u>Verification (Date and Signature)</u>

53.	The developer/applicant shall demonstrate that all development related fees, impact fees, and mitigation fees have been satisfactorily paid.	Prior to Issuance of a Building Permit	Building Dept.	
54.	Prior to issuance of a building permit the developer shall pay all fees in accordance with Zone A of the Southwest Road and Bridge Benefit District.	Prior to Issuance of a Building Permit	Building Dept.	
55.	The developer shall pay the appropriate impact mitigation fee to the Riverside County Flood Control and Water Conservation District.	Prior to Issuance of a Building Permit	Building Dept.	
56.	The developer shall pay all necessary impact and mitigation fees required. These fees include, but are not limited to, fees associated with Transportation Uniform Mitigation Fee (TUMF), Quimby (parkland in-lieu) Fee, and City Development Impact Fees.	Prior to Issuance of a Building Permit or Certificate of Occupancy	Building Dept.	
57.	The developer shall construct the stormwater quality treatment devices to accommodate all project runoff from in accordance with City of Wildomar's Hydrology Manual, Stormwater Quality Best Management Practice Design Handbook, Improvement Standards, and to the satisfaction of the City Engineer. All stormwater quality treatment devices shall be constructed outside of the ultimate public right of way.	Prior to Issuance of a Building Permit	Building Dept.	

RIVERSIDE COUNTY FIRE DEPARTMENT

General Conditions

1.	10.FIRE.999PC #01 – West Fire Protection Planning Office Responsibility	On-Going	Fire Department	
2.	10.FIRE.999 CASE – CITY CASE STATEMENT With respect to the conditions of approval for the referenced project, the Fire Department	On-Going	Fire Department	

**ATTACHMENT D – EXHIBIT 1
ELM STREET PROJECT – CONDITIONS OF APPROVAL**

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<u>Conditions of Approval</u>	<u>Timing/ Implementation</u>	<u>Enforcement/ Monitoring</u>	<u>Verification (Date and Signature)</u>

	recommends the following fire protection measures be provided in accordance with Riverside County Ordinances and /or recognized fire protection standards			
3.	10.FIRE.999 MAP #50 – BLUE DOT REFLECTORS Blue retro-reflective pavement markers shall be mounted on private streets, public streets, and driveways to indicate location of fire hydrants. Prior to installation, placement of markers must be approved by the Riverside County Fire Department.	On-Going	Fire Department	
4.	10. FIRE.999 MAP #16 – HYDRANT/SPACING Schedule A fire protection approved standard fire hydrants (6"x 4"x 2 ½"): locate one at each street intersection and space no more than 500 feet apart in any direction, with no portion of any lot frontage more than 250 feet from hydrant. Minimum fire flow shall be 1000 GPM for 2 hours duration at 20 PSI. Shall include perimeter streets at each intersection and spaced 660 feet apart.	On-Going	Fire Department	

Prior to Final Map Recordation

5.	50.FIRE.999 MAPS #46 – WATER PLANS The applicant or developer shall furnish one copy of the water system plans to the Fire Department for review. Plans shall be signed by a registered civil engineer, containing a Fire Department approval signature block, and shall conform to hydrant type, location, spacing, and minimum fire flow. Once plans are signed by local water company, the originals shall be presented to the Fire Department for signature.	Prior to Final Map Recordation	Fire Department	
6.	50.FIRE.999 MAP#53 – ECS-WTR PRIOR/COMBUS ECS map must be stamped by Riverside County Surveyor with the following note: The	Prior to Final Map Recordation	Fire Department	

**ATTACHMENT D – EXHIBIT 1
ELM STREET PROJECT – CONDITIONS OF APPROVAL**

Project No.: Change of Zone & TTM No. 33840 (Planning Application No. 08-0154)

APN: 376-043-027

<u>Tentative Tract Map Approval Date (City Council):</u>		<u>Tentative Tract Map Expiration Date</u>		
September 9, 2015		September 9, 2018		
<u>Conditions of Approval</u>	<u>Timing/ Implementation</u>	<u>Enforcement/ Monitoring</u>	<u>Verification (Date and Signature)</u>	
required water system, including fire hydrants, shall be installed and accepted by the appropriate water agency prior to any combustible building material placed on an individual lot.				
<u>Prior to Issuance of Building Permits</u>				
7. 80.FIRE.999 MAP #50C – TRACT WATER VERIFICATION The required water system, including all fire hydrant(s), shall be installed and accepted by the appropriate water agency and the Riverside County Fire Department prior to any combustible building material placed on an individual lot. Contact the Riverside County Fire Department to inspect the required fire flow, street signs, all-weather surface, and all access and/or secondary. Approved water plans must be at the job site.	Prior to Issuance of Building Permits	Fire Department		
<u>Prior to Final Inspection</u>				
8. 90. FIRE.999 MAP – RESIDENTIAL FIRE SPRINKLER Residential fire sprinklers are required in all one- and two-family dwellings per the California Residential Code, California Building Code, and California Fire Code. Install fire sprinkler systems per NFPA 13D, 2010 Edition. Plans must be submitted to the Fire Department for review and approval prior to installation.	Prior to Final Inspection			

END

ATTACHMENT D

**Tentative Tract Map No. 33840 Plans
(full-size plans – under separate cover)**

CITY OF WILDOMAR INITIAL STUDY/MND FOR ELM STREET TENTATIVE TRACT MAP TENTATIVE TRACT MAP No. 33840

Planning Application No. 08-0154



Lead Agency:

CITY OF WILDOMAR
23873 CLINTON KEITH ROAD, SUITE 201
WILDOMAR, CA 92595

Prepared by:

PMC[®]

6020 CORNERSTONE COURT WEST, SUITE 260
SAN DIEGO, CA 92121

MARCH 2015

Ben J. Benoit, Mayor
Bridgette Moore, Mayor Pro Tem
Bob Cashman, Council Member
Timothy Walker Council Member
Marsha Swanson, Council Member



23873 Clinton Keith Rd, Ste 201
Wildomar, CA 92595
951/677-7751 Phone
951/698-1463 Fax
www.CityofWildomar.org

TO: Reviewing Agencies and Other Interested Parties

FROM: Matthew C. Bassi, Planning Director

DATE: March 25, 2015

SUBJECT: Elm Street Tentative Tract Map 33840 Initial Study/Mitigated Negative Declaration (Planning Application No. 08-0154)

The City of Wildomar (City) is the lead agency for the preparation and review of an Initial Study/Mitigated Negative Declaration (IS/MND) for the Elm Street Tentative Tract Map project.

The residential project will subdivide 4.16 acres into 15 parcels and includes a change of zone from the existing zone designation of R-R (Rural Residential) to a proposed zone designation of R-1 (One-Family Dwelling). All 15 parcels are intended for the development of future single-family residential dwelling units. The change of zone designation will make the zoning consistent with the current Medium Density Residential (MDR) General Plan land use designation for the site.

A previous IS/MND for the proposed project was circulated on July 9, 2014 through August 7, 2014. The State Clearinghouse Number (SCH) is 2014071028. Comments received on the previous IS/MND during the public review period have been included and addressed in this updated IS/MND in accordance with CEQA guidelines.

The proposed project site is located in the City of Wildomar, California, at the end of Elm Street between Central Street to the northeast and Gruwell Street to the southwest, with the Murrieta Creek Channel drainage course to the northeast. The Riverside County Assessor's Parcel Number (APN) for the project site is 376-043-027.

At this time, the City is requesting comments on the IS/MND for the proposed project. This notice is being sent to responsible agencies, trustee agencies, and other interested parties in accordance with state CEQA laws along with a copy of the IS/MND on a CD. The public comment period for the IS/MND will begin on **Wednesday, March 25, 2015, and conclude on Thursday, April 23, 2015.** Written comments can be provided to Matthew C. Bassi, Planning Director, City of Wildomar, 23873 Clinton Keith Road, Suite 201, Wildomar, CA 92595. Comments can also be emailed to mbassi@cityofwildomar.org.

Sincerely,


Matthew C. Bassi
Planning Director

Enclosure – IS/MND on CD



INITIAL STUDY FOR THE
ELM STREET TENTATIVE TRACT MAP MND
TENTATIVE TRACT MAP No. 33840
(Planning Application No. 08-0154)

Lead Agency:
CITY OF WILDOMAR
23873 Clinton Keith Road, Suite 201
Wildomar, CA 92595

Prepared by:
PMC
6020 Cornerstone Court West, Suite 260
San Diego, CA 92121
March 2015

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1 Tentative Tract Map No. 33840
2 Site Photos
3 Air Quality Annual Modeling
3a Air Quality Summer Modeling
3b Air Quality Winter Modeling
3c Air Quality Model File
4 Habitat Assessment
4a Special-Status Species Known to Occur Near Project Site
4b Special-Status Species Occurrences within 1 Mile
4c Special-Status Species Occurrences within 5 Miles

- 5 Archeological/Historical Resources Survey
- 6 Soils Investigation
- 7 Preliminary Hydrology Study
- 8 Preliminary Water Quality Management Plan
- 9 Elm Street Noise Contour-Existing Conditions

Note to Reader: To save natural resources, the appendices are contained on a CD-ROM included with the printed copy of this Initial Study. The appendices are also available in the Environmental Documents Center of the City's Planning Department website (<http://www.cityofwildomar.org/planning.asp>). Printed copies of the appendices are also available as part of the project file and can be reviewed at the following location:

City of Wildomar City Hall

23873 Clinton Keith Road, Suite 201

Wildomar, CA 92595

Hours: Monday through Thursday, 8 a.m.–5 p.m. (closed Fridays)

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I. INTRODUCTION AND PROJECT DESCRIPTION

Purpose and Project Overview

This document is an Initial Study evaluating the environmental impacts resulting from the development of a proposed Tentative Tract Map (TTM No. 33840) that would subdivide 4.16 acres into 15 parcels and a change of zone district from the existing zone district of Rural Residential (R-R) to the proposed zone district of One-Family Dwelling (R-1). The change of zone district will make the zoning consistent with the current Medium Density Residential (MDR) General Plan land use designation of the site.

A previous Initial Study was circulated from July 9, 2014, through August 7, 2014. The State Clearinghouse Number is 2014071028. Comments were received on this previous Initial Study; these comments have been incorporated into the current March 2015 Initial Study.

Project Location

The proposed project site is located in the City of Wildomar, California, at the end of Elm Street between Central Street to the northeast and Gruwell Street to the southwest, with the Murrieta Creek Channel drainage course to the northeast. The location of the project site is shown in **Figure 1**. The Riverside County Assessor’s Parcel Number (APN) for the project site is 376-043-027.

Project Description

Tentative Tract Map

The applicant is applying for a Tentative Tract Map (TTM No. 33840) to subdivide an existing 4.16-acre parcel into 15 parcels, each meeting or exceeding the 7,200-square-foot minimum lot size required in the One-Family Dwelling (R-1) zone. All 15 parcels are intended for future single-family residential dwelling units. The proposed parcels would be numbered Lots 1 through 15 and are divided as shown in **Table 1-1** below and **Figure 2**.

**Table 1-1
Proposed Lot Acreage**

Lot Number	Gross Lot Sizes (square feet)
1	9,021
2	8,142
3	8,142
4	8,142
5	8,142
6	8,142
7	8,142
8	8,142
9	8,142
10	8,142
11	8,142
12	8,142
13	8,142
14	8,142
15	12,007

Source: RDS and Associates 2013d

Roadway Access

Direct access to each of the lots created by the proposed project will be via a proposed one-way street (shown as A Street on the tract map) that will be accessed via Central Street to the northeast and Gruwell Street to the southwest. The traffic will flow from Central Street through A Street and onto Gruwell Street.

Water

The proposed project will receive potable water service from the Elsinore Valley Municipal Water District (EVMWD). Connections to the EVMWD water supply will occur at existing water lines in Central Street.

Wastewater

The proposed project will receive wastewater service from the Elsinore Valley Municipal Water District. Connection to the EVMWD wastewater system will occur at an existing 8-inch sewer line in Central Street.

Stormwater

Stormwater currently flows on the surface from the northeast border of the project site at Gruwell Street to the southwest to Central Street. Central Street drains directly into the Murrieta Creek Channel. Stormwater from the proposed project will be directed to flow southwesterly along the proposed A Street to the vegetated swale in Lot 15 adjacent to Central Street. Flows within A Street will be directed to a low point fronting Lot 15. The low point in Street A will be conveyed through a vegetated swale in Lot 15. The filtered flows from the vegetated swale will then drain to the Murrieta Creek Channel.

Other Utilities and Services

Electric, gas, cable, and telecommunications services would be extended underground onto the site from existing lines along Central Street (**Figure 2**). Electricity would be provided by Southern California Edison, natural gas service by the Southern California Gas Company, telecommunications by Verizon, and solid waste removal by Waste Management. The site is located within the boundaries of the Lake Elsinore Unified School District. Local government services are provided by the City of Wildomar. Fire and law enforcement services are provided by the City of Wildomar through contracts with the Riverside County Fire Department and the Riverside County Sheriff's Department.



ELM STREET



Source: Placeworks 2014 B

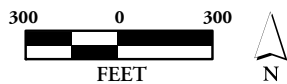


Figure 1
Project Location



ELM STREET

IMPROVEMENT NOTES

- 1 0.25" ASPHALT CONCRETE OVER 0.50" AGGREGATE BASE PAVEMENT SECTION
- 2 PAVEMENT SECTION TO MATCH EXISTING
- 3 TYPE "C" CURB PER CITY OF WILDOMAR STD. 202
- 4 TYPE "A-6" CURB AND GUTTER PER CITY OF WILDOMAR STD. 200
- 5 CONCRETE SIDEWALK PER CITY OF WILDOMAR STD. 401
- 6 4' CROSS GUTTER
- 8 10' CURB TRANSITION FROM TYPE "C" CURB TO TYPE "A-6" CURB AND GUTTER
- 9 UNDERSIDEWALK DRAIN PER CITY OF WILDOMAR STD. 309 (MODIFIED TO FLOW AT 2% IN REVERSE)
- 10 CATCH BASIN AND INLET PER CITY OF WILDOMAR STD. 301 WITH GUTTER DEPRESSION CASE "B" PER CITY OF WILDOMAR STD. 311
- 11 METAL BEAM GUARDRAIL (WOOD POST WITH WOOD BLOCK) PER CALTRANS STD. A7741 INSTALLED PER CALTRANS STANDARD
- 12 INSTALL 4" WIDE RAISED TRAFFIC MEDIAN
- 13 LANDSCAPE PERIMETER WALL PER LANDSCAPE PLANS

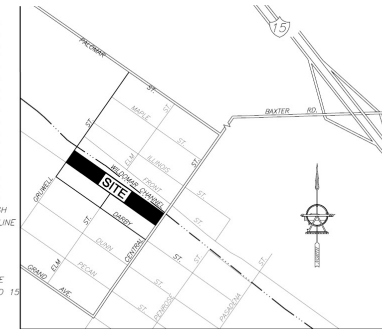
EASEMENT NOTES

- 1 ABANDONMENT OF UNKNOWN ALLEYS AND RESERVATION OF EASEMENT FOR EXISTING UTILITIES RECORDED 4/6/78 IN BOOK 1978, PAGE 65718 OF OFFICIAL RECORDS.
- 2 VACATION OF UNNAMED ALLEY AND RESERVING AND EXCEPTING AN EASEMENT FOR ANY PUBLIC UTILITIES RECORDED 2/26/82 IN BOOK 1982, PAGE 342 OF OFFICIAL RECORDS.
- 3 AN EASEMENT FOR WATER PIPELINE TO THE ELSINORE VALLEY MUNICIPAL WATER DISTRICT RECORDED 2/16/99 IN BOOK 2375, PAGE 584 OF OFFICIAL RECORDS.

LOT NO.	GROSS AC.	NET AC.
1	11,601	8,021
2	11,367	8,142
3	11,367	8,142
4	11,367	8,142
5	11,367	8,142
6	11,367	8,142
7	11,367	8,142
8	11,367	8,142
9	11,367	8,142
10	11,367	8,142
11	11,367	8,142
12	11,367	8,142
13	11,367	8,142
14	11,367	8,142
15	15,859	12,001
16	15,859	12,001
LOT TOTAL	158,580	120,000

NO.	SEC. TAG NO.	SIZE PER CIRCUIT
SC01	4528972E	2 - 120V
SC02	4554372E	2 - 120V
SC03	4554372E	2 - 120V
SC04	4554374E	2 - 120V
SC05	4554375E	2 - 120V
SC06	4364257E	2 - 120V
SC07	4528975E	2 - 120V

-SEC TO BE CONVERTED UNDERGROUND THROUGH SITE PLANS ALONG WITH VERIZON TELEPHONE LINE AND PROVIDE SERVICE TO SITE.
 -GAS SERVICE IS AVAILABLE AT UNION AND GRUWELL STREET.
 -EWMWD SEWER AND WATER CONNECTIONS TO BE INSTALLED IN STEEL CASING WITHIN LOTS 1 AND 15



VICINITY MAP:

NO SCALE
 RIVERSIDE & ORANGE COUNTY
 THOMAS GUIDE 2006 PAGE 897, B-7

APPLICANT/OWNERS:

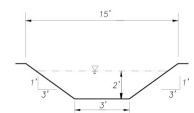
ZARET PROGRESS
 3173 VERA VALLEY ROAD
 FRANKLIN, TN 37064
 TEL: (615) 836-4620
 FAX: (908) 768-4401

ENGINEER:

RDS AND ASSOCIATES
 28519 WALKER COURT
 TEMECULA, CA 92592
 PH.# (951) 891-7708

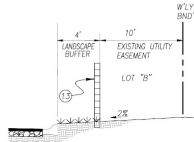
A.P.N.:

376-043-027



SECTION A-A

NOT TO SCALE
 (VEGETATED SWALE AND DRAINAGE OUTLET MAINTAINED BY CITY CFD)



SECTION B-B

NOT TO SCALE

ACREAGE

GROSS - 4.16 AC
 NET - 4.07 AC

NOTES:

1. NOT WITHIN A SPECIFIC PLAN.
2. FEMA FLOOD ZONE "X" (PARCEL 13 TO PARCEL 15)
3. THIS SITE IS SUBJECT TO MODERATE LIQUIDEXTRACTION.
4. THIS IS NOT IN HIGH FIRE AREA.
5. THIS TENTATIVE MAP INCLUDES THE ENTIRE CONTIGUOUS OWNERSHIP OF THE LAND DIVIDER OR ONLY A PORTION THEREOF.
6. SCHEDULE "A" SUBDIVISION
7. THIS SITE IS NOT SUBJECT TO GEOLOGICAL HAZARDS, OR WITHIN A SPECIAL STUDIES ZONE.

ZONING:

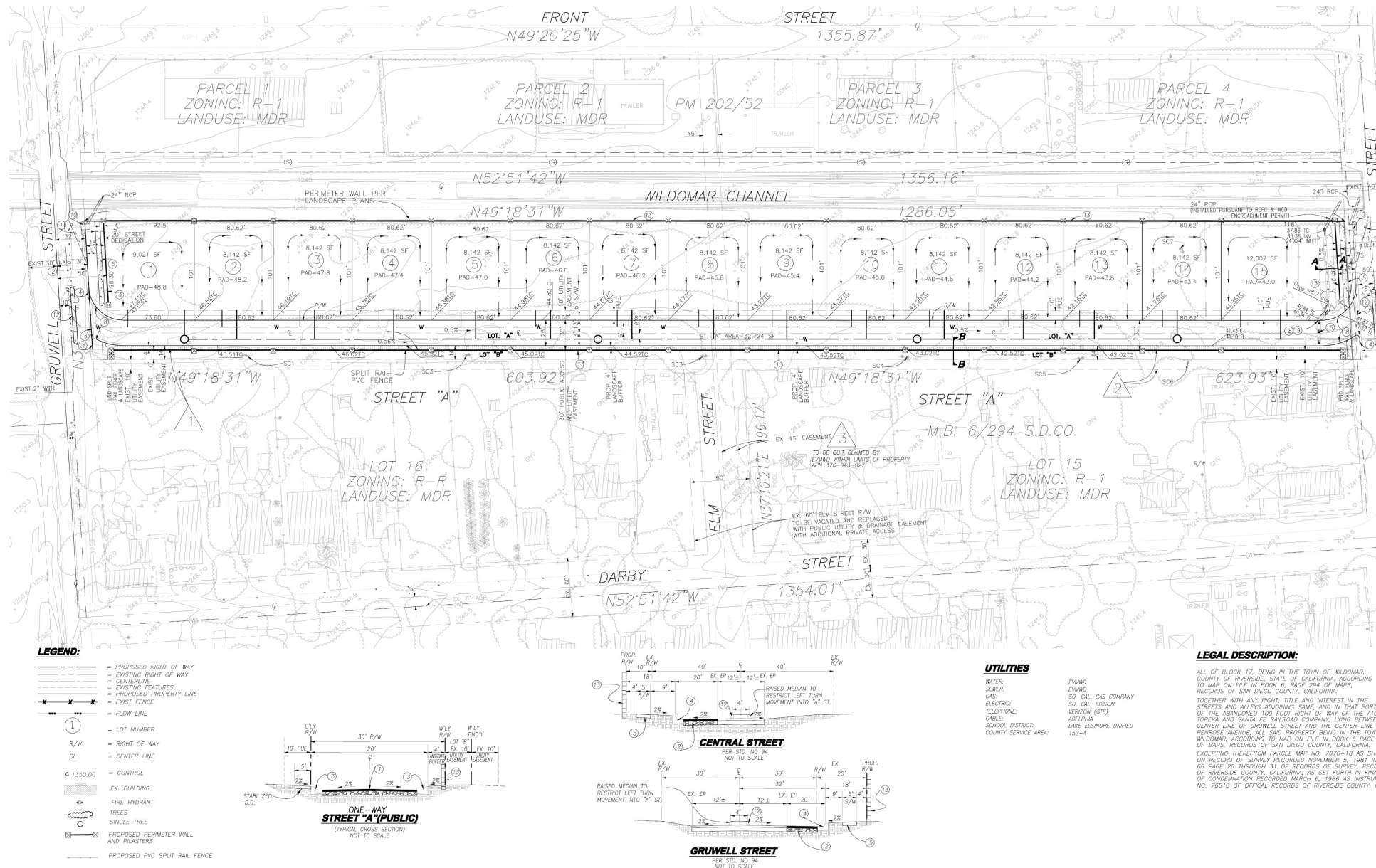
EXISTING LANDUSE: MDR
 PROPOSED LANDUSE: MDR
 EXISTING ZONING: R-1
 PROPOSED ZONING: R-1

LEGAL DESCRIPTION:

ALL OF BLOCK 17, BEING IN THE TOWN OF WILDOMAR, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, ACCORDING TO MAP ON FILE IN BOOK 6, PAGE 294 OF MAPS, RECORDS OF SAN DIEGO COUNTY, CALIFORNIA.
 TOGETHER WITH ANY RIGHT, TITLE AND INTEREST IN THE STREETS AND ALLEYS ADJOINING SAME, AND IN THAT PORTION OF THE ABANDONED 100 FOOT RIGHT OF WAY OF THE ATCHISON, TORRAN AND SANVA FE RAILROAD COMPANY, LYING BETWEEN THE CENTER LINE OF GRUWELL STREET AND THE CENTER LINE OF PENROSE AVENUE, ALL SAID PROPERTY BEING IN THE TOWN OF WILDOMAR, ACCORDING TO MAP ON FILE IN BOOK 6, PAGE 294 OF MAPS, RECORDS OF SAN DIEGO COUNTY, CALIFORNIA, EXCEPTING THEREFROM PARCEL MAP NO. 7070-18 AS SHOWN ON RECORD OF SURVEY RECORDED NOVEMBER 5, 1981 IN BOOK 68, PAGE 28 THROUGH 31 OF RECORDS OF SURVEY, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA, AS SET FORTH IN FINAL ORDER OF CONSUMMATION RECORDED MARCH 6, 1989 AS INSTRUMENT NO. 76518 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

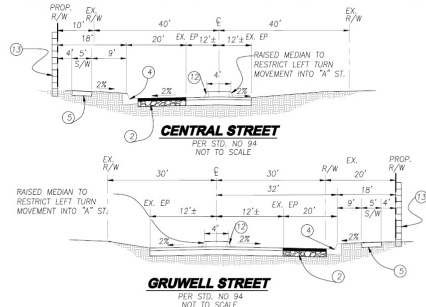
UTILITIES

WATER: EWMWD
 SEWER: EWMWD
 GAS: SO. CAL. GAS COMPANY
 ELECTRIC: SO. CAL. EDISON
 TELEPHONE: VERIZON (GTE)
 CABLE: AZULPHIA
 SCHOOL DISTRICT: LAKE ELSINORE UNIFIED
 COUNTY SERVICE AREA: 152-A



LEGEND:

- - - PROPOSED RIGHT OF WAY
- - - EXISTING RIGHT OF WAY
- - - CENTERLINE
- - - EXISTING FEATURES
- - - PROPOSED PROPERTY LINE
- - - EXIST. FENCE
- - - FLOW LINE
- ① = LOT NUMBER
- R/W = RIGHT OF WAY
- CL = CENTER LINE
- △ 1:50.00 = CONTROL
- EX. BUILDING
- FIRE HYDRANT
- TREES
- SINGLE TREE
- PROPOSED PERIMETER WALL AND PILASTERS
- PROPOSED PVC SPLIT RAIL FENCE



Source: RDS & Associates

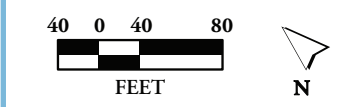


Figure 2
 Tentative Tract Map 33840

II. EXISTING CONDITIONS

Regulatory Setting

The City of Wildomar General Plan land use designation for the project site is Medium Density Residential (MDR), which allows between two and five detached single-family residences per acre on lots ranging from 5,500 to 20,000 square feet in size. The General Plan land use designation for the properties to the northwest of the project site is Low Density Residential (LDR), while the designation for all other properties immediately adjacent to the project site is MDR (**Figure 3**).

The project site is currently zoned Rural Residential (R-R), which allows single-family homes on lot sizes not less than 21,780 square feet. The proposed project includes a change of zone from R-R to One-Family Dwelling (R-1). The R-1 zone district allows single-family dwellings on lot areas not less than 7,200 square feet. The zoning for the properties to the northeast and northwest of the project site is One-Family Dwelling (R-1), with R-R zoning for all other adjacent properties (**Figure 4** and **Figure 5**).

Physical Setting

The project site is relatively flat, with the site's lowest point located at the southeast corner and the highest point at the northwest corner. Elevations on the project site range from approximately 1,242 to 1,249 feet above mean sea level. The project site is currently vacant, unimproved, and a mix of disturbed land and ruderal annual grassland (**Appendix 4**). The southern margin of the site supports exotic woodlands with a scattering of native oak trees. A cement-lined canal carrying Murrieta Creek is located near the northeastern boundary of the site.

III. ENVIRONMENTAL CHECKLIST

BACKGROUND

1. Project Title:

Elm Street Tentative Tract Map (TTM No. 33840) (PA 08-0154)

2. Lead Agency Name and Address:

City of Wildomar, 23873 Clinton Keith Road, Suite 201, Wildomar, CA 92595

3. Contact Person and Phone Number:

Matthew C. Bassi, Planning Director; (951) 677-7751, ext. 213

4. Project Location:

Elm Street in the City of Wildomar; Assessor's Parcel Number: 376-043-027; all of block 17, being in the town of Wildomar, County of Riverside According to the Map on file in Book 6, Page 294 of Maps, Records of San Diego County

5. Project Sponsor's Name and Address:

Zareh Hookasian, 3173 Vera Valley Road, Franklin, TN 37064

6. General Plan Designation:

Medium Density Residential (MDR)

7. Zoning:

Rural Residential (R-R)

8. Description of Project:

A Tentative Tract Map (TTM No. 33840) subdividing one existing parcel, totaling 4.16 acres, into 15 parcels and a change of zone from Rural Residential (R-R) to One-Family Dwelling (R-1)

9. Surrounding Land Uses and Setting:

Northeast – Zoning: R-1, One-Family Dwelling; Land Use: MDR, Medium Density Residential

Southeast – Zoning: R-R, Rural Residential; Land Use: MDR, Medium Density Residential

Southwest – Zoning: R-R, Rural Residential; Land Use: MDR, Medium Density Residential

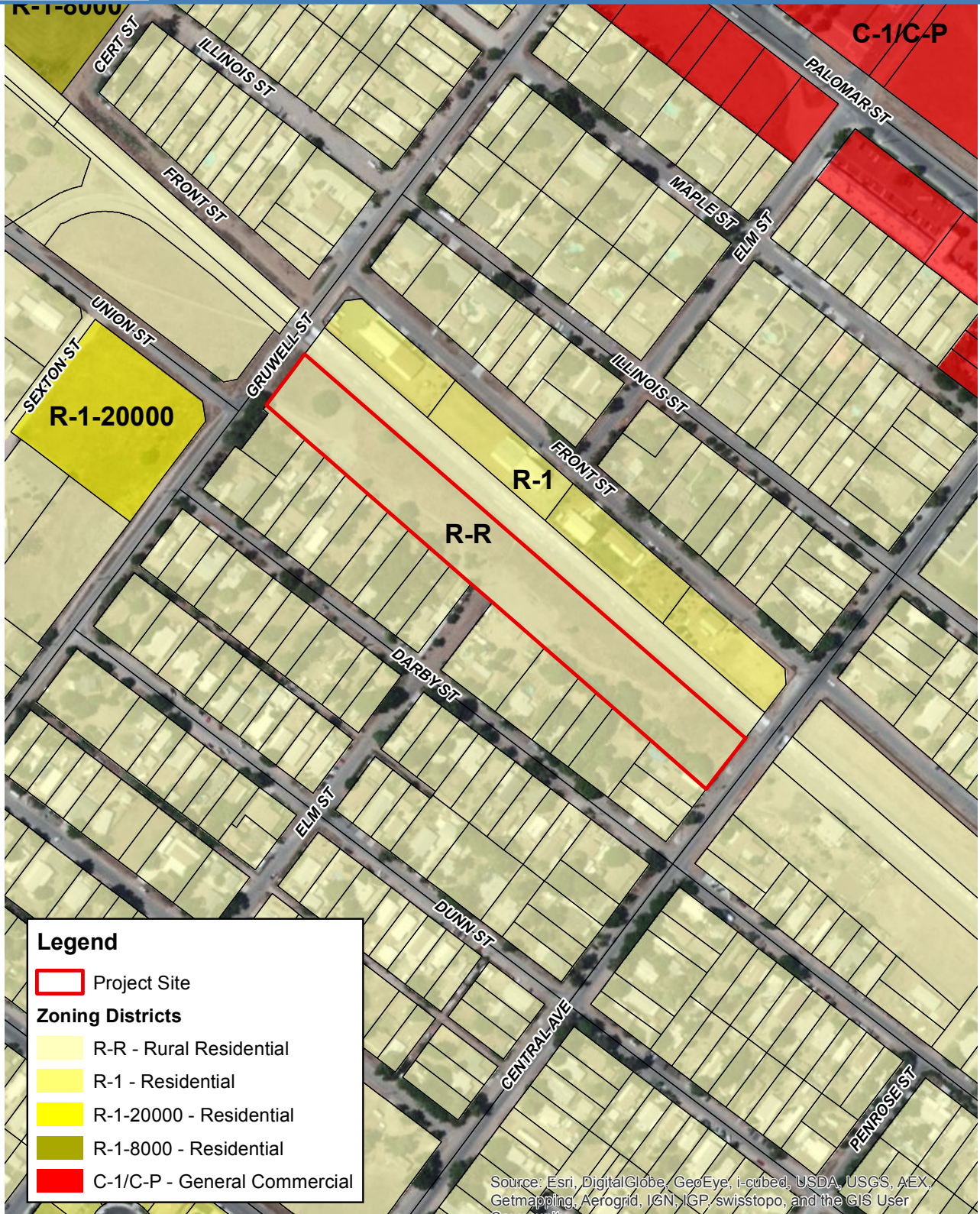
Northwest – Zoning: R-1, One-Family Dwelling; Land Use: LDR, Low Density Residential

10. Other Public Agency Required Approvals:

None



ELM STREET



Source: City of Wildomar, 2013

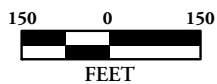


Figure 4
Zoning



ELM STREET



Source: City of Wildomar, 2013

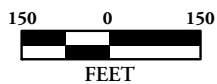


Figure 5
Proposed Zoning

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project involving at least one impact that is “Less Than Significant Impact With Mitigation Incorporated” as indicated by the checklist on the following pages.

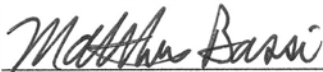
- | | | |
|--|--|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Population/Housing |
| <input type="checkbox"/> Agricultural Resources | <input type="checkbox"/> Hazards/Hazardous Materials | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Transportation/Traffic |
| <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Utilities/Service Systems |
| <input checked="" type="checkbox"/> Geology and Soils | <input checked="" type="checkbox"/> Noise | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION

On the basis of this initial evaluation:

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

City Representative



Signature

March 23, 2015

Date

Matthew C. Bassi, Planning Director

Applicant

Pursuant to Section 15070(b)(1) of the California Environmental Quality Act , as a representative of the project applicant, I agree to revisions of the project plans or proposals as described in this Initial Study/Mitigated Negative Declaration to avoid or reduce environmental impacts of my project to a less than significant level.



Signature

March 23, 2015

Date

Rich Soltysiak

Printed Name

IV. ENVIRONMENTAL ANALYSIS

1. Aesthetics

Issues: Would the project:	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?			✓	
e) Interfere with the nighttime use of the Mount Palomar Observatory, as protected through the Mount Palomar Observatory Lighting Ordinance?			✓	

DISCUSSION

- a, c) **No Impact.** The proposed project will result in residential development visually similar to that which already exists on surrounding properties. There will be no new impacts to any scenic vista or any degradation of the visual character of the site and its surroundings.
- b) **No Impact.** As demonstrated by the site photographs contained in **Figure 6**, the proposed project site does not contain any rock outcroppings, trees, or structures that could be categorized as a scenic resource. The proposed project site is located more than 1 mile from Interstate 15 (I-15), eligible but currently not designated as a state scenic highway (City of Wildomar 2008, Figure C-9; Caltrans 2012), and will not be capable of disrupting views from the freeway.
- d, e) **Less Than Significant Impact.** The proposed project would create new sources of light and glare on an undeveloped site potentially affecting day or nighttime views in the area. Consistent with the City's lighting standards (Wildomar Municipal Code Section 8.64.090), all proposed exterior light fixtures must have full cutoff so that there is no light pollution created above the 90-degree plane of the light fixtures. The City's building permit process will ensure compliance with City zoning and design standards regulating lighting, siding materials, etc. This process will require

submittal of lighting photometric plans for review and approval prior to issuance of building permits. The proposed project would not create new sources of light or glare that would adversely affect day or nighttime views in the area and would not contribute to night sky pollution such that it would interfere with nighttime use of the Mount Palomar Observatory, and therefore this would be considered a less than significant impact. However, all development in the city must comply with all municipal codes, including Chapter 8.64, Light Pollution, of the Wildomar Municipal Code. Compliance with Chapter 8.64 of the Wildomar Municipal Code will reduce lighting impacts to less than significant.

STANDARD CONDITIONS AND REQUIREMENTS

1. Buildout of the proposed project is required to comply with Chapter 8.64 of the Wildomar Municipal Code pertaining to light pollution.

MITIGATION MEASURES

None required.



ELM STREET



NE corner of project site seen from Gruwell Street



Project site seen from Central Street



Project site seen from Elm Street entrance



Darby Street / Elm Street intersection looking to the project site



Project site seen from SE portion looking NW



SE portion of project site looking NW

Source: City of Wildomar, 2013

Figure 6
Site Photos

2. Agricultural Resources

Issues: Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 nonagricultural use?				✓
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?				✓
c) Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				✓
d) Result in the loss of forestland or conversion of forestland to non-forest use?				✓
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forestland to non-forest use?				✓

DISCUSSION

- a–e) **No Impact.** According to the Riverside County Land Information System (2013), the site is not located within an agricultural preserve (Williamson Act) or classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the Farmland Mapping and Monitoring Program of the California Department of Conservation; therefore, there is no potential to convert farmland to nonagricultural uses. The site is located in an urbanized area of Wildomar that is currently designated for residential use. As seen in the photos included in **Figure 6**, the site is not forested and there is no current agricultural use on the site.

STANDARD CONDITIONS AND REQUIREMENTS

None required.

MITIGATION MEASURES

None required.

3. Air Quality

Issues: Would the project:	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 nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			✓	
d) Expose sensitive receptors to substantial pollutant concentrations?			✓	
e) Create objectionable odors affecting a substantial number of people?				✓

DISCUSSION

- a) **Less Than Significant Impact.** The project site is located within the South Coast Air Basin (SoCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD is required, pursuant to the federal Clean Air Act, to reduce emissions of criteria pollutants for which the basin is in nonattainment (i.e., ozone [O₃], coarse particulate matter [PM₁₀], and fine particulate matter [PM_{2.5}]). These are considered criteria pollutants because they are three of several prevalent air pollutants known to be hazardous to human health.

In order to reduce emissions for which the SoCAB is in nonattainment, the SCAQMD has adopted the 2012 Air Quality Management Plan (AQMP). The 2012 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. The 2012 AQMP is a regional and multi-agency effort including the SCAQMD, the California Air Resources Board (CARB), the Southern California Association of Governments (SCAG), and the US Environmental Protection Agency (EPA). The 2012 AQMP pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's 2012 Regional Transportation Plan/Sustainable Communities Strategy, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans.) The 2012 AQMP has assumed that development associated with residential projects, like the proposed project, will be constructed in accordance with population growth projections identified by SCAG in its 2012 Regional Transportation Plan/Sustainable Communities Strategy. The project is subject to the SCAQMD's AQMP.

Criteria for determining consistency with the AQMP are defined by the following indicators:

- 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 AQMP.
- Consistency Criterion No. 2: The proposed project will not exceed the assumptions in the AQMP based on the years of project buildout phase.

The violations to which Consistency Criterion No. 1 refers are the California ambient air quality standards (CAAQS) and the national ambient air quality standards (NAAQS). As evaluated under Issue b) below, the project will not exceed the short-term construction standards or long-term operational standards and in so doing will not violate any air quality standards. Additionally, the analysis for long-term local air quality impacts showed that future carbon monoxide (CO) concentration levels along roadways and at intersections affected by project traffic will not exceed the 1-hour and 8-hour state CO pollutant concentration standards. Thus, a less than significant impact is expected, and the project would be consistent with the first criterion.

Concerning Consistency Criterion No. 2, the AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The proposed project is consistent with the land use designation and development density presented in the City's General Plan and therefore would not exceed the population or job growth projections used by the SCAQMD to develop the AQMP. No impact would occur.

- b) **Less Than Significant Impact.** As discussed previously, the project site is located within the SoCAB. State and federal air quality standards are often exceeded in many parts of the basin. A discussion of the project's potential short-term construction-period and long-term operational-period air quality impacts is provided below.

Construction Emissions

The SCAQMD has established methods to quantify air emissions associated with construction activities such as air pollutant emissions generated by operation of on-site construction equipment, fugitive dust emissions related to grading and site work activities, and mobile (tailpipe) emissions from construction worker vehicles and haul/delivery truck trips. Emissions would vary from day to day, depending on the level of activity, the specific type of construction activity occurring, and, for fugitive dust, prevailing weather conditions.

Construction-generated emissions associated with the proposed project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. Modeling was based primarily on the default settings in the computer program for Riverside County. Construction equipment requirements and usage rates used in the model were based on model default assumptions and are clearly shown in **Appendix 3**.

Dust is typically a major concern during rough grading activities. Because such emissions are not amenable to collection and discharge through a controlled source, they are called “fugitive emissions.” Fugitive dust emissions rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). The proposed project would be subject to SCAQMD rules and regulations to reduce fugitive dust emissions and to mitigate potential air quality impacts, specifically Rule 403 (Fugitive Dust). Rule 403 requires fugitive dust sources to implement Best Available Control Measures for all sources and all forms of visible particulate matter are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce PM₁₀ emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM₁₀ suppression techniques are summarized below.

- a. Portions of the construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized in a manner acceptable to the City.
- b. All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.
- c. All material transported off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
- d. The area disturbed by clearing, grading, earth moving, or excavation operations will be minimized at all times.
- e. Where vehicles leave the construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface.
- f. Installation and utilization of a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.
- g. Apply water to active portions of the site, including unpaved roads, in sufficient quantity.

This assessment includes quantification of net increases of ozone precursor pollutants (i.e., reactive organic gases [ROG] and nitrogen oxides [NOx]) and airborne particulate matter (i.e., PM_{2.5} and PM₁₀) attributable to the proposed project. These quantified emission projections are then compared with SCAQMD significance thresholds (SCAQMD 2011). The estimated maximum daily construction emissions, accounting for SCAQMD Rule 403, are summarized in **Table 3-1**.

**Table 3-1
Maximum Short-Term Construction Emissions (Pounds per Day)**

Construction Phase	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Site Preparation	5.13	54.17	42.12	0.03	9.97	6.53
Grading	3.71	38.50	26.92	0.02	4.81	3.34
Building Construction	3.43	28.69	18.95	0.02	2.00	1.85
Paving	1.86	18.43	13.69	0.01	1.12	1.05
Painting	1.28	2.37	1.88	0.00	0.19	0.19
<i>SCAQMD Threshold</i>	<i>75.00</i>	<i>100.00</i>	<i>550.00</i>	<i>150.00</i>	<i>150.00</i>	<i>55</i>
Exceed Threshold?	No	No	No	No	No	No

Source: CalEEMod (SCAQMD 2013); see **Appendix 3**. **Bolded** area equals maximum daily construction emissions. Modeling inputs account for SCAQMD Rule 403, Fugitive Dust, which includes construction activity requirements including application of water on the project site, employment of wheel washing systems, sweeping adjacent streets daily, limiting on-site construction vehicle speeds to a maximum 15 miles per hour, and reestablishing vegetation on inactive portions of the site. Building construction, paving, and painting assumed to occur simultaneously.

ROG = reactive organic gas

NO_x = oxides of nitrogen

CO = carbon monoxide

SO_x = sulfur oxides

PM₁₀ = particulate matter equal to or less than 10 microns in diameter

PM_{2.5} = particulate matter less than 2.5 microns in diameter

As shown, emissions resulting from project construction would not exceed any criteria pollutant thresholds established by the SCAQMD. Therefore, a less than significant impact would occur.

Construction Localized Significance Analysis

The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute to or cause localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as localized significance thresholds (LSTs), which represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor.

The significance of localized emissions impacts depends on whether ambient levels in the vicinity of the project are above or below state standards. 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. In the case of PM₁₀ and PM_{2.5}, project emissions are considered significant if they increase ambient concentrations by a measurable amount.

The SCAQMD established localized significance thresholds in response to the SCAQMD Governing Board’s Environmental Justice Initiative I-4. 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 ambient air quality standard at the nearest residence or sensitive receptor. The SCAQMD states that lead agencies can use the localized significance thresholds as another indicator of significance in its air quality impact analyses.

LSTs were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. To address the issue of localized significance, the SCAQMD adopted localized significance thresholds that show whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. The analysis makes use of methodology included in the SCAQMD Final Localized Significance Threshold Methodology (SCAQMD 2008).

For this project, the appropriate source receptor area (SRA) for the localized significance thresholds is the Lake Elsinore area (SRA 25) since this area includes the project site. Localized significance thresholds apply to CO, NO₂, PM₁₀, and PM_{2.5}. The SCAQMD produced look-up tables for projects that disturb less than or equal to 5 acres in size.

The SCAQMD’s methodology clearly states that “off-site mobile emissions from the project should not be included in the emissions compared to LSTs.” Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod “on-site” emissions outputs were considered. Existing residential uses surround the project site on most sides. SCAQMD methodology explicitly states, “It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters.” As such, LSTs for receptors at 25 meters are utilized in this analysis.

Table 3-2 presents the results of localized emissions during construction activity. The required implementation of SCAQMD Rule 403 would reduce PM₁₀ and PM_{2.5} emissions during construction. **Table 3-2** identifies the Rule 403–controlled localized impacts at the nearest receptor location in the vicinity of the project site.

**Table 3-2
Localized Significance Summary – Construction (Pounds per Day)**

Activity	NO _x	CO	PM ₁₀	PM _{2.5}
On-Site Site Preparation Emissions	54.63	41.10	9.84	6.50
On-Site Grading Emissions	38.44	26.07	4.70	3.31
SCAQMD Localized Threshold	371	1,965	13	8
Significant?	No	No	Yes	Yes

*Source: CalEEMod 2013 v.2.2. See **Appendix 3** for the CalEEMod output files and additional calculations for the estimated emissions. Emissions projections account for adherence to various components of SCAQMD Rule 403, including application of water on the project site, employment of wheel washing systems, sweeping adjacent streets daily, limiting on-site construction vehicle speeds to a maximum 15 miles per hour and reestablishing vegetation on inactive portions of the site.*

As shown, emissions during the peak day construction activity would not result in concentrations of pollutants at nearby residences or other sensitive receptors, and less than significant impacts would occur.

Operational Impacts

The SCAQMD has also established significance thresholds to evaluate the potential impacts associated with long-term project operations (SCAQMD 1993). Regional air pollutant emissions associated with project operations include area source emissions, energy-use emissions, and mobile source emissions. Area source emissions comprise emissions from fuel combustion from space and water heating, landscape maintenance equipment, evaporative emissions from architectural coatings and consumer products, and unpermitted emissions from stationary sources. Energy-use emissions comprise emissions from on-site natural gas usage, and mobile source emissions comprise emissions from automobiles.

Operational area source emissions, energy-use emissions, and mobile source emissions (e.g., motorized vehicles) for the proposed project were calculated using the CalEEMod air quality model (**Appendix 3**). As shown in **Table 3-3**, the project's net emissions would not exceed SCAQMD thresholds for CO, NO_x, sulfur oxides (SO_x), ROG, PM₁₀, or PM_{2.5}. Note that emissions rates differ from summer to winter. This is because weather factors are dependent on the season, and these factors affect pollutant mixing/dispersion, ozone formation, etc. Therefore, regional operations emissions would not result in a significant long-term regional air quality impact.

**Table 3-3
Long-Term Unmitigated Operational Emissions (Pounds per Day)**

Emissions Source	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
<i>Summer</i>						
Area Source Emissions	4.56	0.11	8.79	0.01	1.15	1.15
Energy Use Emissions	0.01	0.12	0.05	0.00	0.01	0.01
Vehicle Emissions	0.58	1.84	6.59	0.01	1.12	0.31
Total	5.16	2.08	15.44	0.02	2.28	1.47
<i>Winter</i>						
Area Source Emissions	4.56	0.11	8.79	0.01	1.15	1.15
Energy Use Emissions	0.01	0.12	0.05	0.00	0.01	0.01
Vehicle Emissions	0.57	1.92	6.13	0.01	1.12	0.31
Total	5.14	2.16	14.97	0.02	2.28	1.47
SCAQMD Threshold	55.00	55.00	550.00	150.00	150.00	55
Exceed Threshold?	No	No	No	No	No	No

Source: CalEEMod (SCAQMD 2013)

ROG = reactive organic gas

NO_x = nitrogen oxides

CO = carbon monoxide

SO_x = sulfur oxides

PM₁₀ = particulate matter equal to or less than 10 microns in diameter

PM_{2.5} = particulate matter less than 2.5 microns in diameter

Operations Localized Significance Analysis

The proposed project involves the construction and operation of 15 residential units. According to SCAQMD localized significance threshold methodology, LSTs would apply to the operational phase of a proposed project if the project includes stationary sources or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). The proposed project does not include such uses. Thus, due to the lack of stationary source emissions, no long-term localized significance threshold analysis is needed, as there would be no impact.

Impacts associated with construction and operational air quality would be considered less than significant, as SCAQMD significance thresholds for criteria emissions would not be surpassed (see **Tables 3-1, 3-2, and 3-3**).

- c) **Less Than Significant Impact.** The proposed project may contribute to the net increase of ozone precursors and other criteria pollutants. The SCAQMD's approach for assessing cumulative impacts is based on the AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal and California Clean Air Acts. In other words, the SCAQMD considers projects that are consistent with the AQMP, which is intended to bring the basin into attainment for all criteria pollutants, to also have less than significant cumulative impacts.¹ The discussion under Issue a) describes the SCAQMD criteria for determining consistency with the AQMP and further demonstrates that the proposed project would be consistent with it.

For example, as stated under Issue a), the criteria for determining consistency with the AQMP are defined by the following indicators:

- 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 AQMP.
- Consistency Criterion No. 2: The proposed project will not exceed the assumptions in the AQMP in 2013 or increments based on the years of project buildout phase.

The violations to which Consistency Criterion No. 1 refers are the CAAQS and the NAAQS. As evaluated under Issue b) above, the project will not exceed the short-term construction standards or long-term operational standards and in so doing will not violate any air quality standards. Thus, a less than significant impact is expected, and the project would be consistent with the first criterion. Concerning Consistency Criterion No. 2, the AQMP contains air pollutant

¹ CEQA Guidelines Section 15064(h)(3) states, "a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem (e.g., water quality control plan, air quality plan, integrated waste management plan) within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency."

reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The proposed project is consistent with the land use designation and development density presented in the City's General Plan and therefore would not exceed the population or job growth projections used by the SCAQMD to develop the AQMP.

As such, cumulative impacts would be less than significant per the SCAQMD significance threshold since the project would be consistent with the AQMP.

- d) **Less Than Significant Impact.** Sensitive land uses are generally defined as locations where people reside or where the presence of air emissions could adversely affect the use of the land. Typical sensitive receptors include residents, schoolchildren, hospital patients, and the elderly.

Air Toxics

The project would not be a source of air toxics, as it only proposes future residential development and residential development does not generate air toxics.

In terms of the development of residential land uses near an existing stationary source of air toxics, the issuance of SCAQMD air quality permits and compliance with all SCAQMD, state, and federal regulations regarding stationary toxic air contaminants would reduce potential stationary sources of air toxics emissions such that sensitive receptors would not be exposed to substantial air pollutant concentrations. The SCAQMD limits public exposure to air toxics through a number of programs and reviews the potential for air toxic emissions from new and modified stationary sources through the SCAQMD permitting process for stationary sources. Air toxic emissions from existing stationary sources are limited by:

1. SCAQMD Rule 1401, which requires that construction or reconstruction of a major stationary source emitting hazardous air pollutants listed in Section 112 (b) of the Clean Air Act be constructed with Best Available Control Technology and comply with all other applicable requirements.
2. Implementation of the Air Toxics "Hot Spots" (AB 2588) Program.
3. Implementation of the federal Title III toxics program.

Facilities and equipment that require permits from the SCAQMD are screened from risks from toxic emissions and can be required to install Toxic Best Available Control Technology (T-BACT) to reduce the risks to below significant if deemed necessary by the SCAQMD. T-BACTs are the most up-to-date methods, systems, techniques, and production processes available to achieve the greatest feasible emission reductions for air toxics. In addition, the proposed project is not located near any existing stationary sources of air toxics. Therefore, future residential development allowed under the proposed project would not be adversely affected by stationary sources of air toxics.

Mobile sources of air toxics include freeways and major roadways, which are sources of diesel particulate matter (DPM). DPM has been listed as an air toxic by the California Air Resources Board. In April 2005, CARB released the *Air Quality and Land Use Handbook: A Community Health Perspective*, which offers guidance on siting sensitive land uses in proximity to sources of air

toxics. The handbook recommends that sensitive land uses be sited no closer than 500 feet from a freeway or major roadway, a buffer area that was developed to protect sensitive receptors from exposure to DPM, which was based on traffic-related studies that showed a 70 percent drop in PM concentrations at a distance of 500 feet from the roadway. Presumably, acute and chronic risks as well as lifetime cancer risk due to DPM exposure are lowered proportionately. Per Google Earth (2013), the project site is approximately 6,259 feet (1.1 miles) west of Interstate 15. Therefore, the site lies beyond the CARB-recommended buffer area, and future receptors would not be negatively affected by air toxics generated on Interstate 15.

Carbon Monoxide

Typically, substantial pollutant concentrations of CO are associated with mobile sources (e.g., vehicle idling time). Localized concentrations of CO are associated with congested roadways or signalized intersections operating at poor levels of service (level of service E or lower). High concentrations of CO may negatively affect local sensitive receptors (e.g., residents, schoolchildren, or hospital patients). There are sensitive receptors (existing residential uses) adjacent to the project site in most directions.

As stated in subsection 16, Transportation/Traffic, the proposed project will not result in any level of service at E or lower at the traffic facilities analyzed [see Issue a) in subsection 16, Transportation/Traffic]. Therefore, this impact is considered less than significant since the proposed project would not result in traffic facilities operating at poor levels of service.

- e) **No Impact.** The SCAQMD *CEQA Air Quality Handbook* (1993) identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The proposed project is residential in nature and will not include any of the land uses that have been identified by the SCAQMD as odor sources. Therefore, there would be no odor impacts from the proposed project.

STANDARD CONDITIONS AND REQUIREMENTS

None required.

MITIGATION MEASURES

None required.

4. Biological Resources

Issues: Would the project:	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 Wildlife or US 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 Wildlife or US 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?		✓		

ENVIRONMENTAL SETTING

A habitat assessment of the project site was performed by Osborne Biological Consulting in August 2007 and re-verified in August 2013 (**Appendix 4**). This habitat assessment was used to conduct an evaluation of the project site and to characterize the environmental setting on and adjacent to the site. In addition to the information provided by the habitat assessment, a thorough query of available data and literature from local, state, federal, and nongovernmental agencies was used to evaluate the potential biological impacts of the proposed project.

Database searches were performed on the following websites:

- US Fish and Wildlife Service's (USFWS) Information Planning and Conservation (IPaC) System (2013a)
- USFWS's Critical Habitat Portal (2013b)
- California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDDB) (2013)
- California Native Plant Society's (CNPS) Inventory of Rare, Threatened, and Endangered Plants of California (2013)

A search of the USFWS's IPaC System and Critical Habitat Portal database was performed for the project area to identify federally protected species and their habitats that may be affected by the proposed project. The query of the Critical Habitat Portal revealed no critical habitat in the project vicinity. In addition, a query of the CNDDDB was conducted to identify known occurrences for special-status species within a 1- and 5-mile radius of the proposed project. Lastly, the CNPS database was queried to identify special-status plant species with the potential to occur within the Wildomar, California, US Geological Survey (USGS) 7.5-minute quadrangle.

According to the habitat assessment, the site is a mix of disturbed land and ruderal annual grassland (**Appendix 4**). The southern margin of the site supports exotic woodlands with a scattering of native oak trees. A cement-lined canal carrying Murrieta Creek is located near the northeastern boundary of the site.

The proposed project site is located within the Western Riverside County Multiple Species Conservation Plan (MSHCP) (County of Riverside 2003). The MSHCP formally determines conservation planning for all of western Riverside County. The MSHCP identifies plants, wildlife, and habitat that need to be preserved or protected. It also outlines procedures for mitigation of future land development and determines under what circumstances an "incidental take" can be permitted.

Special-Status Species

Candidate, sensitive, or special-status species are commonly characterized as species that are at potential risk or actual risk to their persistence in a given area or across their native habitat. These species have been identified and assigned a status ranking by governmental agencies such as the CDFW, the USFWS, and private organizations such as the CNPS. The degree to which a species is at risk of extinction is the determining factor in the assignment of a status ranking. Some common threats to a species' or population's persistence include habitat loss, degradation, and fragmentation, as well as human conflict and intrusion. For the purposes of this biological review, special-status species are defined by the following codes:

1. Listed, proposed, or candidates for listing under the federal Endangered Species Act (50 Code of Federal Regulations [CFR] 17.11 – listed; 61 Federal Register [FR] 7591, February 28, 1996, candidates)
2. Listed or proposed for listing under the California Endangered Species Act (Fish and Game Code [FGC] 1992 Section 2050 et seq.; 14 California Code of Regulations [CCR] Section 670.1 et seq.)

3. Designated as Species of Special Concern by the CDFW
4. Designated as Fully Protected by the CDFW (FGC Sections 3511, 4700, 5050, 5515)
5. Species that meet the definition of rare or endangered under the California Environmental Quality Act (CEQA) (14 CCR Section 15380) including CNPS List Rank 1B and 2

The query of the USFWS, CNPS, and CNDDDB databases revealed 27 sensitive plant species and 22 special-status wildlife species, a total of 49 species, with the potential to occur in the project vicinity. **Appendix 4a** summarizes each species identified in the database results, includes a description of the habitat requirements for each species, and cites conclusions regarding the potential for each species to be impacted by the proposed project.

DISCUSSION OF IMPACTS

- a) **Less Than Significant Impact With Mitigation Incorporated.** Forty-nine special-status species were identified by the database queries; however, due to the nature of the project site, suitable habitat for all but four of the species identified does not occur on or adjacent to the site. Please refer to **Appendix 4a** for a summary of the general habitat characteristics required by each species, as well as the potential for each species to be impacted by the project. All special-status species with the potential to occur on the project site are covered under the MSHCP.

Based on the results of database searches and historic records, as well as known regional occurrences, burrowing owl (*Athene cunicularia*), coast horned lizard (*Phrynosoma blainvillii*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), and Parry's spineflower (*Chorizanthe parryi* var. *parryi*) are the only special-status species with the potential to occur on the project site. Given the site's heavily disturbed nature and because it is surrounded by urban land uses, no special-status plants or other special-status animals have the potential to occur on the project site.

The initial site survey was conducted in August 2007 and was re-verified in August 2013 by personnel at Osborne Biological Consulting. The site was surveyed on foot, and all plant and wildlife species observed were recorded. No sign of burrowing owls, rare plants, or other special-status species were encountered.

Though no sign of burrowing owls was found during previous surveys, project implementation may result in the loss of western burrowing owls through destruction of active nesting sites and/or incidental burial of adults, young, and eggs, should they become established on-site. Implementation of mitigation measures **BIO-2** and **BIO-3** would reduce these impacts to a less than significant level.

The other three special-status species with the potential to occur on the project site are all covered under the MSHCP. A standard condition for the proposed project includes the payment of mitigation fees to comply with the overlying habitat conservation plan (the MSHCP). Adherence to this standard will ensure that impacts to coast horned lizard, San Diego black-tailed jackrabbit, and Parry's spineflower will be less than significant.

Habitats on and adjacent to the project site may provide suitable nesting habitat for birds protected under the Migratory Bird Treaty Act and Section 3503.5 of the California Fish and Game Code. The removal of trees/vegetation during construction activities could result in noise,

dust, human disturbance, and other direct/indirect impacts to nesting birds on or in the vicinity of the project site. Incorporation of mitigation measure **BIO-1** would ensure that potential impacts to these species are less than significant with mitigation incorporated.

- b) **No Impact.** Sensitive habitats include (a) areas of special concern to resource agencies; (b) areas protected under CEQA; (c) areas designated as sensitive natural communities by the CDFW; (d) areas outlined in Section 1600 of the FGC; (e) areas regulated under Section 404 of the federal Clean Water Act; and (f) areas protected under local regulations and policies (MSHCP). No riparian habitat or other sensitive natural communities occur within the project boundaries; therefore, no impact will occur as a result of the project.
- c) **No Impact.** No waters of the State or of the United States occur within the project boundaries; however, the cement-lined channel of Murrieta Creek is located near the northern boundary of the site. There is no anticipated impact to the cement-lined creek channel; therefore, no impact to federally protected wetlands will occur as a result of the project.
- d) **No Impact.** Wildlife corridors refer to established migration routes commonly used by resident and migratory species for passage from one geographic location to another. Movement corridors may provide favorable locations for wildlife to travel between different habitat areas, such as foraging sites, breeding sites, cover areas, and preferred summer and winter range locations. They may also function as dispersal corridors allowing animals to move between various locations within their range. No wildlife corridors for resident migratory wildlife species occur on or adjacent to the site. In addition, the project is not located within a “Special Linkage Area” as defined by the MSHCP. As a result, no impact to the movements of any native resident or migratory fish or wildlife species, or established native resident or migratory wildlife corridors, or the use of native wildlife nursery sites would occur as a result of the proposed project.
- e) **No Impact.** According to the habitat assessment (Osborne Biological Consulting 2007; **Appendix 4**), there are six native oak (*Quercus agrifolia*) trees growing on-site. No tree preservation policy or ordinance is applicable to the proposed project. Furthermore, as discussed throughout this subsection, the proposed project would protect biological resources, including sensitive, rare, threatened, or endangered species, wildlife, and habitats, consistent with policies in the MSHCP. As such, the project would not conflict with any local policies or ordinances protecting biological resources. No impact will occur.
- f) **Less Than Significant Impact With Mitigation Incorporated.** The MSHCP is a habitat conservation plan and natural community conservation plan to which the City of Wildomar is a permittee (i.e., signatory). Although the project site is located within the MSHCP Plan Area, it is not located within a Criteria Cell. Since the site is not located within a Criteria Cell, there are no conservation requirements on the property. The project site is subject to review for consistency with Section 6.1.2–Protection of Species Associated with Riparian/Riverine Areas and Vernal Pool, Section 6.1.3–Protection of Narrow Endemic Plant Species, Section 6.3.2–Additional Survey Needs and Procedures, and Section 6.1.4–Guidelines pertaining to the Urban/Wildlands Interface of the MSHCP. A discussion of the proposed project’s consistency with these MSHCP sections follows.

Consistency with MSHCP Section 6.1.2: Section 6.1.2 of the MSHCP addresses preservation of riparian, riverine, vernal pool, and fairy shrimp habitats. According to the habitat assessment prepared by Osborne Biological Consulting (2007; **Appendix 4**), the project site does not support riverine/riparian habitat and vernal pools. Therefore, no impacts to riparian or fairy shrimp habitat will occur.

Consistency with MSHCP Section 6.1.3: Section 6.1.3 sets forth survey requirements for certain narrow endemic plants. The project site is not located within the Narrow Endemic Plant Species Survey Area and therefore would not conflict with Section 6.1.3.

Consistency with MSHCP Section 6.3.2: Section 6.3.2 sets forth the survey requirements for various plant and animal surveys. The project is not located within a Criteria Area Species Survey Area. However, the project is located in an additional survey area for burrowing owl. Focused surveys for burrowing owls were conducted in 2007 and 2013 (Osborne Biological Consulting 2007; **Appendix 4**). During the surveys, the project site was walked to determine the presence of burrowing owls. No sign of burrowing owl was observed; however, there is the potential that this species could become established on-site in the future. As such, project-related activities could result in impacts to this species. However, implementation of mitigation measures **BIO-2** and **BIO-3** would ensure that potential impacts to burrowing owls are avoided or mitigated to a less than significant level.

Consistency with MSHCP Section 6.1.4: Section 6.1.4 of the MSHCP addresses the need for certain projects to incorporate measures to address urban/wildland interfaces in or near the MSHCP conservation area. The project site is not located within or next to any MSHCP conservation areas that would require the need for implementation of the urban/wildland interface guidelines. The project would not conflict with Section 6.1.4 of the MSHCP or with any goals and policies of the MSHCP; therefore, impacts are considered less than significant.

A final component of the MSHCP is mitigation fee areas, which are land areas that occur within the MSHCP and require a fee for development activities to occur. These fees are utilized to fund the minimization of impacts to certain endemic species. The proposed project is located within the MSHCP mitigation fee area (Wildomar Municipal Code Section 3.42.080). A standard condition for the proposed project includes the payment of these fees to comply with the overlying habitat conservation plan (the MSHCP).

With implementation of mitigation measures and adherence to the standard conditions and requirements, any impacts will be less than significant with mitigation incorporated. In addition, implementation of mitigation measures **BIO-2** and **BIO-3** will ensure that the project does not conflict with the MSHCP.

STANDARD CONDITIONS AND REQUIREMENTS

1. As required by Section 3.42.070 of the Wildomar Municipal Code, the project applicant is required submit fees to the City in accordance with the requirements of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Mitigation Fee Area.

MITIGATION MEASURES

BIO-1 All developers of the proposed project site shall conduct construction and clearing activities outside of the avian nesting season (January 15–August 31), where feasible. If clearing and/or construction activities occur during the nesting season, preconstruction surveys for nesting raptors, migratory birds, and special-status resident birds (e.g., coastal California gnatcatcher) shall be conducted by a qualified biologist, up to 14 days before initiation of construction activities. The qualified biologist shall survey the construction zone and a 250-foot radius surrounding the construction zone to determine whether the activities may have the potential to disturb or otherwise harm nesting birds.

If an active nest is located within 100 feet (250 feet for raptors) of construction activities, the project applicant shall establish an exclusion zone (no ingress of personnel or equipment at a minimum radius of 100 feet or 250 feet, as appropriate, around the nest). Alternative exclusion zones may be established through consultation with the CDFW and the USFWS, as necessary. The exclusion zones shall remain in force until all young have fledged.

Reference to this requirement and to the Migratory Bird Treaty Act shall be included in the construction specifications.

If construction activities or tree removal are proposed to occur during the non-breeding season (September 1–January 14), a survey is not required, no further studies are necessary, and no mitigation is required.

Timing/Implementation: The project applicant shall incorporate requirements into all rough and/or precise grading plan documents. The project applicant's construction inspector shall monitor to ensure that measures are implemented during construction.

Enforcement/Monitoring: City of Wildomar Planning and Public Works Departments

BIO-2 Per MSHCP Species-Specific Objective 6, preconstruction presence/absence surveys for burrowing owl within the survey area, where suitable habitat is present, will be conducted for all covered activities through the life of the building permit. Surveys will be conducted 30 days prior to disturbance. Take of active nests will be avoided. Passive relocation (use of one-way doors and collapse of burrows) will occur when owls are present outside the nesting season. If construction is delayed or suspended for more than 30 days after the survey, the area shall be resurveyed.

Surveys shall be completed for occupied burrowing owl burrows within all construction areas and within 150 meters (500 feet) of the project work areas (where possible and appropriate based on habitat). All occupied burrows will be mapped on an aerial photo.

Timing/Implementation: Thirty days prior to any vegetation removal or ground-disturbing activities

Enforcement/Monitoring: City of Wildomar Planning and Public Works Departments

BIO-3 If burrowing owls are identified during the survey period, the City shall require the project applicant to take the following actions to offset impacts prior to ground disturbance:

Active nests within the areas scheduled for disturbance or degradation shall be avoided from February 1 through August 31, and a minimum 75-meter (250-foot) buffer shall be provided until fledging has occurred. Following fledging, owls may be passively relocated (use of one-way doors and collapse of burrows) by a qualified biologist.

If impacts on occupied burrows in the non-nesting period are unavoidable, on-site passive relocation techniques may be used if approved by the CDFW to encourage owls to move to alternative burrows outside of the impact area. However, no occupied burrows shall be disturbed during the nesting season. A qualified biologist must verify through noninvasive methods that the burrow is no longer occupied.

If relocation of the owls is approved for the site by the CDFW, the City shall require the developer to hire a qualified biologist to prepare a plan for relocating the owls to a suitable site. The relocation plan must include all of the following:

- The location of the nest and owls proposed for relocation.
- The location of the proposed relocation site.
- The number of owls involved and the time of year when the relocation is proposed to take place.
- The name and credentials of the biologist who will be retained to supervise the relocation.
- The proposed method of capture and transport for the owls to the new site.
- A description of site preparation at the relocation site (e.g., enhancement of existing burrows, creation of artificial burrows, one-time or long-term vegetation control).
- A description of efforts and funding support proposed to monitor the relocation.

If paired owls are present within 50 meters (160 feet) of a temporary project disturbance (e.g., parking areas), active burrows shall be protected with fencing/cones/flagging and monitored by a qualified biologist throughout construction to identify losses from nest abandonment and/or loss of reproductive effort. Any identified loss shall be reported to the CDFW.

Timing/Implementation: Prior to any vegetation removal or ground-disturbing activities

Enforcement/Monitoring: City of Wildomar Planning and Public Works Departments

5. Cultural Resources

Issues: Would the project:	Potentially Significant Impact	Less Than Significant Impact 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 Section 15064.5?				✓
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		✓		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		✓		
d) Disturb any human remains, including those interred outside of formal cemeteries?		✓		

DISCUSSION

- a) **No Impact.** A historical records check and field survey conducted of the site by a qualified archeologist in August 2013 (CRM Tech 2013; **Appendix 5**) determined that none of the existing structures on the site are of historical significance. In addition, the Wildomar General Plan does not identify any historical resources on the project site.
- b) **Less Than Significant Impact With Mitigation Incorporated.** A historical/archeological resources survey performed in August 2013 revealed that the project is not anticipated to cause a substantial adverse impact to an archaeological resource (CRM Tech 2013; **Appendix 5**). However, because archaeological resource sites have been identified in Wildomar, there is the potential for the unanticipated discovery of these resources. Because these resources are known to exist in the general area, the mitigation measures listed in this section (**CUL-1** through **CUL-7**) will ensure that any unanticipated discovery would not have a significant impact on archeological resources.

According to the Riverside County Land Information System (2013), the project site is not located within Native American tribal lands. However, historically tribal activities have occurred in and around the Wildomar area, and there is a potential for the inadvertent discovery of previously unknown resources. Implementation of mitigation measures **CUL-1** through **CUL-7** will reduce any potential impact to a less than significant level.

- c) **Less Than Significant Impact With Mitigation Incorporated.** The site has been identified as having a low potential/sensitivity for paleontological resources according to the Wildomar General Plan Paleontological Sensitivity Resources Map. Mitigation measures **CUL-1** through **CUL-7** will be implemented to reduce impacts in the event that paleontological resources are found during ground-disturbing activity. Following the implementation of these mitigation measures, any impact would be less than significant.

- d) **Less Than Significant Impact With Mitigation Incorporated.** There are no records of the project site containing any previously identified formal or informal cemetery. Although there are no known human remains on the project site, in the event human remains are encountered during ground-disturbing activities, mitigation measures (**CUL-1** through **CUL-7**) would reduce any impact to a less than significant level.

STANDARD CONDITIONS AND REQUIREMENTS

None required.

MITIGATION MEASURES

CUL-1 If during grading or construction activities cultural resources are discovered on the project site, work shall be halted immediately within 50 feet of the discovery and the resources shall be evaluated by a qualified archeologist and the Pechanga Tribe (Tribe). Any unanticipated cultural resources that are discovered shall be evaluated in the final report prepared by the qualified archeologist. The report shall include a list of the resources discovered, documentation of each site/locality, and interpretation of the resources identified, and the method of preservation and/or recovery for identified resources. In the event the significant resources are recovered and if the qualified archaeologist and the Tribe determines the resources to be historic or unique, avoidance and/or mitigation would be required pursuant to and consistent with CEQA Guidelines Sections 15064.5 and 15126.4 and Public Resources Code Section 21083.2 and the Cultural Resources Treatment and Monitoring Agreement required by mitigation measure CUL-2.

This mitigation measure shall be incorporated in all construction contract documentation.

Timing/Implementation: As a condition of project approval, and implemented during ground-disturbing construction activities

Enforcement/Monitoring: City of Wildomar Building and Planning Departments

CUL-2 At least 30 days prior to seeking a grading permit, the project applicant(s) shall contact the Pechanga Tribe to notify the Tribe of grading, excavation, and the monitoring program and to coordinate with the City of Wildomar and the Tribe to develop a Cultural Resources Treatment and Monitoring Agreement. The agreement shall include, but not be limited to, outlining provisions and requirements for addressing the treatment of cultural resources; project grading and development scheduling; terms of compensation for the monitors; treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site; and establishing on-site monitoring provisions and/or requirements for professional Tribal monitors during all ground-disturbing activities. A copy of this signed agreement shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit.

Timing/Implementation: Prior to the issuance of a grading permit

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments

CUL-3 If human remains are encountered, California Health and Safety Code Section 7050.5 requires that no further disturbance occur until the Riverside County Coroner has made the necessary findings as to origin. Further, 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. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within 24 hours. Subsequently, the Native American Heritage Commission shall identify the “most likely descendant” within 24 hours of receiving notification from the coroner. The most likely descendant shall then have 48 hours to make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

Timing/Implementation: As a condition of project approval, and implemented during ground-disturbing construction activities

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments

CUL-4 All cultural materials, with the exception of sacred items, burial goods, and human remains, which will be addressed in the Cultural Resources Treatment and Monitoring Agreement required by mitigation measure CUL-2, that are collected during the grading monitoring program and from any previous archeological studies or excavations on the project site shall be curated according to the current professional repository standards. The collections and associated records shall be transferred, including title, to the Pechanga Tribe’s curation facility, which meets the standards set forth in 36 CRF Part 79 for federal repositories.

Timing/Implementation: As a condition of project approval, and implemented during ground-disturbing construction activities

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments

CUL-5 All sacred sites, should they be encountered within the project site, shall be avoided and preserved as the preferred mitigation, if feasible as determined by a qualified professional in consultation with the Pechanga Tribe. To the extent that a sacred site cannot be feasibly preserved in place or left in an undisturbed state, mitigation measures shall be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.

Timing/Implementation: As a condition of project approval, and implemented during ground-disturbing construction activities

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments

CUL-6 If inadvertent discoveries of subsurface archaeological resources are discovered during grading, work shall be halted immediately within 50 feet of the discovery. The developer, the project archeologist, and the Tribe shall assess the significance of such resources and shall meet and confer regarding the mitigation for such resources. If the developer and the Tribe cannot agree on the significance of or the mitigation for such resources, these issues will be presented to the City of Wildomar Planning Director. The Planning Director shall make the determination based on the provisions of CEQA with respect to archaeological resources and shall take into account

the religious beliefs, customs, and practices of the Pechanga Tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the City of Wildomar. In the event the significant resources are recovered and if the qualified archaeologist determines the resources to be historic or unique as defined by relevant state and local law, avoidance and mitigation would be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.

Timing/Implementation: As a condition of project approval, and implemented during ground-disturbing construction activities

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments

CUL-7 To address the possibility that cultural resources may be encountered during grading or construction, a qualified professional archeologist shall monitor all construction activities that could potentially impact archaeological deposits (e.g., grading, excavation, and/or trenching). However, monitoring may be discontinued as soon the qualified professional is satisfied that construction will not disturb cultural and/or paleontological archaeological resources. A final mitigation monitoring report shall be prepared by the archaeologist documenting any resources found, their treatment, ultimate disposition, new or updated site records and any other pertinent information associated with the project. Final copies of the report will be submitted to the City of Wildomar, the developer, the Eastern Information Center, and the Pechanga Tribe.

Timing/Implementation: As a condition of project approval, and implemented during ground-disturbing construction activities

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments

6. Geology and Soils

Issues: Would the project:	Potentially Significant Impact	Less Than Significant Impact 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:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault?			✓	
ii) Strong seismic ground shaking?			✓	
iii) Seismic-related ground failure, including liquefaction?			✓	
iv) Landslides?				✓
b) Result in substantial soil erosion or the loss of topsoil?			✓	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?			✓	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?		✓		
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				✓

DISCUSSION

a)

- i) **Less Than Significant Impact.** A soils investigation performed by John R. Byerly, Inc., in 2003 was updated for the proposed project in July 2013 (**Appendix 6**). While the project site is located approximately 1,500 feet northwest of the seismically active Wildomar branch of the Elsinore Fault Zone, Riverside County geographic information system (GIS) mapping does not identify the site as being within a California Earthquake Fault Hazard Zone (formerly known as an Alquist-Priolo Special Studies Zone) or the Riverside Fault Hazard Zone. Considering this, the project site may be expected to experience occasional strong ground motions from earthquakes caused by both local and regional faults. However, the July 2013 soils investigation performed by John R.

Byerly, Inc. (**Appendix 6**) supported a determination of a previous geologic report on the project site performed in June 2013 that concluded there is no visual evidence of active faulting on the site. In addition, a review of published maps and the Riverside County Land Information System reveals that no known active faults are located on the project site (**Appendix 6**).

Because there is no evidence of a known fault on the project site, the project would not expose people or structures to potential substantial adverse effects associated with ground rupture. This would be considered a less than significant impact.

- ii) **Less Than Significant Impact.** The proposed project could expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. The project site is located in an area of high regional seismicity and may experience horizontal ground acceleration during an earthquake along the Wildomar fault of the Elsinore Fault Zone, which is located approximately 1,500 feet from the project site, or other fault zones throughout the region. The project site is not within a California Earthquake Fault Hazard Zone (formerly called an Alquist-Priolo Special Studies Zone) and does not lie within a Riverside County Fault Zone. The project site has been, and will continue to be, exposed to strong seismic ground shaking. However, compliance with the standard conditions and requirements of the City of Wildomar will minimize the potential for damage associated with strong seismic ground shaking allowing any impact to be less than significant.
 - iii) **Less Than Significant Impact.** A soils investigation completed for the proposed project by John R. Byerly, Inc. (2013; **Appendix 6**) determined that neither liquefaction nor seismically induced settlement need to be a consideration in the design of homes at the project site. However, the project site is within a moderate risk liquefaction zone as established by the State of California. The City of Wildomar's standard conditions and requirements will address any potential impacts from other seismic-related ground failure and will minimize the potential for damage associated with strong seismic ground shaking. Any impact will be less than significant.
 - iv) **No Impact.** The proposed project is not expected to expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, from landslides. Due to the relatively level terrain in the proposed project area, this site is not subject to landslide, collapse, or rockfall hazards. The project site is located in an area of general seismic activity, but does not contain areas subject to unstable geologic units or soil. According to the Wildomar General Plan (2008), the project site has no potential for landslides. Additionally, due to the proposed project site's distance from boulders or other rock formations, there is no potential for mudslide or rock fall hazards. No impact is anticipated.
- b) **Less Than Significant Impact.** During site preparation and grading and as future development is proposed, soil erosion may result during construction, as grading and construction can loosen surface soils and make soils susceptible to the effects of wind and water movement across the surface. The City of Wildomar's standard conditions and requirements applied to the proposed project will require compliance with the National Pollutant Discharge Elimination System (NPDES) and the State Water Quality Control Board's construction permit, as well as the submittal of detailed erosion control plans with any grading plans. A draft water quality management plan for the project site is included as **Appendix 8** to this Initial Study. Implementation of standard conditions and requirements of the City of Wildomar will also address any erosion issues associated with the future grading of the site. As a result, any impact would be less than significant.

- c) **Less Than Significant Impact.** According to the Riverside County Land Information System (2013), the project site is located in an area that is designated as having a moderate potential for liquefaction and is susceptible to subsidence. However, the City of Wildomar's standard conditions and requirements would address any potential impacts related to ground failure. Any impact associated with ground failure hazards would be less than significant.
- d) **Less Than Significant Impact With Mitigation Incorporated.** The soils investigation by John R. Byerly, Inc. (2013; **Appendix 6**) determined that in their present state, the existing artificial fill and portions of the upper natural soils are not considered suitable for structural support due to compressibility considerations. However, the implementation of mitigation measure **GEO-1** and **GEO-2** will reduce any impact from these observed conditions. Supporting soils on the site were noted in the soils investigation by John R. Byerly, Inc. (2013; **Appendix 6**) to be medium dense to dense silty sands and medium stiff silty clays. In addition, future development proposed on the site is required to comply with the California Building Code and commonly accepted engineering practices, which require special design and construction methods for dealing with expansive and unstable soil behavior. Compliance with recommendations included in the soils report required by the standard conditions for project will ensure that soils at future development sites would be capable of supporting the structures resulting from the proposed project. Compliance would reduce any impact resulting from expansive and unstable soils to a less than significant level.
- e) **No Impact.** The proposed project will not include the installation of septic tanks or alternative wastewater disposal systems. No impact is expected.

STANDARD CONDITIONS AND REQUIREMENTS

1. Any grading performed on the project site shall conform to the California Building Code, Chapter 16.12 of the Wildomar Municipal Code, and all other relevant laws, rules, and regulations governing grading in Wildomar. Prior to commencing any grading which includes 50 or more cubic yards, the developer shall obtain a grading permit from the Building Department.
2. Prior to issuance of a grading permit, the developer shall provide the Engineering Department evidence of compliance with the National Pollutant Discharge Elimination System (NPDES) and obtain a construction permit from the State Water Resources Control Board (SWRCB).
3. For the buildout of the proposed project erosion control-landscape plans, required for manufactured slopes greater than 3 feet in vertical height, are to be signed by a registered landscape architect and bonded prior to the issuance of a grading permit and per the requirements of California Building Code as adopted by the City of Wildomar in Section 15.12.010 of the City's Municipal Code. Planting shall occur within 30 days of meeting final grades to minimize erosion and to ensure slope coverage prior to the rainy season. The developer shall plant and irrigate all manufactured slopes steeper than a 4:1 (horizontal to vertical) ratio and 3 feet or greater in vertical height with grass or ground cover; slopes 15 feet or greater in vertical height shall be planted with additional shrubs or trees or as approved by the City Engineer.

MITIGATION MEASURES

GEO-1 Prior to the construction of any home on the proposed project site, the soils below the building areas and for a horizontal distance beyond the building areas at least equal to the depth of over-excavation below the final ground surface or 5 feet, whichever distance is greater, should be over-excavated to a depth of at least 5 feet below the final ground surface, whichever is deeper. Should competent natural soil be encountered before a depth of 5 feet is reached, the over-excavation can be terminated at that depth as long as there is at least 24 inches of compacted fill below all footings. Competent natural soil is defined as undisturbed material exhibiting a relative compaction of at least 85 percent (ASTM D 1557).

Timing/Implementation: Prior to the issuance of a building permit

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments

GEO-2 The project applicant shall incorporate the recommendations of the Soils Investigation conducted by John R. Byerly, Inc., (2013; **Appendix 6**) into project plans. The project's building plans shall demonstrate that they incorporate all applicable recommendations of the soils investigation and comply with all applicable requirements of the latest adopted version of the California Building Code. A licensed professional engineer shall prepare the plans, including those that pertain to soil engineering, structural foundations, and installation. All on-site soil engineering activities shall be conducted under the supervision of a licensed geotechnical engineer or certified engineering geologist.

Timing/Implementation: Prior to the issuance of a building permit

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments

7. Greenhouse Gas Emissions

Issues: Would the project:	Potentially Significant Impact	Less Than Significant Impact 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?			✓	

DISCUSSION

a) **Less Than Significant Impact.** The future construction and operation of the proposed project will generate greenhouse gas (GHG) emissions. Overall, the following activities associated with future residential development could directly or indirectly contribute to the generation of GHG emissions:

- **Construction Activities:** During construction, 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 carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Furthermore, CH₄ is emitted during the fueling of heavy equipment.
- **Gas, Electric, and Water Use:** Natural gas use results in the emissions 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. Preliminary estimates indicate that the total energy used to pump and treat water exceeds 6.5 percent of the total electricity used in the state per year.
- **Solid Waste Disposal:** Solid waste generated by future residential development on the project site 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. Methane is 21 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 future development of the proposed project site would result in GHG emissions from the combustion of fossil fuels in daily automobile and truck trips.

GHG emissions associated with residential land uses would occur over the short term from construction activities, consisting primarily of emissions from equipment exhaust. There would also be long-term regional emissions associated with project-related new vehicular trips and stationary source emissions, such as natural gas used for heating and electricity usage for lighting. Preliminary guidance from the Office of Planning and Research (OPR) and recent letters from the Attorney General critical of CEQA documents which 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. The calculation presented below includes construction as well as long-term operational emissions in terms of annual carbon dioxide equivalent (CO₂e) associated with the anticipated operations of the proposed project. The resultant emissions of these activities were calculated using the CalEEMod air quality model (**Appendix 3**). CalEEMod (SCAQMD 2013) is a statewide land use emissions computer model designed to provide a uniform platform for the use of government agencies, land use planners, and environmental professionals.

Thresholds of significance illustrate the extent of an impact and are a basis from which to apply mitigation measures. On September 28, 2010, the SCAQMD conducted Stakeholder Working Group Meeting #15, which resulted in a recommended threshold of 3,000 metric tons of CO₂e as a threshold for all land uses. Therefore, for the purposes of this evaluation and in the absence of any other adopted significance thresholds, a threshold of 3,000 metric tons of CO₂e per year is used to assess the significance of greenhouse gases. Emissions resulting from implementation of the proposed project have been quantified and the quantified emissions are compared with the SCAQMD greenhouse gas threshold. The anticipated GHG emissions during project construction and operation are shown in **Table 7-1**. Per this table, GHG emissions projected to result from both construction (amortized over 30 years) and operation of the proposed project would not exceed the SCAQMD greenhouse gas threshold of 3,000 metric tons of CO₂e per year. The impact is therefore considered less than significant.

**Table 7-1
Construction-Related and Operational Greenhouse Gas Emissions (Metric Tons per Year)**

Emission Type	CO ₂ e
Construction (amortized over 30 years)	19
Indirect Emissions from Energy Consumption	60
Water Demand	7
Waste Generation	8
Area Source (landscaping)	5
Mobile Source (vehicles)	208
Operations Total	307
<i>SCAQMD Greenhouse Gas Threshold</i>	<i>3,000</i>
Threshold Exceeded?	No

Source: CalEEMod (SCAQMD 2013)

- b) **Less Than Significant Impact.** Wildomar is a member agency of the Western Riverside Council of Governments (WRCOG), which coordinated a Subregional Climate Action Plan (CAP) process on behalf of its member agencies. The WRCOG Subregional CAP (2014) establishes a community-wide emissions reduction target of 15 percent below 2010, following guidance from CARB and the Governor’s Office of Planning and Research. CARB and the California Attorney General have determined this approach to be consistent with the statewide Assembly Bill 32 (AB 32) goal of reducing emissions to 1990 levels by the year 2020. Progress toward achieving the 2020 emissions reduction target will be monitored over time through preparation of an annual memorandum documenting program implementation and performance. Following each annual report, WRCOG and the participating jurisdictions may adjust or otherwise modify the strategies to achieve the reductions needed to reach the target. Such adjustments could include more prescriptive measures, reallocation of funding to more successful programs, and modifications to the 2020 business-as-usual (BAU) emissions projection and reduction target based on revised population, housing, and employment growth estimates. Additionally, there will be a comprehensive inventory update prior to 2020 to track overall progress toward meeting the GHG reduction target.

To meet emissions reduction targets, the CAP considers existing programs and policies in the subregion that achieve GHG emissions reductions in addition to new GHG reduction measures. Several measures apply to participating jurisdictions in western Riverside County uniformly, because they respond to adoption of a state law (e.g., the Low Carbon Fuel Standard) or result from programs administered at the discretion of a utility serving multiple jurisdictions (e.g., utility rebates). For other more discretionary measures, participating jurisdictions, including Wildomar, have voluntarily committed to a participation level that could be implemented in their community. For example, the City has agreed to increase the amount of bike lanes in the city by 10 percent compared with existing conditions (CAP Measure T-1), increase bicycle parking (CAP Measure T-2), increase fixed-route bus service by 5 percent compared with existing conditions (CAP Measure T-5), synchronize traffic signals (CAP Measure T-7), increase the jobs/housing ratio in the city by 5 percent (CAP Measure T-9), and provide residential green bins for the collection and transport of organic waste for compost (CAP Measure SW-1). There are no aspects of the project that would inhibit these goals and therefore would not be considered to conflict with it.

The City is also subject to compliance with the Global Warming Solutions Act (AB 32), codified at Health and Safety Code Sections 38500, 38501, 28510 (repealed), 38530, 38550, 38560, 38561–38565, 38570, 38571, 38574, 38580, 38590, and 38592–38599. AB 32 is a legal mandate requiring that statewide GHG emissions be reduced to 1990 levels by 2020. In adopting AB 32, the legislature determined the necessary GHG reductions for the state to make in order to sufficiently offset its contribution to the cumulative climate change problem to reach 1990 levels. As identified in Issue a) above, the proposed project would not surpass the SCAQMD’s recommended GHG significance threshold, which was prepared with the purpose of complying with the requirements of AB 32. This threshold was developed based on evidence that such thresholds represent quantitative levels of GHG emissions, compliance with which means that the environmental impact of the GHG emissions will normally not be cumulatively considerable under CEQA. Compliance with such thresholds will be part of the solution to the cumulative GHG emissions problem, rather than hinder the State’s ability to meet its goals of reduced statewide GHG emissions under AB 32. Therefore, the proposed project would not conflict with AB 32.

For these reasons, this impact is considered to be less than significant.

STANDARD CONDITIONS AND REQUIREMENTS

None required.

MITIGATION MEASURES

None required.

8. Hazards and Hazardous Materials

Issues: Would the project:	Potentially Significant Impact	Less Than Significant Impact 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 reasonable 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 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				✓
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				✓
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✓
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				✓

DISCUSSION

- a) **Less Than Significant Impact.** When completed, the proposed project will be a residential development, which will not store or use any significant quantities of hazardous material. During the construction phase of the proposed project, the stormwater pollution prevention program will manage the presence and use of hazardous materials on the site. Any impacts would be less than significant.

- b) **Less Than Significant Impact.** Residential development associated with the proposed project would not include uses that utilize large quantities of hazardous materials. Due to the limited nature of materials associated with residential land uses and the existing regulatory requirements, the potential for release of hazardous materials into the environment associated with development would be considered less than significant.
- c) **No Impact.** The closest school to the proposed project site, Wildomar Elementary School, is located approximately 1,200 feet to the northeast, while David A. Brown Middle School is 0.70 miles from the site. As a future residential development, the project will not emit hazardous emissions or handle hazardous or acutely hazardous material within one-quarter mile of a school. No impacts are expected.
- d) **No Impact.** The proposed project site is not located on any hazardous materials site as designated by Government Code Section 65962.5. A review of the information on the California Department of Toxic Substances Control Envirostor website (2013) did not identify any other hazardous materials sites on or adjacent to the project site. Consequently, there is no impact.
- e) **No Impact.** The project site is not located within any airport land use plan. The closest public airport is French Valley Airport, which is located approximately 8.5 miles southeast of the project site. Given the distance and because the project is not in the airport land use plan for French Valley Airport, there is no impact.
- f) **No Impact.** The project site is located in proximity to Skylark Field, which is a private airstrip located at the south end of Lake Elsinore, approximately 2 miles northwest of the project site. Skylark Field is used primarily by skydiving aircraft, which commonly drop parachutists into the nearby back-bay area south of the lake. The airstrip is also used for gliding and other recreational uses. As shown in Figure 5, Skylark Airfield Area of Influence, of the Elsinore Area Plan (County of Riverside 2011), the proposed project site is outside of the influence policy area. No impact is anticipated.
- g) **No Impact.** Access to the project site will be via Central Street along the eastern boundary of the project; A Street is a new street part of the proposed project that will direct traffic flows from Central Street, through the project and out toward Gruwell Street. Development of the proposed project will not require the closure or relocation of any roadways, and operation of the proposed project is not expected to interfere with access to any surrounding roadway. Elm Street currently terminates at the southwestern side of the project. No access from Elm Street to the project site will be created. In addition, no current program within the City of Wildomar identifies any surrounding roadway as an emergency access route. The proposed project will have no impact on any plans for emergency evacuation.
- h) **No Impact.** According to the Riverside County Land Information System (2013), the project site is not within a Very High Fire Hazard Severity Zone as designated by the California Department of Forestry and Fire Protection (Cal Fire). In addition, future development on the proposed project site will occur in an urbanized setting, minimizing any exposure to wildfire threats. No impact is anticipated.

STANDARD CONDITIONS AND REQUIREMENTS

1. As required by Section 15.04.020 of the Wildomar Municipal Code, any trash, debris, and waste materials remaining from uses prior to development shall be disposed of off-site, in accordance with current local, state, and federal disposal regulations. Any materials containing petroleum residues encountered during property improvements shall be evaluated prior to removal and disposal, following proper procedures. Any buried trash/debris encountered shall be evaluated by an experienced environmental consultant prior to removal.

MITIGATION MEASURES

None required.

9. Hydrology and Water Quality

Issues: Would the project:	Potentially Significant Impact	Less Than Significant Impact 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 a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			✓	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?			✓	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			✓	
f) Otherwise substantially degrade water quality?			✓	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			✓	
h) Place within 100-year flood hazard area structures which would impede or redirect flood flows?			✓	

Issues: Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?				✓
j) Inundation by seiche, tsunami, or mudflow?				✓

DISCUSSION

- a) **Less Than Significant Impact.** The project site falls under the jurisdiction of the San Diego Regional Water Quality Control Board (RWQCB) and is located in the Lake Elsinore watershed. Any future development associated with the proposed project will be subject to the requirements of National Pollutant Discharge Elimination System (NPDES) Stormwater Permit No. R8-2010-0033, which requires that the City impose water quality and watershed protection measures for all development projects and prohibits discharges from causing violations of applicable water quality standards or from resulting in conditions that create a nuisance or water quality impairment in receiving waters. A key component of the NPDES permit is the implementation of the Area-Wide Urban Runoff Management Program for the City, which includes the requirement of stormwater quality treatment and/or best management practices (BMPs) in project design for both construction and operation for new development. The BMPs will include site design components as well as source and treatment control measures, which are included in the project’s water quality management plan (WQMP) (**Appendix 8**).

Following the implementation of the best management practices included in the project’s WQMP, the proposed project and associated future development on the project site are not expected to violate any water quality standards or waste discharge requirements, or have a significant impact on the environment.

- b) **Less Than Significant Impact.** The proposed project is located in the area subject to the Elsinore Basin Groundwater Management Plan (EVMWD 2005). Adopted on March 24, 2005, under the authority of the Groundwater Management Planning Act (California Water Code Part 2.75, Section 10753), as amended, the plan addresses the hydrogeologic understanding of the Elsinore Basin, the evaluation of baseline conditions, the identification of management issues and strategies, and the definition and evaluation of alternatives. The EVMWD will provide water service to the proposed project, and no wells will be constructed as part of the project.

As vacant land, the proposed project site is currently largely permeable. The proposed project will increase the imperviousness of the site through construction of homes, driveways, roads, and sidewalks. Section 17.24.020(G) of the Wildomar Municipal Code restricts the maximum size of the dwelling to 50 percent of the lot, while the adopted Design Guidelines require that residential lot coverage remain below 50 percent (City of Wildomar 2003). The small area of the property is such that even if the entire site were covered with impervious surface, there would be minimal impact on overall groundwater recharge. Stormwater from the site will flow into the Murrieta

Creek Channel and ultimately flow into Lake Elsinore. As the water from the site will not be removed from the Elsinore Basin, the impact on basin recharge is considered less than significant.

The proposed project would not substantially interfere with groundwater recharge or deplete groundwater supplies. Furthermore, the EVMWD imports water to ensure that significant overdraft of local groundwater supplies does not occur. Based on the EVMWD's Urban Water Management Plan (2011), no adverse impacts to groundwater resources are forecast to occur from implementing the proposed project, which is anticipated as part of buildout of the Wildomar General Plan. This impact will be less than significant.

- c) **Less Than Significant Impact.** A preliminary hydrology/drainage study prepared for the proposed project by RDS and Associates in May 2013 (**Appendix 7**) determined that the current stormwater flows from the site are 3.5 cubic feet per second (cfs) for 10-year storm events and 6.1 cfs for 100-year storm events. The same study determined that the development of the project site will result in predicted stormwater flows of 5.3 cfs and 8.7 cfs for the 10-year and 100-year storms, respectively (RDS and Associates 2013a; **Appendix 7**). No watercourse exists on the project site, and an increase of 1.8 cfs to stormwater flows during 10-year storm events and 2.7 cfs to stormwater flows during 100-year storm events would not result in erosion on the project site. In addition, future development on the project site will be required to implement the water quality management plan (WQMP) prepared for the proposed project (**Appendix 8**). Considering the incremental increase to stormwater flows from the site and the implementation of the WQMP, any impact would be less than significant.
- d) **Less Than Significant Impact.** Grading and paving of portions of the proposed project site would result in changes to the existing hydrologic features of the project site. As noted in Issue c) above, these changes would not result in significant changes to the volume of stormwater flows from the project site or the hydrologic features receiving flows from the site (RDS and Associates 2013a; **Appendix 7**). Any impact would be less than significant.
- e) **Less Than Significant Impact.** The proposed project will include the construction of a street, A Street, which will direct flows from Gruwell Street via rolled curb and gutter southwesterly to the vegetated swale within Lot 15, adjacent to Central Street. Flows within A Street will be directed to a low point on Lot 15. The low point within A Street will be conveyed through a vegetated swale within Lot 15. The filtered flows from the vegetated swale will then outlet to the Murrieta Creek Channel via a grated inlet and 24-inch reinforced concrete pipe. The existing drainage flows discharged into the Murrieta Creek Channel for the developed condition of the proposed project site were calculated to be 5.3 cfs and 8.7 cfs for the 10-year and 100-year storms, respectively (RDS and Associates 2013a; **Appendix 7**).

The stormwater system as described will be discharged directly into a publicly owned, operated, and maintained Municipal Separate Stormwater Sewer System (MS4), and the discharge will be in full compliance with Riverside County Flood Control requirements for connections and discharges to the MS4. In addition, the vegetated swale, and the outlet to the Murrieta Creek Channel will be owned and maintained by the homeowners association of the proposed project.

Finally, any future development will be required to prepare a stormwater pollution prevention plan (SWPPP) that will include best management practices designed to reduce and manage increases in runoff water at the site. The BMPs may include design components such as

channeling site runoff into landscape areas, the incorporation of landscape buffer areas between sidewalks and streets, the construction of containment basins, or the infiltration of roof runoff to landscaping. The proposed best management practices included in the water quality management plan (**Appendix 8**) and required SWPPP will ensure that post-development discharge of stormwater flow is directed to the existing publicly owned, operated, and maintained MS4 facility. Any impact would be less than significant.

- f) **Less Than Significant Impact.** The proposed project and/or future development associated with the proposed project would not otherwise substantially degrade water quality. Future development on the project site would be subject to the requirements of NPDES Stormwater Permit No. R8-2010-0033, which requires that the City impose water quality and watershed protection measures for all development projects and prohibits discharges from causing violations of applicable water quality standards or from resulting in conditions that create a nuisance or water quality impairment in receiving waters. A key component of the NPDES permit is the implementation of the Area-Wide Urban Runoff Management Program for the City, which includes the requirement of stormwater quality treatment and/or BMPs in project design for both construction and operation for new development.

As a standard condition, any future development will be required to prepare and comply with the requirements of the SWPPP and finalized water quality management plan, which would ensure that significant water quality impacts and violations of standards and requirements do not occur. Any impact to water quality would be less than significant.

- g, h) **Less Than Significant.** A portion of the residential project may be located inside of the 100-year floodplain as mapped on a Flood Insurance Rate Map (FIRM) Panel Number 06065C2682G (FEMA 2008) and may be subject to flooding. The 100-year flood line appears to be within the channel and adjacent right-of-way for the Murrieta Creek Channel, but the actual location of the line will need to be determined by final engineering (see **Figure 7**). If the area is within the 100-year flood elevation, the FIRM map indicates that flooding would be 1 foot or less in elevation. The City's Municipal Code Chapter 15.96 relates to flood hazard area regulations. One of the provisions of the Flood Hazard Area Regulations is that "for all new construction and substantial improvements, fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices; provided that they permit the automatic entry and exit of floodwaters." If the project engineer can demonstrate to the City Engineer that the property is outside of the floodplain, the provisions of Municipal Code Chapter 15.96 will not apply. Either compliance with Chapter 15.96 or evidence that the property is outside of the 100-year floodplain will result in a less than significant impact.
- i) **No Impact.** According to Figure 10 of the Wildomar General Plan (2008), the project site is located outside of the inundation area of Lake Elsinore. No impact is anticipated.
- j) **No Impact.** The project site is not located in an area that is subject to seiches, mudflows, or tsunamis. No impact is anticipated.

STANDARD CONDITIONS AND REQUIREMENTS

1. Prior to the approval of the grading permit for future development on the project site, the project applicant(s) for future development shall be required to prepare and implement a stormwater pollution prevention plan (SWPPP) consistent with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2010-0014-DWQ), which is to be administered through all phases of grading and project construction. The SWPPP shall incorporate best management practices (BMPs) to ensure that potential off-site water quality impacts during construction phases are minimized. The SWPPP shall be submitted to the San Diego Regional Water Quality Control Board and to the City of Wildomar for review. A copy of the SWPPP must be kept accessible on the project site at all times. In addition, the project applicant(s) will be required to submit, and obtain City approval of, the attached preliminary water quality management plan (**Appendix 8**) prior to the issuance of any building or grading permit for future development on the project site in order to comply with the Area-Wide Urban Runoff Management Program. The project shall implement site design BMPs, source control BMPs, and treatment control BMPs as identified in the water quality management plan. Site design BMPs shall include, but are not limited to, landscape buffer areas, roof and paved area runoff directed to vegetated areas, and vegetated swales. Source control BMPs shall include, but are not limited to, education, landscape maintenance, litter control, irrigation design to prevent overspray, and covered trash storage. Treatment control BMPs shall include vegetated swales and a detention basin, or an infiltration device.
2. The project shall comply with the provisions of Wildomar Municipal Code Chapter 15.96, Flood Hazard Area Regulations.

MITIGATION MEASURES

None required.







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ELM STREET



LEGEND

-  SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD
- The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.
- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.
-  FLOODWAY AREAS IN ZONE AE
- The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.
-  OTHER FLOOD AREAS
- ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
-  OTHER AREAS
- ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.
- ZONE D** Areas in which flood hazards are undetermined, but possible.
-  COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS
-  OTHERWISE PROTECTED AREAS (OPAs)
- CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

Source: FEMA Flood Map Store

Not to scale

Figure 7
FIRM Map

10. Land Use and Planning

Issues: Would the project:	Potentially Significant Impact	Less Than Significant Impact 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?			✓	

DISCUSSION

- a) **No Impact.** The proposed project is located between existing homes on Darby Street and vacant land parallel to the Murrieta Creek Channel. The new roadway, shown as A Street on **Figure 2**, will connect Central Street with Gruwell Street and serve only the proposed project. No existing circulation pattern will be disrupted and proposed project will not block access to other properties. As shown in **Figure 1**, the proposed project is surrounded by existing development, and the existing creek forces all pedestrian or vehicle traffic to use the bridges on Central and Gruwell streets. Access to the rear of existing homes along Darby Street will be maintained by the existing 10-foot utility easement along the south side of the proposed A Street. The proposed project will not eliminate any streets in the area or create any new structures that would divide the community. No impact is anticipated.
- b) **Less Than Significant Impact.** The proposed project site is currently zoned Rural Residential (R-R) and designated for Medium Density Residential (MDR) use in the Wildomar General Plan. Land to the northeast of the site is zoned One-Family Dwelling (R-1) and designated MDR, while land to the northwest is zoned R-1 and designated for Low Density Residential (LDR) use. All other surrounding land is zoned R-R and designated MDR. The proposed project includes a change of zone of the project site from the existing R-R to R-1. The change in zone will allow consistency with the land use designation of the site and would not result in any zoning conflicts, since the existing and proposed zones are both for detached single-family home residential uses. The following are a few General Plan policies that are furthered by the project and help to avoid and/or mitigate environmental effects:

LU 6.4 Retain and enhance the integrity of existing residential, employment, agricultural, and open space areas by protecting them from encroachment of land uses that would result in impacts from noise, noxious fumes, glare, shadowing, and traffic.

LU 22.6 Require setbacks and other design elements to buffer residential units to the extent possible from the impacts of abutting agricultural, roadway, commercial, and industrial uses.

LU 22.1 Accommodate the development of single- and multi-family residential units in areas appropriately designated by the General Plan and area plan land use maps.

LU 22.4 Accommodate the development of a variety of housing types, styles and densities that are accessible to and meet the needs of a range of lifestyles, physical abilities, and income levels.

LU 22.10 Require that residential units/projects be designed to consider their surroundings and to visually enhance, not degrade, the character of the immediate area.

OS 17.1 Enforce the provisions of applicable MSHCPs, if adopted, when conducting review of development applications.

Impacts to land use are considered less than significant.

- c) **Less Than Significant Impact.** The City of Wildomar participates in the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The plan establishes areas of sensitivity considered Criteria Areas or Cells. Projects outside of these areas can proceed consistent with the provisions of CEQA and are subject to payment of an MSHCP Mitigation Fee. The MSHCP establishes procedures for the determination of sensitivity. The proposed project is subject to the MSHCP but is outside of any Criteria Area or Cell; therefore, the proposed project will be required to pay the standard impact mitigation fee. The proposed project will not conflict with any habitat conservation plan or natural community conservation plan, and any impacts would be less than significant.

STANDARD CONDITIONS AND REQUIREMENTS

1. Prior to the issuance of a grading permit, the developer shall pay the regional impact mitigation fee established by the Western Riverside County Multiple Species Habitat Conservation Plan.

MITIGATION MEASURES

None required.

11. Mineral Resources

Issues: Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?				✓
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				✓

DISCUSSION

- a) **No Impact.** The proposed project is located within an area designated as MRZ-3 by the Wildomar General Plan (2008). The MRZ-3 zone includes areas where the available geologic information indicates that while mineral deposits are likely to exist, the significance of the deposit is undetermined. A review of project soil types (**Appendix 6**) did not reveal any significant potential for mineral resources at the site. No impact is anticipated.
- b) **No Impact.** There are no known locally important mineral resource recovery sites identified on the project site in the Wildomar General Plan (2008) or in a specific plan or other land use plan of value to the region or to the residents of the state. No impact is expected.

STANDARD CONDITIONS AND REQUIREMENTS

None required.

MITIGATION MEASURES

None required.

12. Noise

Issues: Would the project result in:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) The exposure of persons to, or the generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		✓		
b) The 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 2 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?			✓	

DISCUSSION

- a) **Less Than Significant Impact With Mitigation Incorporated.** The City of Wildomar sets standards for allowable noise levels according to General Plan land use designations. These standards, contained in the Wildomar General Plan, are measured by equivalent continuous sound level (L_{eq}). L_{eq} is a method of describing sound levels that vary over time, resulting in a single decibel value which takes into account the total sound energy over a period of time of interest. The proposed project is currently designated for residential use, with a maximum exterior noise level of 65 L_{eq} (10 minutes) from 7 a.m. to 10 p.m. and 45 L_{eq} (10 minutes) from 10 p.m. to 7 a.m., and a maximum interior noise level of 55 L_{eq} (10 minutes) from 7 a.m. to 10 p.m. and 40 L_{eq} (10 minutes) from 10 p.m. to 7 a.m.

Construction Noise Levels

As the proposed project is developed, it is possible that construction noise will result in a short-term, unsustainable elevation in the amount of noise at the project site. Noise levels associated with the anticipated construction equipment are summarized in **Table 12-1**. Based on these typical noise levels, construction activities associated with future development may result in noise levels that range from 71 to 94 dBA at 50 feet. The loudest noise sources are likely to be earth-moving equipment such as graders, bulldozers, and backhoes that typically are used at the beginning of construction in previously undeveloped areas. However, noise levels would attenuate (drop) as noise source distance increases away from sensitive receptors or by being blocked with intervening features such as walls, fences, and buildings. Construction noise attenuates at a rate of 6 dBA per doubling of distance, such that estimated noise of 90 dBA at 50 feet would be reduced to 84 dBA at 100 feet, and an intervening solid wall or building can reduce noise levels by 5 to 10 decibels as long as it serves to block the line of sight from the noise source to the receptor (FTA 2006).

The site is essentially flat, with approximately 7 feet of elevation change over the 1,286-foot length of the property. While there will be excavation associated with the installation of sewer and water lines, grading activities are anticipated to last approximately 8 days.

Table 12-1
Typical Construction Equipment Noise Levels

Type of Equipment	Typical Noise Level (dBA) 50 Feet from Source
Dozers	85
Cranes	83
Rollers	74
Tractors	80
Front-End Loaders	85
Graders	85
Air Compressors	81
Trucks	88

Source: FTA 2006, Table 12-1, Transit Noise and Vibration Impact Assessment

The City of Wildomar General Plan does not set decibel standards for temporary construction noise impacts. The General Plan contains four policies pertaining to temporary construction noise (Policies N 12.1 through 12.4), but those policies do not set decibel standards and generally require that the City make reasonable efforts to minimize temporary construction noise impacts on adjacent uses. Chapter 9.48 of the Wildomar Municipal Code contains noise standards in addition to the standards included in the General Plan, but Section 9.48.010 specifically states that the noise standards contained in that chapter are not thresholds of significance for the purposes of CEQA review. In addition, Section 9.48.020(l) of the Wildomar Municipal Code states that sound emanating from private construction projects located within one-quarter of a mile of an inhabited dwelling is exempt from the noise ordinance, provided that:

1. Construction does not occur between the hours of 6:00 p.m. and 6:00 a.m. during the months of June through September; and
2. Construction does not occur between the hours of 6:00 p.m. and 7:00 a.m. during the months of October through May.

To determine a threshold for construction noise, worker noise safety standards of other agencies were reviewed. The rationale is that if a maximum construction noise level is generally safe for construction workers who are exposed to the noise all day, then the noise level should be also be safe for adjacent residents who are typically farther from the noise source and exposed only briefly during the day. Noise standards from the California Department of Transportation (Caltrans), the American National Standards Institute (ANSI), the American Conference of Governmental Industrial Hygienists (ACGIH), the Federal Railroad Administration (FRA), and the California Department of Industrial Relations (DIR) were reviewed. Their limits are as follows:

Caltrans Standard Specifications Section 14-8

Do not exceed 86 dBA LMax at 50 feet from the job site activities from 9 p.m. to 6 a.m.

The American National Standards Institute

A10.46-2007, Hearing Loss Prevention in Construction and Demolition Workers. Applies to all construction and demolition workers with potential noise exposures (continuous, intermittent, and impulse) of 85 dBA and above.

The American Conference of Governmental Industrial Hygienists

The ACGIH has established exposure guidelines for occupational exposure to noise in its Threshold Limit Values (TLVs) (85 dBA PEL with a 3 dBA exchange rate).

Federal Railroad Administration

49 CFR 227, Occupational Noise Exposure for Railroad Operating Employees. Requires railroads to conduct noise monitoring and implement a hearing conservation program for employees whose exposure to cab noise equals or exceeds an 8-hour time-weighted-average of 85 dBA. This final rule became effective February 26, 2007.

California Department of Industrial Relations

Employers shall make hearing protectors available to all employees exposed to an 8-hour time-weighted average of 85 decibels or greater at no cost to the employees. Hearing protectors shall be replaced as necessary. The DIR also establishes time-based exposure limits to different noise levels; however, their table starts at the 90 dBA level.

As shown above, these agencies seem to settle on 85 dBA as a reasonable threshold of noise exposure for construction workers. It should be noted that this threshold is based on worker protection, which assumes continuous exposure for the worker. Construction activities would be intermittent and temporary, and it is unlikely that a noise-sensitive receptor would be exposed to construction-related noise levels above 85 dBA continuously for the length of the project's construction. However, the City has determined that exposure of noise-sensitive receptors to construction noise levels above 85 dBA would result in a potentially significant impact.

As shown in **Table 12-1**, most of the probable construction equipment has an upper range of noise that is consistent with the 85 dBA threshold. As shown on **Figure 2**, with the exception of a single home at the intersection of the proposed A Street and Central Street, all of the residences on the west side of A Street are more than 100 feet from the nearest construction area. Existing homes across the Murrieta Creek Channel right-of-way to the northeast are approximately 70 to 100 feet from the construction area for the proposed homes.

However, for the home at the intersection of the proposed A Street and Central Street, the distance to the roadway construction is approximately 15 feet, and the homes located to the southwest of the project site along Darby Street are also located approximately 10 to 20 feet from the site boundary. Noise-sensitive uses located between 10 and 70 feet from the project site could potentially be exposed to noise levels above 85 dBA during the site preparation and grading phase of project construction. Noise from construction activities at these locations would be sporadic and limited during the construction period. To address this impact, mitigation measure **NOI-1** requires that the construction contractor follow best management practices that include, but are not limited to, restricting grading and excavation activities to the hours of 9:00 a.m. to 4:00 p.m. on non-holiday Mondays through Fridays. This ensures that the loudest construction activities occur outside of recognized weekend, holiday, sleeping, and rest time; using grading and excavation equipment that has been certified to generate noise levels of no more than 85 dBA at a distance of 50 feet; either erecting a temporary noise barrier or developing the proposed masonry wall along the western, northern, and southern perimeters of the site; and coordinating with the adjacent residents such that the residents are fully aware of the construction schedule.

Compliance with mitigation measure **NOI-1** will ensure notification of the neighborhood, a contact to call concerning noise, a requirement to conduct the noisiest construction activities (e.g., grading and trenching) during the time of day when most residents are at work, and that the noise wall is constructed to reduce noise early in the project. This will ensure that noise levels are at or below the 85 dBA threshold; therefore, this impact is less than significant with mitigation incorporated.

Operational Noise Levels

Noise in the city is dominated by I-15 and traffic on local roadways. **Table 12-2** shows the existing noise levels along Central Street. As shown in **Table 12-2**, the estimated noise levels along Central Street are 59.9 dBA CNEL, which exceeds the 55 dBA CNEL standard established in Table 1 of Section 9.48.040, General Sound Level Standards, of the City of Wildomar Municipal Code. However, as shown in **Figure 2**, the perimeter of the project site would include a masonry wall with a height of approximately 5 feet 6 inches. Sound levels can be reduced by placing barriers between the noise source and the receiver. In general, barriers contribute to decreasing noise

levels only when the structure breaks the “line of sight” between the source and the receiver. Noise barriers can be constructed from earth, concrete, masonry, wood, metal, and other materials. To effectively reduce sound transmission through the barrier, the material chosen must be rigid and sufficiently dense (at least 20 kilograms per square meter). All noise barrier material types are equally effective, acoustically, if they have this density (FHWA 2015). The noise reduction from the masonry wall would reduce noise levels from Central Street by approximately 5 dBA, such that noise levels are estimated to be 54.9 dBA, which is below the maximum established in Table 1 of Section 9.48.040, General Sound Level Standards, of the City of Wildomar Municipal Code.

**Table 12-2
Existing Noise Contour Distance**

Roadway Segment	Existing CNEL at 100 Feet from Centerline	Distance to CNEL Contour from Centerline of Roadway (feet)*			
		70 CNEL	65 CNEL	60 CNEL	55 CNEL
Central Street, west of Palomar Street	59.9	—	46	98	211

Traffic noise calculation sheets are available in Appendix 9.

* Does not account for attenuating features such as intervening structure, walls, or earthen berms.

The proposed project would introduce new noise sources due to the development of new residential uses on currently vacant land. The primary source of community noise would be from the installation heating, ventilation, and air conditioning (HVAC) systems. The HVAC equipment on the new residences would comply with the City of Wildomar noise ordinance. In addition, noise from the equipment would likely be indistinguishable in the ambient noise environment due to traffic noise along Central Street and the noise attenuation due to the distance between the HVAC systems and nearby residences. Thus, noise impacts from HVAC equipment would be less than significant.

- b) **Less Than Significant Impact.** Construction of future development on the project site would have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. **Table 12-3** displays vibration levels for typical construction equipment.

**Table 12-3
Typical Construction-Equipment Vibration Levels**

Equipment	PPV at 25 Feet (in/sec) ¹	Approximate Lv at 25 Feet ²
Large Bulldozer	0.089	87
Trucks	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Source: FTA 2006

¹ Where PPV is the peak particle velocity

² Where Lv is the velocity level in decibels (VdB) referenced to 1 micro-inch/second and based on the root mean square (RMS) velocity amplitude.

Future development on the project site may require the use of bulldozers and trucks. According to the Federal Transit Administration (FTA) (2006), vibration levels associated with the use of a large bulldozer are 0.089 inches per second (in/sec) peak particle velocity (PPV) and 87 vibration decibels [VdB referenced to 1 in/sec and based on the RMS velocity amplitude] at 25 feet, as shown in **Table 12-3**. Using the FTA-recommended procedure for applying a propagation adjustment to these reference levels, predicted worst-case vibration levels of approximately 0.03 in/sec PPV and 81 dBA at approximately 50 feet from the project site's boundary could occur from use of a large bulldozer. These vibration levels would not exceed the California Department of Transportation's recommended standard of 0.2 in/sec PPV (Caltrans 2002) with respect to the prevention of structural damage for normal buildings, which standard is also incorporated into the Noise Element of the City of Wildomar General Plan. Vibration levels at greater distances would be substantially diminished. Because zoning provides for residential development, no vibration impacts are anticipated from operations. Any impacts would be less than significant.

- c) **Less Than Significant Impact.** Buildout of the proposed project will result in new homes with residents that may increase the ambient noise levels in the area from the current condition. However, the noise from the project will be similar in scope and type to the existing residential units in the area (i.e., periodic noise from lawn mowers, car engines, leaf blowers, children). As the proposed residential development, and the associated noise from the new residents, is similar to the existing uses in the area, no substantial increases in ambient noise levels are anticipated and this impact is considered less than significant.
- d) **Less Than Significant Impact With Mitigation Incorporated.** Future construction activity on the project site would temporarily increase ambient noise levels above existing levels, as discussed in more detail in Issue a) above. This condition is expected to occur as the site is graded and as the homes and other site improvements are constructed. There will be a temporary increase in noise as the site is prepared for construction of the roadway and with construction of the homes. Compliance with the City's noise ordinance and implementation of mitigation measure **NOI-1** will ensure that these impacts are less than significant with mitigation incorporated.
- e) **No Impact.** The project site is not located within the influence area for any airport. The closest public general aviation airfield is French Valley Airport, approximately 8.5 miles southeast of the project site. The project site is outside of the airport noise and safety influence or flight surface control areas. No impact is expected.
- f) **Less Than Significant Impact.** Skylark Field is located approximately 2 miles northwest of the project site at the south end of Lake Elsinore. As shown on Figure 5 of the Elsinore Area Plan (2003), the proposed project is outside the Airport Influence Policy area for Skylark Field. The proposed project is not within an airport master plan area and does not require review by the Airport Land Use Commission. Because the proposed project is distant from the airfield and not part of the influence policy area for the airport, aircraft will be higher in overflight of the property and would not subject the project site to excessive noise. This impact is considered less than significant.

STANDARD CONDITIONS AND REQUIREMENTS

1. All construction and general maintenance activities shall be limited to the hours and decibel levels described in Wildomar Municipal Code Chapter 9.48, except as further restricted by mitigation measure **NOI-1**.

MITIGATION MEASURES

NOI-1 The applicant shall require by contract specifications that the following construction best management practices (BMPs) be implemented by contractors to reduce construction noise levels:

- a) Notification shall be mailed to owners and occupants of all developed land uses immediately bordering the project site, immediately across the Murrieta Creek Channel from the project site, and directly across the street from the project site providing a schedule for major construction activities that will occur for the duration of the construction period. In addition, the notification will include the identification of and contact number for a community liaison and a designated construction manager who would be available on-site to monitor construction activities. The construction manager will be located at the on-site construction office during construction hours for the duration of all construction activities. Contact information for the community liaison and the construction manager will be located at the construction office, City Hall, and the police department.
- b) Site grading and excavation activity shall be limited to weekdays between 9:00 a.m. and 4:00 p.m., and no construction activities shall occur on Saturdays, Sundays, or federally recognized holidays.
- c) The construction contractor shall utilize grading and excavation equipment that is certified to generate noise levels of no more than 85 dBA at a distance of 50 feet.
- d) All construction equipment shall be properly maintained with operating mufflers and air intake silencers as effective as those installed by the original manufacturer.
- e) The construction contractor shall erect a temporary noise construction barrier along the southwestern, northwestern, and western perimeters of the project site. If a temporary construction barrier is deemed technically infeasible, the contractor shall construct a masonry wall along the southern and western perimeters of the project prior to any other phase of construction activity, including site grading. The applicant shall demonstrate that the temporary barrier achieves a noise reduction of at least 5 decibels during construction activities.
- f) The construction contractor shall evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets, for example, and implement such measures if such measures are feasible and would noticeably reduce noise impacts.
- g) The construction contractor shall monitor the effectiveness of noise attenuation measures by taking noise measurements.

Timing/Implementation: Prior to any earth movement permit or activity

Enforcement/Monitoring: City of Wildomar Planning and Public Works Departments

13. Population and Housing

Issues: Would the project:	Potentially Significant Impact	Less Than Significant Impact 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?				✓

DISCUSSION

- a) **Less Than Significant Impact.** The proposed project will eventually result in 15 additional single-family homes. Using January 1, 2014, California Department of Finance (DOF) estimates, an average of 3.3 persons per household is assumed for residences within the city. Considering this estimate, the proposed project will result in approximately 50 new residents. As of 2014, according to the DOF, Wildomar’s estimated population was 33,718. The addition of 50 residents to the city’s population represents an increase of less than 0.001 percent. Any impact would be less than significant.
- b, c) **No Impact.** No housing units or people would be affected, and the construction of replacement housing is not required. No impact is expected.

STANDARD CONDITIONS AND REQUIREMENTS

None required.

MITIGATION MEASURES

None required.

14. Public Services

Issues: Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 following public services:				
a) Fire protection?			✓	
b) Police protection?			✓	
c) Schools?			✓	
d) Parks?			✓	
e) Other public facilities?			✓	

DISCUSSION

- a) **Less Than Significant Impact.** The Riverside County Fire Department (RCFD) provides fire protection and safety services to the City of Wildomar. The proposed project will be primarily served by Wildomar Fire Station #61, located at 32637 Gruwell Street, approximately 200 feet from the project site. In addition to Fire Station #61, several other Riverside County fire stations in the surrounding area would be able to provide fire protection safety services to the project site if needed. The 2011 RCFD annual report concluded that there were a total of 2,674 incidents in 2010 and 2,555 incidents in 2011 in Wildomar. Considering the number of housing units in the city, 10,806 in 2010 and 10,840 in 2011, there were 0.25 incidents per household in 2010 and 0.24 incidents per household in 2011. The proposed project will eventually add 15 single-family homes. Considering the 2011 incident rate of 0.24 incidents per housing unit, the proposed project may be projected to generate 3.6 annual incidents. An additional 3.6 incidents would represent a 0.14 percent increase in the number of incidents in Wildomar, which is considered less than significant.

A standard condition of approval for the proposed project includes compliance with the requirements of the Riverside County Fire Department and the payment of standard development impact fees by any future home builder pursuant to Section 3.44.080 of the Wildomar Municipal Code. The proposed project is not expected to result in activities that create unusual fire protection needs or significant impacts. Any impact would be considered incremental and less than significant.

- b) **Less Than Significant Impact.** Police protection services are provided by the Riverside County Sheriff's Department (RCSD). The nearest sheriff's station is located at 333 Limited Street in Lake Elsinore, approximately 5.3 miles from the project site. Traffic enforcement is provided for

Riverside County in this area by the California Highway Patrol, with additional support from the local Riverside County Sheriff's Department.

For the purpose of establishing acceptable levels of service, the Riverside County Sheriff's Department maintains a recommended service ratio of 1.2 sworn law enforcement personnel for every 1,000 residents (City of Wildomar 2008). As stated in Issue a) in subsection 13, Population and Housing, of this Initial Study, the proposed project will result in approximately 50 new residents. Considering the RCSD's recommended service ratio, the population increase resulting from the proposed project would require 0.06 additional sworn law enforcement personnel.

In addition, as a standard condition of approval, any future building permit applicant will be required to pay the standard development impact fees pursuant to Section 3.44.080 of the Wildomar Municipal Code. The proposed project is not expected to result in activities that create unusual police protection needs or result in the need to construct new facilities. Any impacts would be considered incremental and less than significant.

- c) **Less Than Significant Impact.** The project site is located in the Lake Elsinore Unified School District (LEUSD). The district has established school impact mitigation fees to address the facility impacts created by residential, commercial, and industrial development.

According to the LEUSD's (2012) School Facilities Needs Analysis, the generation rates for single-family homes include 0.2877 per unit for elementary school (K-5), 0.1376 per unit for middle school (grades 6-8), and 0.1702 per unit for high school (grades 9-12). Based on these rates, the project will generate four elementary school students, two middle school students, and three high school students, for a total of seven students. As of the 2011/12 academic year, the LEUSD enrolled 22,171 students. The proposed project will represent an increase in LEUSD enrollment of less than 1 percent.

Current state law requires that impacts to current school facilities be mitigated through mandatory development impact fees. The fees enacted within the LEUSD of \$3.10 per square foot of residential development will be collected for future development as stated in standard conditions of approval. This standard condition of approval will act to fully mitigate any impact the proposed project will have on the LEUSD's facilities. Any impact would be less than significant.

- d) **Less Than Significant Impact.** The City of Wildomar owns and manages three public parks: Marna O'Brien Park, Regency Heritage Park, and Windsong Park. In addition, the city contains 306.93 acres of land dedicated to open space recreation and 220.92 acres of land dedicated to open space conservation. Upon city incorporation in 2008, the City of Wildomar adopted the Riverside County Municipal Code. The code includes an open space requirement of 3 acres of neighborhood and community parkland per 1,000 residents for residential subdivisions. The completion of the proposed project will result in a population increase of approximately 50 residents in Wildomar, generating a demand for 0.15 acres of parkland. This incremental increase in the demand for parkland will be offset by the standard condition of payment of Quimby park impact fees as required by Section 16.20.020 of the Wildomar Municipal Code.

- e) **Less Than Significant Impact.** Development associated with the proposed project may result in a slight increase in the demand for other governmental services, economic development, and the other community support services commonly provided by the City of Wildomar, including but not

limited to City Hall, the Mission Trail Library, and the Animal Friends of the Valleys animal shelter. As stated in Issue a) in subsection 13, Population and Housing, of this Initial Study, the proposed project will result in approximately 50 new residents. Considering the 2014 population of Wildomar of 33,718, the proposed project would result in a population increase of 0.001 percent. Impacts to community support services as a result of this incremental population increase would be less than significant.

A standard condition of approval for the proposed project includes the payment of standard development impact fees pursuant to Section 3.44.080 of the Wildomar Municipal Code. The proposed project is not expected to result in activities that create unusual demands on local government services. Any impact would be less than significant.

STANDARD CONDITIONS AND REQUIREMENTS

1. Prior to issuance of any building permit, the project applicant(s) for future development shall pay the required development impact fees for the Riverside County Sheriff's Department, Riverside County Fire Department, and other governmental services pursuant to Chapter 3.44 of the Wildomar Municipal Code and in effect at the time of building permit issuance.
2. Prior to issuance of any building permit, the project applicant(s) for future development shall pay the required school impact mitigation fees established by the Lake Elsinore Unified School District and in effect at the time of building permit issuance.
3. Prior to issuance of any building permit, the project applicant(s) for future development shall pay the required Quimby park impact fees established by the City of Wildomar and in effect at the time of building permit issuance.

MITIGATION MEASURES

None required.

15. Recreation

Issues: Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) 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) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?				✓

DISCUSSION

- a) **Less Than Significant Impact.** The proposed project and future residential development associated with the proposed project may result in the incremental increased use of existing neighborhood and regional parks or other recreational facilities. However, considering the very small population increase of 50 residents, the impacts are expected to be less than significant.
- b) **No Impact.** The proposed project and future residential development associated with the proposed project would not be expected to require the construction or expansion of new recreational facilities. There are no parks or recreational facilities included in the project. As a result, no impacts are anticipated.

STANDARD CONDITIONS AND REQUIREMENTS

1. Prior to issuance of any building permit, the project applicant(s) for future development shall pay the required park impact fees established by the City of Wildomar and in effect at the time of building permit issuance.

MITIGATION MEASURES

None required.

16. Transportation/Traffic

Issues: Would the project:	Potentially Significant Impact	Less Than Significant Impact 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 result in substantial safety risks?				✓
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			✓	
e) Result in inadequate emergency access?				✓
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			✓	

DISCUSSION

- a) **Less Than Significant Impact.** Intersection and roadway functioning is usually described by its level of service (LOS). LOS A constitutes light traffic conditions with no interruptions in service or delays at intersections, while LOS F represents congested and unstable conditions with slow moving traffic accompanied by significant delays at many intersections. The City of Wildomar General Plan (2008) establishes a citywide goal for intersection performance during peak traffic periods at LOS D or better.

Development associated with the proposed project would result in additional vehicle trips on the citywide road network. Assumptions regarding the number of trips a proposed project will generate are based on trip generation rates in the Institute of Transportation Engineers, *Trip*

Generation Manual, 8th Edition (2008). The manual, which determines daily traffic trips based on land use, states that detached single-family residential units generate 0.75 a.m. peak-hour trips, 1.01 p.m. peak-hour trips, and 9.57 daily trips. Considering these generation rates, the proposed development is projected to generate a total of 144 additional daily vehicle trips on a weekday, 11 of which will occur during the morning peak hour and 15 of which will occur during the evening peak hour.

The Wildomar General Plan (2008) also classifies local roadways by the number of lanes of the road and certain design standards for vertical and horizontal roadway alignment. According to these criteria, both Central Street and Gruwell Street are categorized as secondary collector roadways south of Palomar Street. For collector roadways to be classified as a LOS D, the maximum allowed average daily trips (ADT) are 23,300 (City of Wildomar 2008). The 2013 Riverside County Transportation Department (RCTD) traffic count book included a 9,661 ADT count for Central Street north of Grand Avenue and a 1,949 ADT count for Gruwell Street south of Palomar Street (RCTD 2013). A 9,661 ADT for Central Street allows a level of service lower than D, and an additional 144 vehicle trips would not impact this designation. A 1,949 ADT count for Gruwell Street allows a level of service lower than D, and an additional 144 vehicle trips would not result impact this designation. The additional 144 vehicle trips resulting from the proposed project would represent a less than 0.01 percent increase to a collector roadway already operating at LOS D.

The proposed project represents a population increase of approximately 50 people, representing an increase of less than .001 percent to the current population of the city. Such a small increase in population is not enough to affect public transit systems or non-motorized transit opportunities. Any impact would be less than significant.

- b) **Less Than Significant Impact.** Every county in California is required to develop a Congestion Management Program (CMP) that looks at the links between land use, transportation, and air quality. In its role as Riverside County's Congestion Management Agency, the Riverside County Transportation Commission (RCTC) prepares and periodically updates the county's CMP to meet federal Congestion Management System guidelines as well as state CMP legislation. The Southern California Association of Governments (SCAG) is required under federal planning regulations to determine that CMPs within its region are consistent with the Regional Transportation Plan. The RCTC's current Congestion Management Program was adopted in March 2011; of the roadways in Wildomar, Interstate 15 (I-15) is included in the CMP.

The RCTC's Congestion Management Program does not require traffic impact assessments for development proposals. However, local agencies are required to maintain the minimum level of service thresholds included in their respective general plans. If a street or highway segment included as part of the CMP falls below the adopted minimum LOS E, a deficiency plan is required.

Some of the vehicle trips generated by residential development on the project site will connect to the CMP network at Interstate 15, and development associated with the proposed project may add 15 p.m. peak-hour vehicle trips and 11 a.m. peak-hour vehicle trips to the designated CMP network at the Baxter Road/I-15 ramps. However, these additional trips do not exceed the City of Wildomar's specialized significance criteria for determining whether to study traffic impacts if a project that generates 50 p.m. peak-hour vehicle trips or that increases an intersection delay by more than 5.0 seconds. Any generation of traffic less than this is considered less than significant.

The proposed project is projected to generate 15 p.m. peak-hour trips; therefore, the impact would be less than significant.

- c) **No Impact.** The proposed project would not 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. The maximum building height of the project is significantly less than the height of the terrain in the vicinity of the project. Since the location and height of the project would not affect air traffic patterns or aircraft operations from any private or public airport, no impacts are expected.
- d) **Less Than Significant Impact.** The proposed project will include the creation of a roadway (A Street). A Street will run along the southwestern boundary of the project site, will be accessed via Central Street (right turn in), and will terminate at Gruwell Street (right turn out) as shown on **Figure 2**. The City has site design criteria governing the placement of driveways along A Street to allow adequate site distance and turning movements, allowing any impact to be less than significant.
- e) **No Impact.** The proposed project would include the creation of a roadway (A Street). Traffic will flow from Central Street, through A Street and out to Gruwell Street. A Street will be designed to provide adequate emergency access. The proposed project would not interfere with area-wide emergency access or the implementation of local emergency response plans. No impact is anticipated.
- f) **Less Than Significant Impact.** The proposed project will construct curb improvements along A Street consistent with City requirements. All roadway and driveway improvements within the City's right-of-way will be designed to comply with design criteria contained in Chapter 16.24 of the Wildomar Municipal Code, including the construction of sidewalks, curbs, and gutters along the property frontage. The proposed project site is not located on a current Riverside Transit Authority transit line, bike lane, or pedestrian path.

STANDARD CONDITIONS AND REQUIREMENTS

1. Prior to issuance of any building permit on the project site, any project applicant(s) shall pay the appropriate Transportation Uniform Mitigation Fee to the Western Riverside County Council of Governments.

MITIGATION MEASURES

None required.

17. Utilities and Service Systems

Issues: Would the project:	Potentially Significant Impact	Less Than Significant Impact 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 stormwater 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?			✓	

DISCUSSION

- a) **Less Than Significant Impact.** The San Diego Regional Water Quality Control Board regulates wastewater discharges within the portion of Wildomar encompassing the project site.²

² The city lies within two different watersheds and therefore is subject to the jurisdiction of two different regional boards: Santa Ana (Lake Elsinore) and San Diego (Santa Margarita River). This would require the City to administer two separate MS4 permits, which would add considerably to the cost and burden of development. The City requested to be governed by one MS4 permit to reduce costs. The City and the Regional Boards agreed that the City would be governed by the MS4 permit issued by the San Diego Regional Water Quality Control Board for the Santa Margarita River watershed. So, no matter where a project is located within the city, it must comply with the MS4 permit issued by the San Diego Regional Board for the Santa Margarita River watershed. However, the Santa Ana Regional Water Quality Control Board will continue to regulate grading activities as well as any hydrology changes within its permit area.

Development on the project site would receive wastewater services from the Elsinore Valley Municipal Water District. Sewer service will be provided through connection to an existing 8-inch gravity feed sewer line in Central Street. The proposed project is within the EVMWD's Regional Sewershed, which manages and directs sewage flows from approximately 56,100 acres to the Regional Water Reclamation Facility (WRF) at 14980 Strickland Avenue in Lake Elsinore. Flows from the project site will be directed from the project site through the existing B-2 LS lift station located at 32741 Mission Trail in Wildomar (EVMWD 2008a). Per California Regional Water Quality Control Board Order No. R8-2005-0003, the Regional WRF has a capacity of 8 million gallons per day (mgd) with an average flow of approximately 4.66 mgd, resulting in a treatment capacity of approximately 3.34 mgd (EVMWD 2008a). The proposed project will not result in a flow of wastewater that exceeds the permitted flow of this facility. Any impact would be less than significant.

- b) **Less Than Significant Impact.** The EVMWD will provide water and wastewater services for the proposed project. To anticipate and meet the service needs of future growth, the EVMWD has an adopted Urban Water Management Plan (UWMP) (2011) and a Wastewater Master Plan (2008a).

The EVMWD Urban Water Management Plan established a baseline per capita water demand for residents within the district's service area by compiling overall water demands for a ten-year period from 1999 to 2008. This per capita demand rate is measured in gallons per capita per day (gpcd). The 2010 baseline water demand baseline is 248 gpcd. Based on this estimate, the proposed project would result in an increased water demand of 12,400 gpd (13.88 acre-feet per year). The UWMP states that the current average daily production of potable water is 43,800 acre-feet per year and that the EVMWD has the capacity to produce 66,500 acre-feet per year of potable water. Considering the incremental increase in potable water production required by the proposed project and the remaining production capacity of the EVMWD, the proposed project will have a less than significant impact on water treatment and conveyance facilities.

For this study, assumptions on wastewater production from the proposed project are based on the EVMWD's 2008 Wastewater Master Plan, which estimated that land designated for medium-density residential use produced 900 gallons of wastewater per day per acre. Using this estimation, the proposed project would produce 3,744 gallons of wastewater per day. Current capacity at lift station B-2 LS is 3,600 gallons per minute, which would allow flows from the proposed project (EVMWD 2008a). The Lake Elsinore Regional WRF has an existing average flow of 8 mgd and a peak flow of 17.6 mgd. Estimated wastewater flows from the proposed project would result in an incremental increase to treatment demands at the treatment plant. Any impact would be less than significant.

- c) **Less Than Significant Impact.** A preliminary hydrology study performed for the proposed project by RDS and Associates in May 2013 determined that current stormwater flows from the site are 3.5 cubic feet per second (cfs) for 10-year storm events and 6.1 cfs for 100-year storm events. The proposed project will include the construction of A Street, which will direct flows via rolled curb and gutter southwesterly to Central Street. Flows within A Street will be directed to a low point fronting Lot 15. The low point within A Street will be conveyed through a vegetated swale in Lot 15. The filtered flows from the vegetated swale will then outlet to the Murrieta Creek Channel via a grated inlet and 24-inch reinforced concrete pipe. The existing drainage flows discharged into the Murrieta Creek Channel for the developed condition of the proposed project were calculated to be 5.3 cfs and 8.7 cfs for the 10-year and 100-year storms, respectively (RDS and Associates 2013a; **Appendix 7**).

The stormwater system as described will be discharged directly into a publicly owned, operated, and maintained MS4, and the discharge will be in full compliance with Riverside County Flood Control requirements for connections and discharges to the MS4.

Finally, the vegetated swale, and the outlet to the Murrieta Creek Channel will be owned and maintained by the homeowners association of the proposed project, allowing any impact to existing stormwater facilities to be less than significant.

- d) **Less Than Significant Impact.** The project site is within the service boundary for the EVMWD, and future development on the project site would connect to the EVMWD's water service infrastructure. Using EVMWD baseline per capita water demand rates and population projection information provided by the California Department of Finance (DOF), the proposed project is estimated to result in an increased annual demand of 13.88 acre-feet of water (EVMWD 2011; DOF 2014).³ The projected demand of 13.88 acre-feet per year would represent an increase of less than 0.01 percent to the water demand of the district through 2034 (EVMWD 2011). Furthermore, since the proposed project would not result in any change to the current land use designation, any increase in water demand resulting from the proposed project has been anticipated by the EVMWD and was considered in the 2010 Urban Water Management Plan. Any impact would be less than significant.
- e) **Less Than Significant Impact.** The proposed project would connect to existing wastewater service infrastructure provided by the EVMWD. To determine future demand for wastewater facilities, the EVMWD relies on recommended generation factors included in Appendix B of the Wastewater Master Plan (2008a). The recommended generation factors are determined according to land use designation, with the designation of the proposed project being Medium Density Residential (MDR). The generation factor for the MDR land use is 900 gallons per day per acre (EVMWD 2008a). Using this factor, the proposed project may be expected to result in an additional wastewater demand of 3,744 gpd. An increase of 3,744 gpd represents an increase of less than 0.01 percent to the wastewater demand of the EVMWD and its facilities. Any impact would be less than significant.
- f, g) **Less Than Significant Impact.** The main disposal site in the vicinity of the project site is the El Sobrante Landfill in Corona. The El Sobrante Landfill (CalRecycle Solid Waste Information System Number 33-AA-0217) is projected to reach full capacity of 184,930,000 tons in 2045 (CalRecycle 2013). The landfill covers approximately 1,322 acres and receives approximately 16,054 tons of solid waste per day.

The California Department of Resources Recycling and Recovery (CalRecycle) collects and maintains data that records the rate of solid waste disposal at local, regional, and statewide levels. CalRecycle inputs this data into the Disposal Reporting System (DRS), which is used to determine per capita disposal rates as well as other solid waste disposal statistics. There is currently no regional reporting system in place for inland Southern California, so for this analysis the statewide per capita disposal rate will be used. The most current data available (2011) from

³ Calculation includes the EVMWD's base daily per capita water use of 248 gallons per day (gpd) and the DOF's average 2014 population per household estimate of 3.3 people (15 DUs x 3.3 = 49.5 (50) people; 50 people x 248 gpd = 12,400 gpd; 12,400 gpd x 365 = 4,526,000 gallons per year (gpy); 4,526,000 gpy/ 325,851 = 13.88 acre-feet per year).

the CalRecycle DRS assigns a disposal rate of 4.4 pounds per day to the residents of California (CalRecycle 2011). Using the CalRecycle DRS disposal rates for California residents, the 50 projected new residents of the proposed project may be expected to generate 220 pounds per day of solid waste. This increase in solid waste generation is within the capacity of the El Sobrante Landfill, and impacts would be less than significant.

STANDARD CONDITIONS AND REQUIREMENTS

None required.

MITIGATION MEASURES

None required.

V. MANDATORY FINDINGS OF SIGNIFICANCE

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

DISCUSSION

The following are Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

a) **Less Than Significant Impact With Mitigation Incorporated.** Based on evaluations and discussions contained in this IS/MND, the proposed project and associated future residential development on the project site have a very limited potential to incrementally degrade the quality of the environment because the site was previously disturbed, is not in an environmentally sensitive location, and is consistent with the City of Wildomar General Plan. As a result, the proposed project would not significantly affect the environment following implementation of the mitigation measures contained in this IS/MND.

b) **Less Than Significant Impact With Mitigation Incorporated**

Aesthetics

Implementation of the proposed project and associated future residential development on the project site would not contribute to cumulative visual resource or aesthetic impacts. The proposed project will include residential development that is consistent with existing surrounding land uses, and the City’s plot plan application process will ensure that future residential development is in compliance with all aesthetic zoning development standards. Any impact would be less than cumulatively considerable.

Agricultural Resources

Implementation of the proposed project and associated future residential development on the project site would not contribute to cumulative impacts to agricultural resources or forestland impacts. Thus, less than cumulatively considerable impacts to agricultural resources and forestland resources are anticipated under cumulative conditions.

Air Quality

The SCAQMD's approach for assessing cumulative impacts is based on the AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal and California Clean Air Acts. If a project is consistent with AQMP, the SCAQMD considers the project to have less than significant cumulative impacts. As discussed earlier, the proposed project would be consistent with the AQMP, which is intended to bring the South Coast Air Basin into attainment for all criteria pollutants. In addition, the construction and operations emissions calculated for the proposed project (see **Tables 3-1, 3-2, and 3-3**) are less than the applicable SCAQMD daily significance thresholds that are designed to assist the region in attaining the applicable state and national ambient air quality standards. As such, cumulative impacts would be less than cumulatively considerable.

Biological Resources

The potential for impacts to raptors and migratory birds is addressed through mitigation. The cumulative biological impacts associated with the project will be mitigated through payment of mitigation fees required by the MSHCP. Therefore, any impact would be less than cumulatively considerable.

Cultural Resources

Future residential development on the project site could contribute to an increase in cultural resource impacts. However, mitigation measures identified in subsection 5, Cultural Resources, of this IS/MND would reduce the potential impacts associated with future development on the project site and ensure that any cultural resources discovered during construction are properly handled and preserved. Thus, the project would have a less than cumulatively considerable impact.

Geology and Soils

Project-related impacts on geology and soils associated with future residential development on the project site would be site-specific. The mitigation measures in subsection 6, Geology and Soils, would ensure that the development on the site would not contribute to seismic hazards or water quality impacts associated with soil erosion. As geology and soils impacts are site-specific, the project will not have a cumulatively considerable impact.

Greenhouse Gas Emissions

The greenhouse gas analysis provided in subsection 7, Greenhouse Gas Emissions, evaluated the proposed project's cumulative contribution to global climate change and determined that the project would not create a cumulatively considerable environmental impact resulting from greenhouse gas emissions.

Hazards and Hazardous Materials

The proposed project is not expected to utilize or contribute to hazards associated with the accidental release of hazardous materials. However, even if hazardous materials are used on the site, compliance with federal, state, and City regulations will ensure that cumulative hazard conditions are less than cumulatively considerable.

Hydrology and Water Quality

Future residential development on the project site has the potential to result in cumulative hydrology and water quality impacts; however, implementation of the best management practices (BMPs) included in the preliminary water quality management plan and a stormwater pollution prevention plan (SWPPP) will ensure that any cumulative impact is less than cumulatively considerable.

Land Use and Planning

The proposed project and associated future residential development on the project site are consistent with the existing land use designation of the General Plan and with the zoning district. The proposed division of the site is consistent with other development in the project area. Future development of each parcel will require completion of a plot planning process. Because the proposed project area is surrounded by residential development, and the project is consistent with the General Plan designation for the site, the project would result in no cumulative impacts to land uses.

Mineral Resources

The proposed project and associated future residential development on the project site would not result in any site-specific significant impacts to mineral resources. Less than cumulatively considerable impacts under cumulative conditions are anticipated.

Noise

Future residential development on the project site would result in incremental temporary and permanent changes in the ambient noise levels in the vicinity. However, the proposed project is consistent with the current land use designation of the project site as well as the land uses surrounding the project site. In addition, there are no pending or approved projects in the immediate vicinity of the project site that would create cumulative noise impacts to which this project could contribute. Any impacts would be less than cumulatively considerable.

Population and Housing

Cumulative development in the vicinity of the project would increase the population and number of housing units in Wildomar and Riverside County. However, development at the proposed project site is consistent with current land use designations and growth assumed in the Land Use Element of the Wildomar General Plan. The cumulative environmental and growth inducement effects are evaluated in the technical sections of this IS/MND. Given that this growth is anticipated in the General Plan, this impact is considered less than cumulatively considerable.

Public Services

The proposed project is not expected to contribute to cumulative public service impacts. Future regional development may result in impacts to public services. However, the incremental impacts on public services from this project and from future development will be offset through the implementation of development impact fees. Less than cumulatively considerable public services impacts are anticipated.

Recreation

Cumulative development within the city and the projected population increase of 50 people due to the proposed project may lead to cumulative impacts to recreation facilities. However, these impacts are offset by the payment of park and recreation fees, allowing any impact to be less than cumulatively considerable.

Transportation/Traffic

Cumulative impacts to traffic within the region are anticipated by considering current approved land use designations. Specific ranges of the daily trips are assigned to particular land use types. Since the proposed project will not include a change in the land use designation of the project site the proposed project's contribution to cumulative traffic impacts will be less than significant. In addition, as a standard condition, the project applicant will be responsible to implement and pay its fair-share contribution toward necessary improvements through payment of the Transportation Uniform Mitigation Fee. The project's impacts to cumulative traffic conditions would be less than cumulatively considerable.

Utilities and Service Systems

The proposed project and any future development of the project site would not result in any impacts to utilities and service systems. However, future development of the surrounding areas could result in potential impacts to utilities and service systems. These potential impacts would be offset by the payment of service fees and would therefore be less than cumulatively considerable.

- c) **Less Than Significant Impact With Mitigation Incorporated.** The proposed project and associated future development of single-family residential homes does not have the potential to significantly adversely affect humans, either directly or indirectly. While a number of the future development impacts were identified as having a potential to significantly impact humans, with the implementation of the identified mitigation measures and standard requirements and conditions of the City of Wildomar, these impacts are expected to be less than significant. With implementation of the identified measures, the proposed project and associated future residential development is not expected to cause significant adverse impacts to humans.

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APPENDICES

**APPENDIX 1: TENTATIVE TRACT MAP
No. 33840**

TENTATIVE TRACT MAP NO. 33840

AMENDMENT NO. 4

IN THE CITY OF WILDOMAR, COUNTY OF RIVERSIDE

APN: 376-043-027

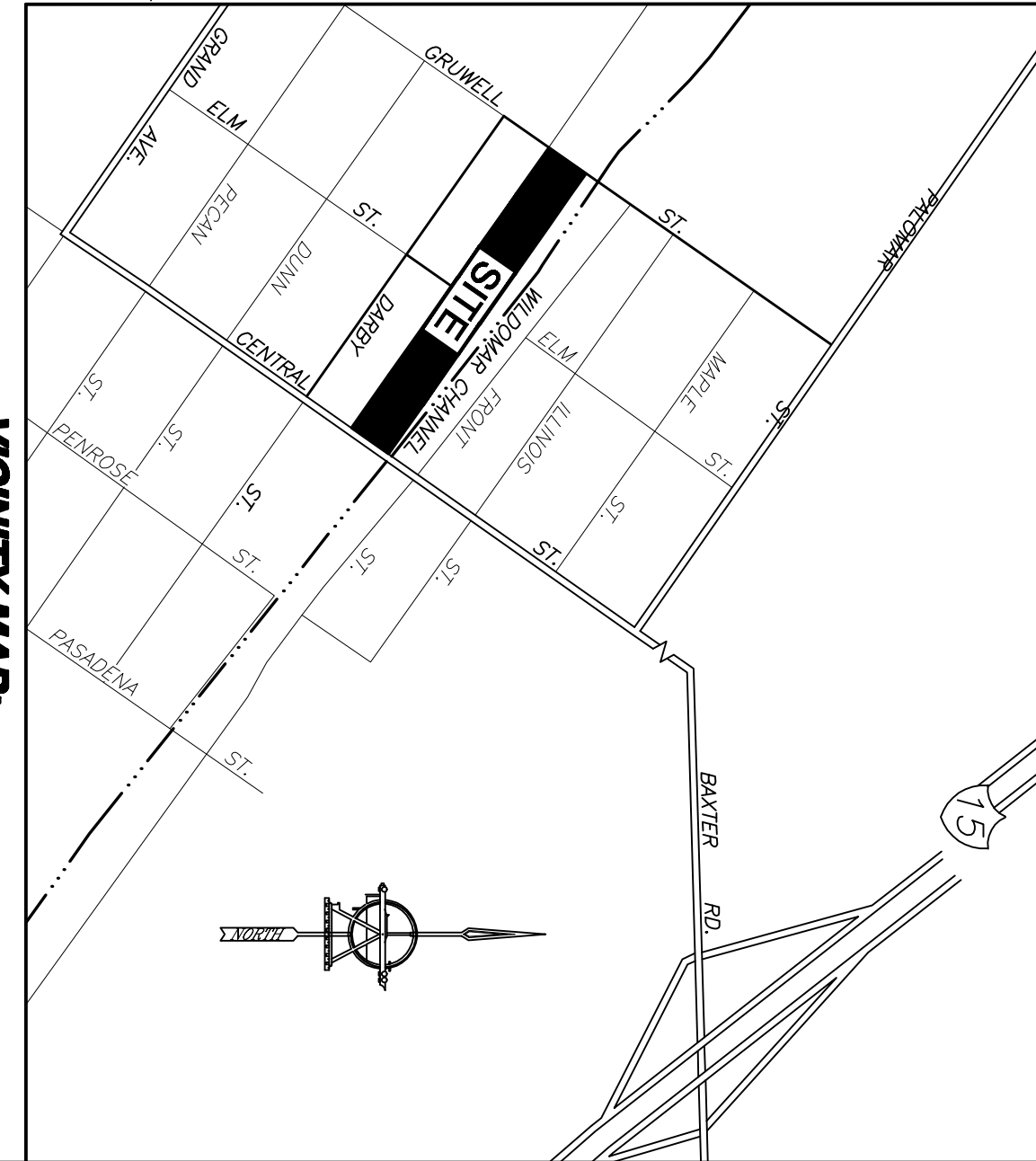
ALL OF BLOCK 17 BEING IN THE TOWN OF WILDOMAR COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, ACCORDING TO THE MAP ON FILE IN BOOK 5, PAGE 294 OF MAPS, RECORDS OF SAN DIEGO COUNTY, CALIFORNIA.

- #### IMPROVEMENT NOTES
- 0.25" ASPHALT CONCRETE OVER 0.50" AGGREGATE BASE PAVEMENT SECTION
 - PAVEMENT SECTION TO MATCH EXISTING
 - TYPE 'C' CURB PER CITY OF WILDOMAR STD. 202
 - TYPE 'A-6" CURB AND GUTTER PER CITY OF WILDOMAR STD. 200
 - CONCRETE SIDEWALK PER CITY OF WILDOMAR STD. 401
 - CROSS CUTTER
 - 10" CURB TRANSITION FROM TYPE 'C' CURB TO TYPE 'A-6" CURB AND GUTTER
 - UNDERSIDEWALK DRAIN PER CITY OF WILDOMAR STD. 309 (MODIFIED TO LOW AT 2% IN REVERSE)
 - CATCH BASIN AND INLET PER CITY OF WILDOMAR STD. 301 WITH GUTTER DEPRESSION CASE 'B'
 - PER CITY OF WILDOMAR STD. 311
 - METAL BEAM GUARDRAIL (WOOD POST WITH WOOD BLOCK) PER CALTRANS STD. A7A1
 - INSTALLED PER CALTRANS STANDARD.
 - WIDE RASSED TRAFFIC MEDIUM
 - LANDSCAPE PERIMETER WALL PER LANDSCAPE PLANS

- #### EASEMENT NOTES
- ABANDONMENT OF UNKNOWN ALLEYS AND RESERVATION OF EASEMENT FOR EXISTING UTILITIES RECORDED 4/6/78 IN BOOK 1978, PAGE 63718 OF OFFICIAL RECORDS.
 - VACATION OF UNNAMED ALLEY AND RESERVING AND EXERCISING AN EASEMENT FOR ANY PUBLIC UTILITIES RECORDED 2/26/82 IN BOOK 1982, PAGE 342 OF OFFICIAL RECORDS.
 - AN EASEMENT FOR WATER PRELIMINE TO THE ESTIMODE ALLEY MUNICIPAL WATER DISTRICT RECORDED 2/16/99 IN BOOK 2375, PAGE 594 OF OFFICIAL RECORDS.

LOT NUMBER	LOT AREA AC	LOT AREA SQ FT
1	11.367	6,142
2	11.367	6,142
3	11.367	6,142
4	11.367	6,142
5	11.367	6,142
6	11.367	6,142
7	11.367	6,142
8	11.367	6,142
9	11.367	6,142
10	11.367	6,142
11	11.367	6,142
12	11.367	6,142
13	11.367	6,142
14	11.367	6,142
15	15.822	12,007
16	11.367	6,142
17	11.367	6,142
18	11.367	6,142
19	11.367	6,142
20	11.367	6,142
21	11.367	6,142
22	11.367	6,142
23	11.367	6,142
24	11.367	6,142
25	11.367	6,142
26	11.367	6,142
27	11.367	6,142
28	11.367	6,142
29	11.367	6,142
30	11.367	6,142
31	11.367	6,142
32	11.367	6,142
33	11.367	6,142
34	11.367	6,142
35	11.367	6,142
36	11.367	6,142
37	11.367	6,142
38	11.367	6,142
39	11.367	6,142
40	11.367	6,142
41	11.367	6,142
42	11.367	6,142
43	11.367	6,142
44	11.367	6,142
45	11.367	6,142
46	11.367	6,142
47	11.367	6,142
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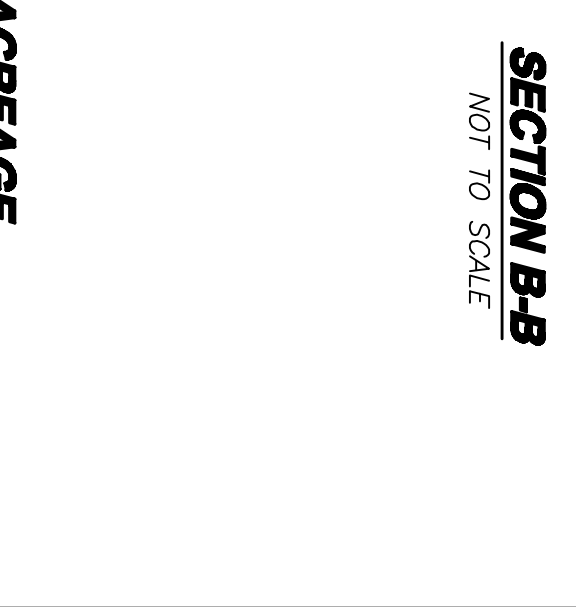
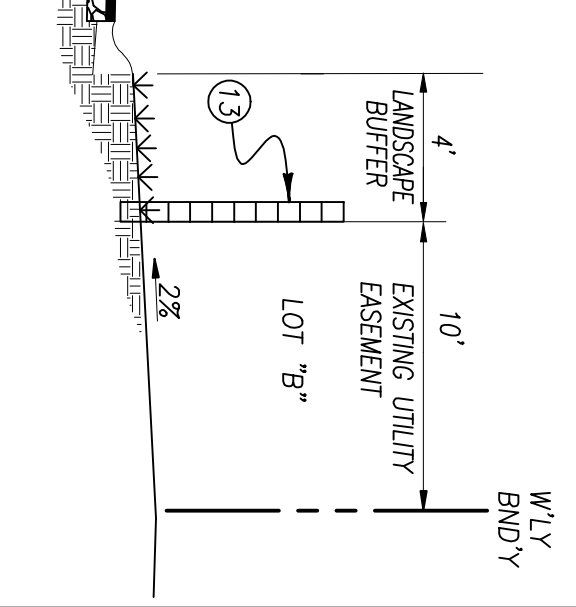
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100	NO. 100



APPLICANT/OWNERS:
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ENGINEER:
 RDS & ASSOCIATES
 30019 WILHUA CT.
 TEMECULA, CA 92592
 PH: (951) 691-7706

APN:
 376-043-027



AGREEMENT
 GROSS - 416 AC
 NET - 407 AC

NOTES:

- NOT WITHIN A SPECIFIC PLAN.
- FEAR FLOOD ZONE 'X' (PARCEL 13 TO PARCEL 19)
- EXISTING UTILITIES SHOWN FOR INFORMATION ONLY.
- THIS IS NOT IN HIGH FIRE AREA.
- THIS TENTATIVE MAP INCLUDES THE ENTIRE OR ONLY A PORTION THEREOF.
- SCHEDULE 'X' SUBDIVISION.
- THIS SITE IS NOT SUBJECT TO GEOLOGICAL HAZARDS, OR WITHIN A SPECIAL STUDIES ZONE.

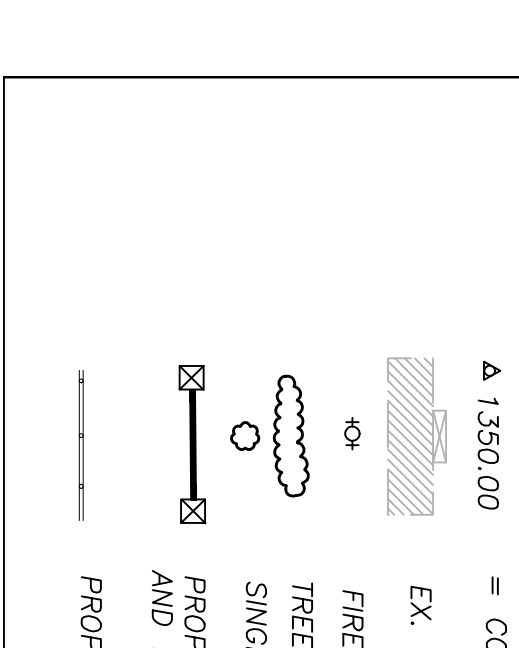
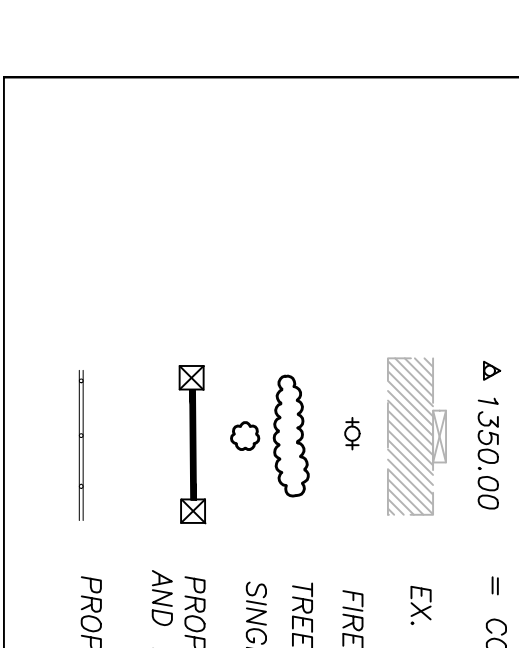
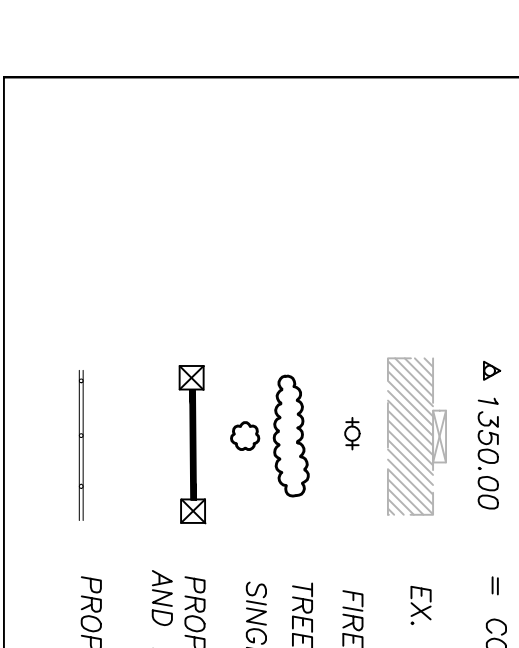
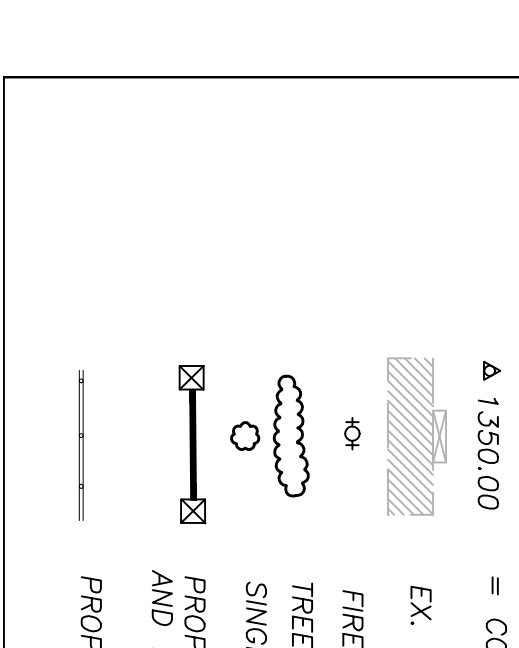
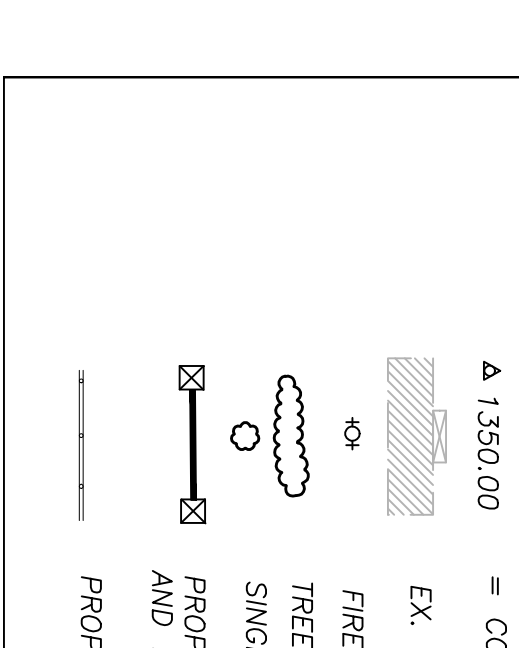
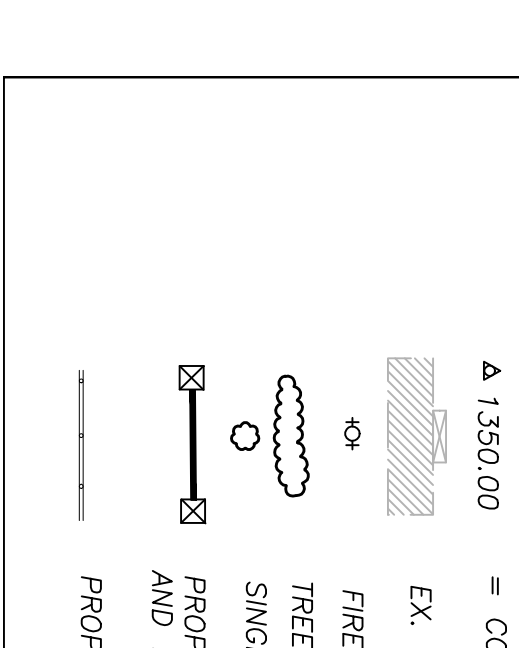
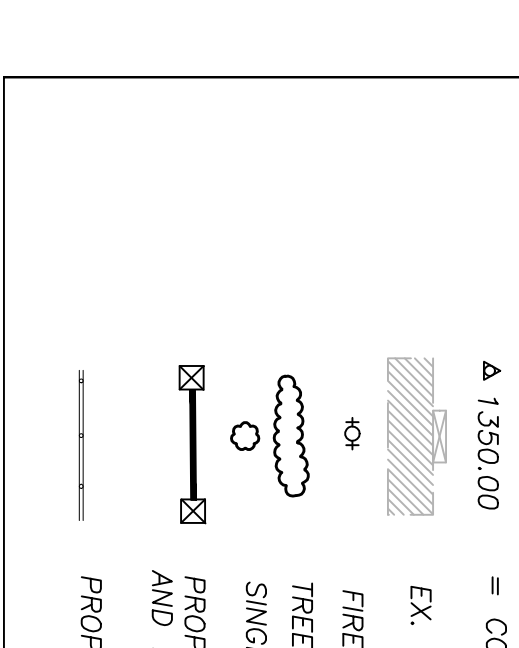
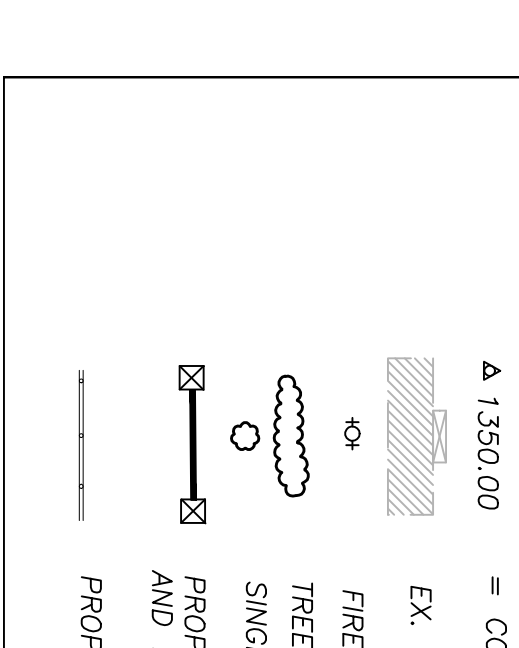
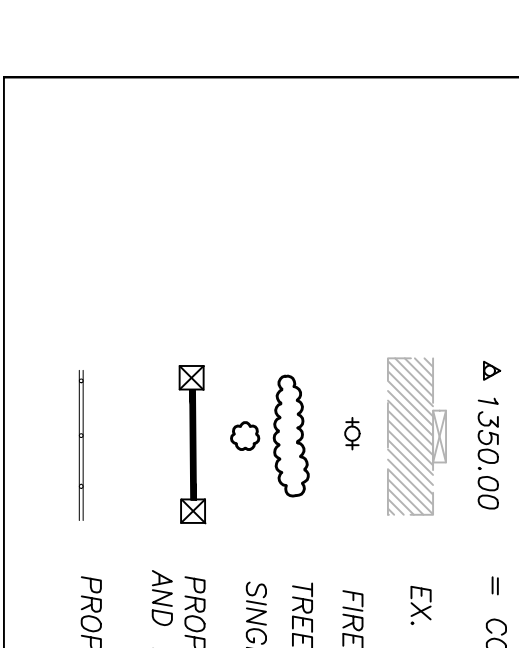
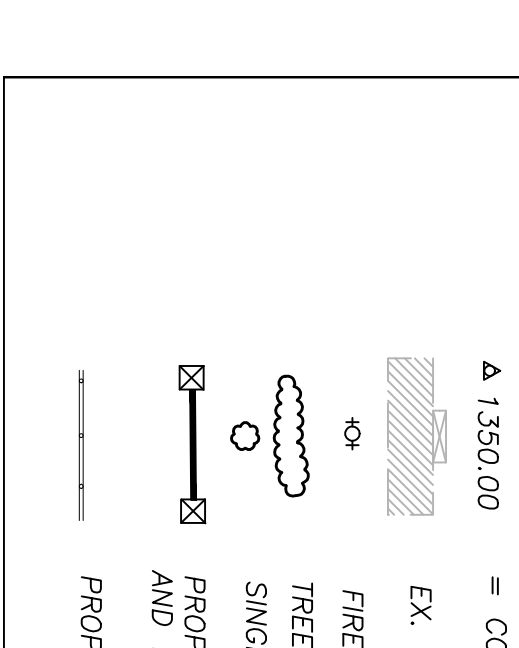
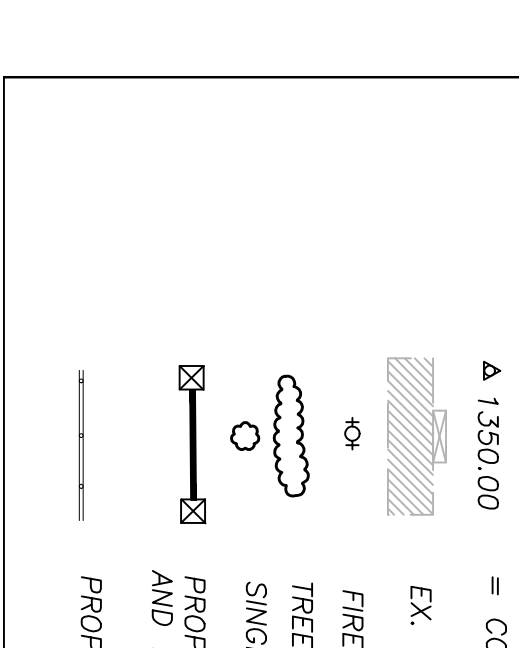
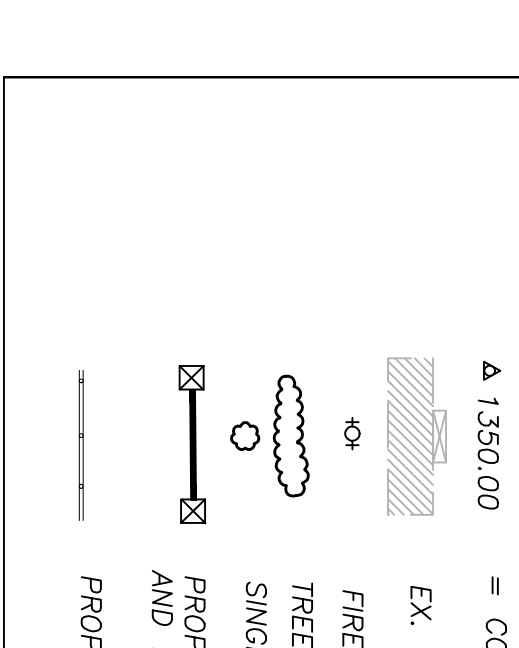
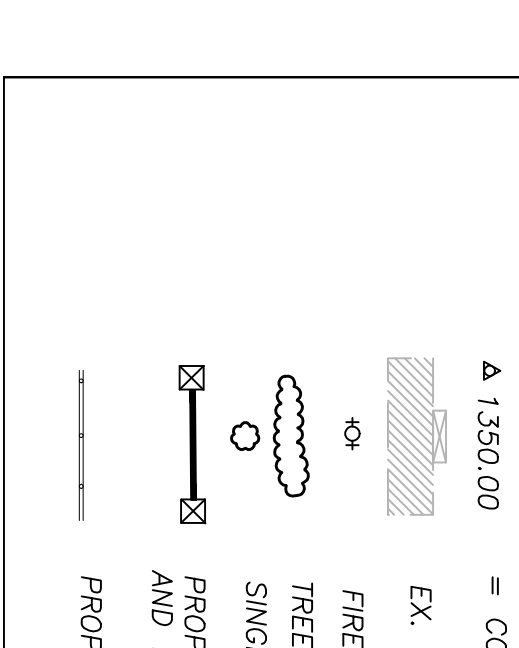
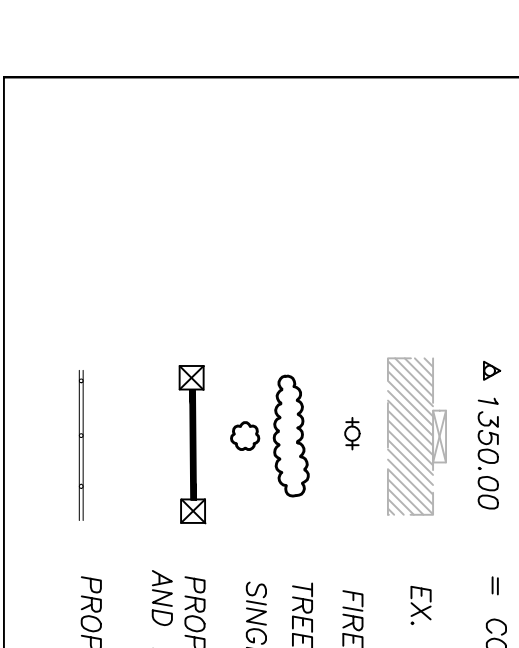
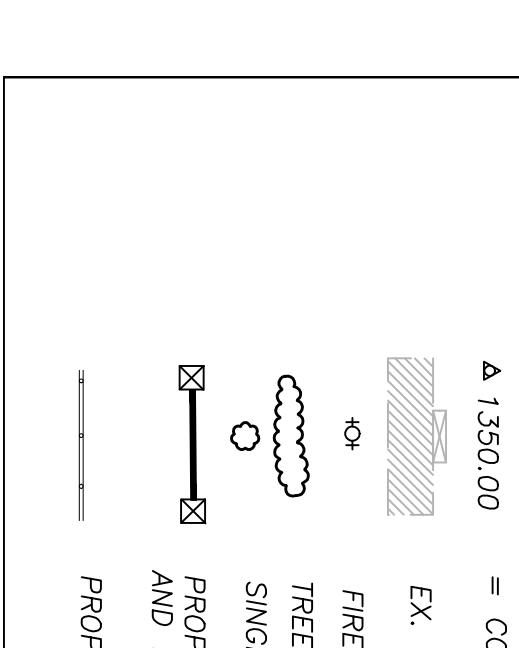
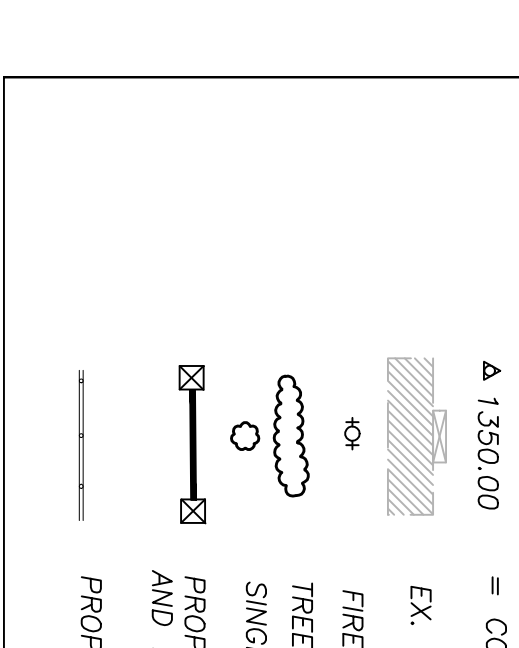
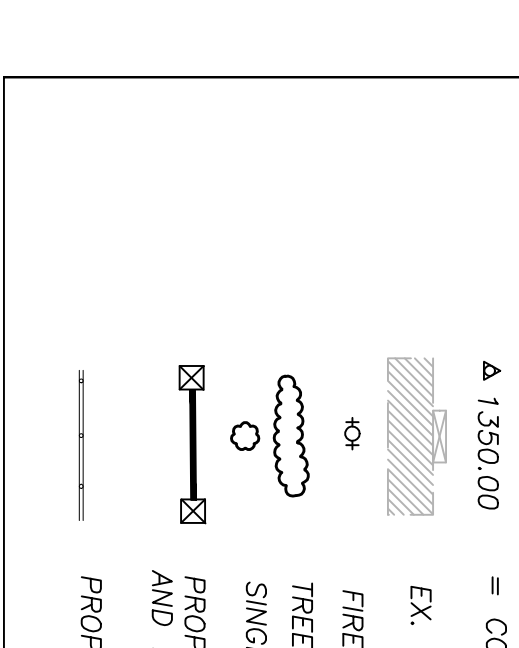
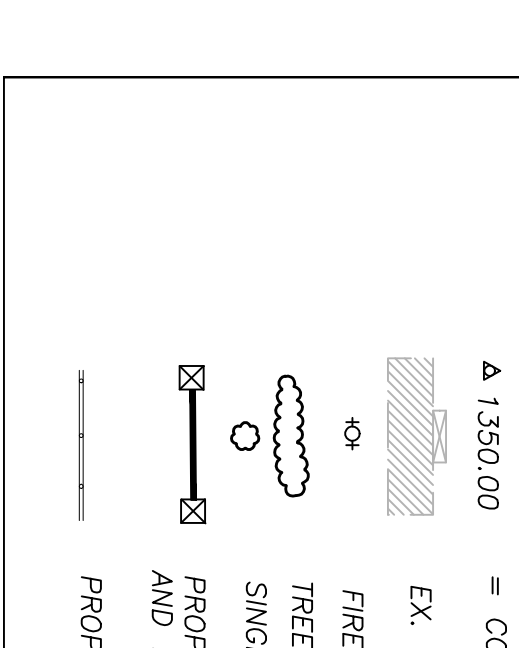
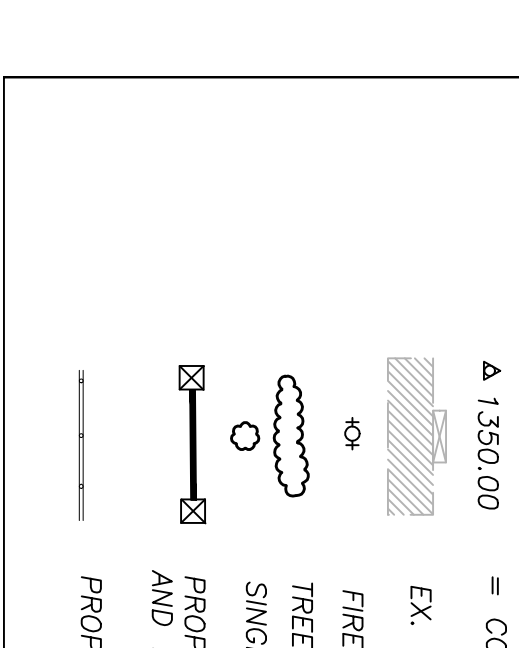
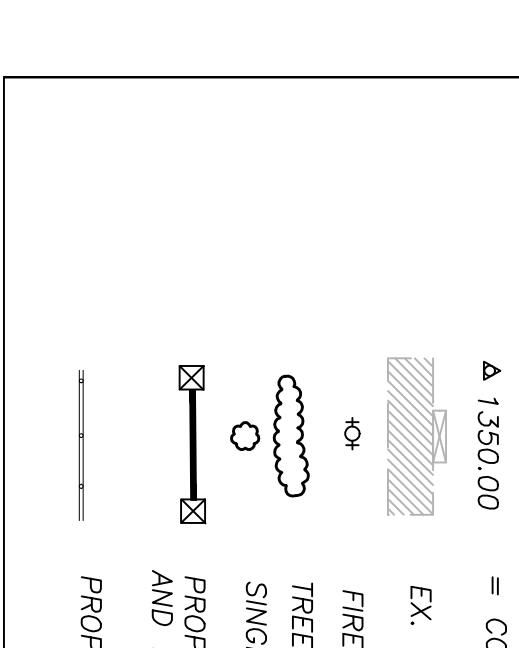
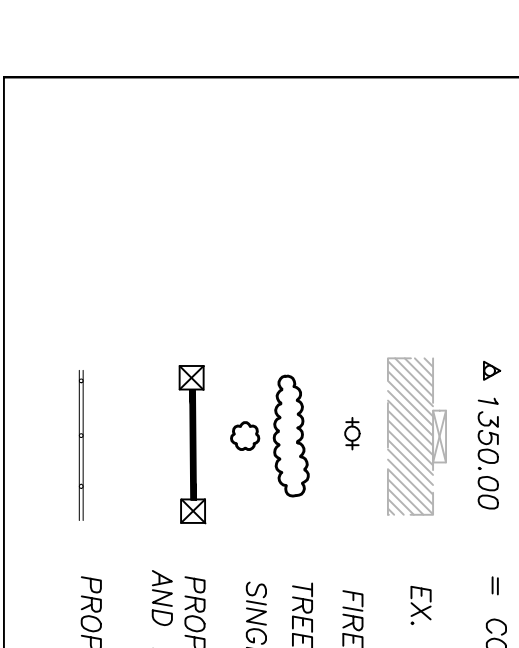
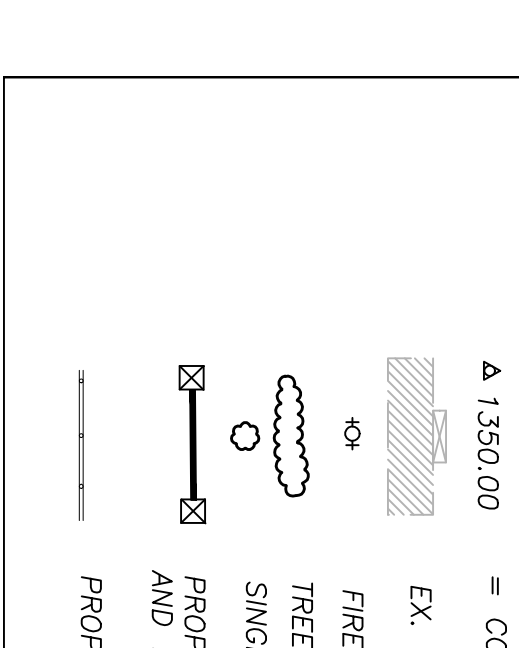
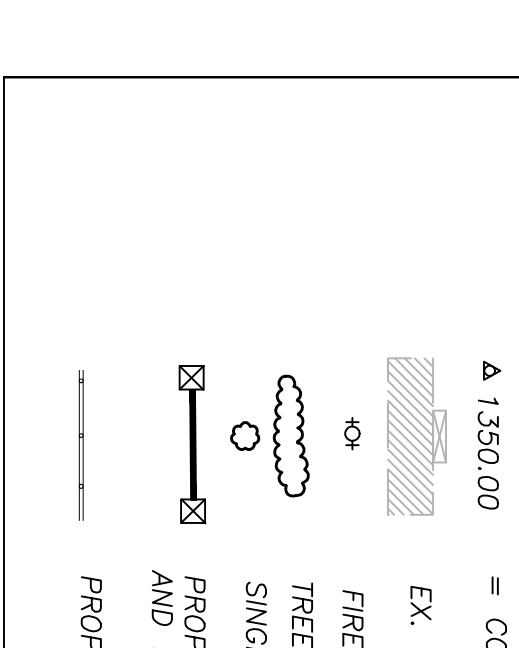
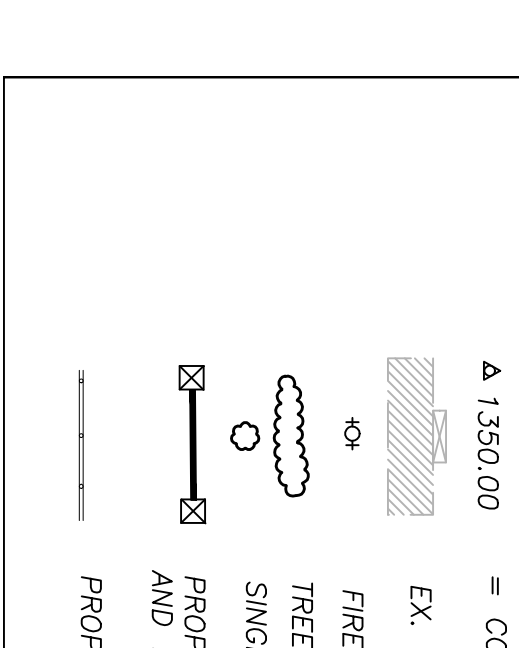
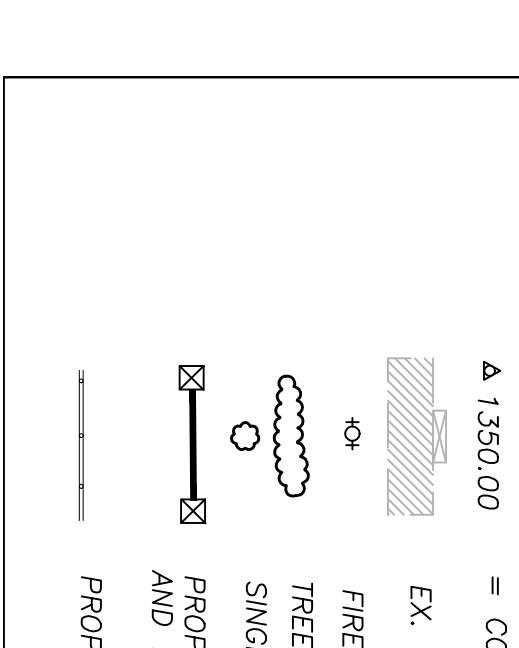
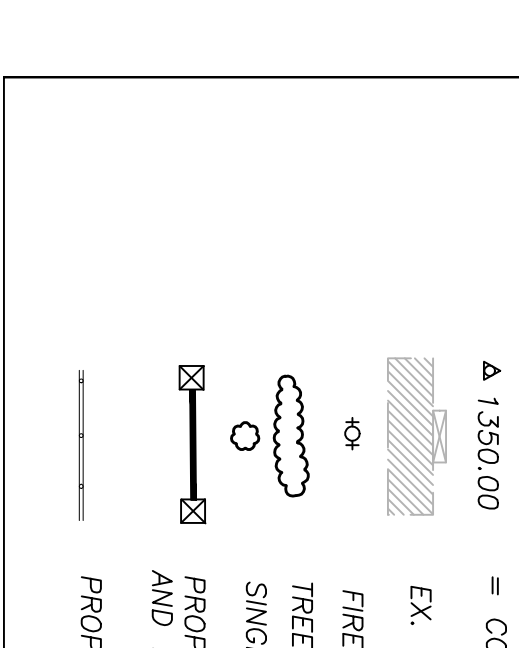
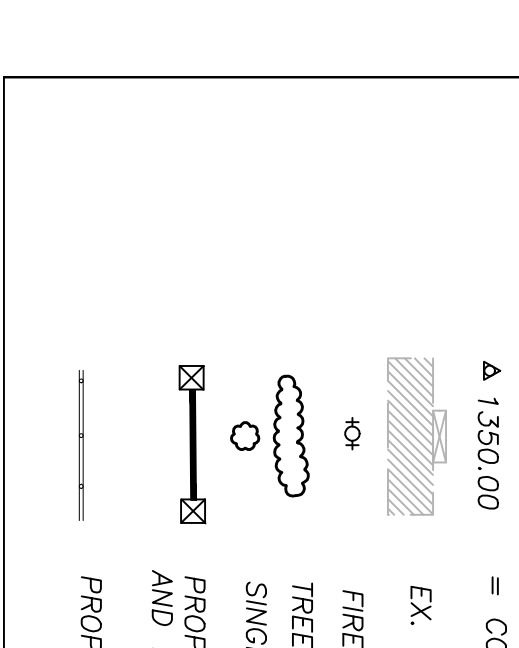
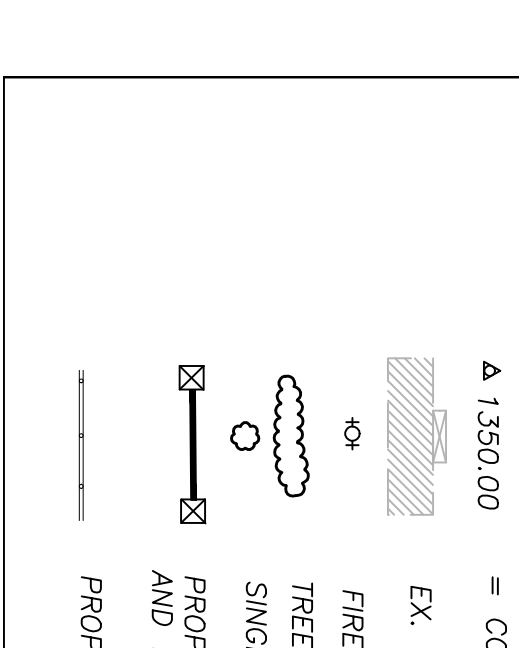
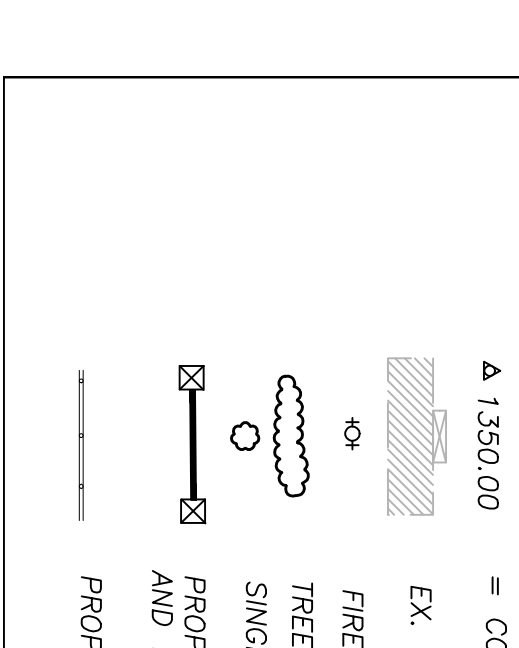
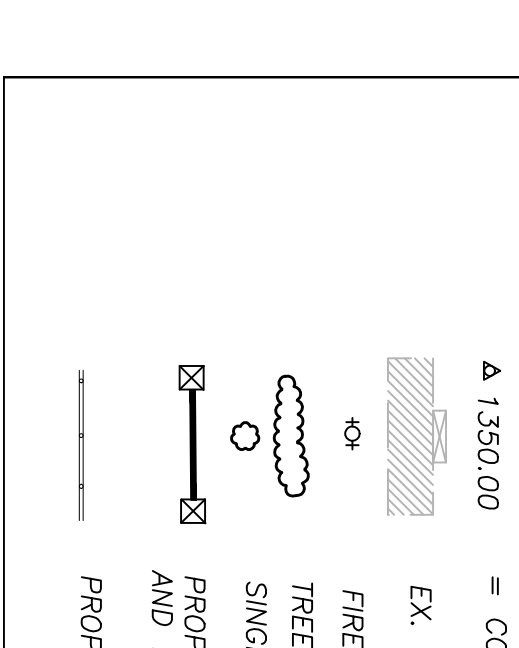
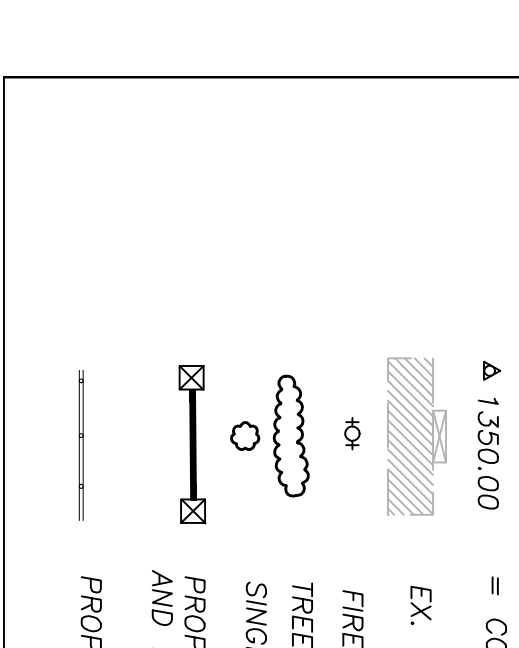
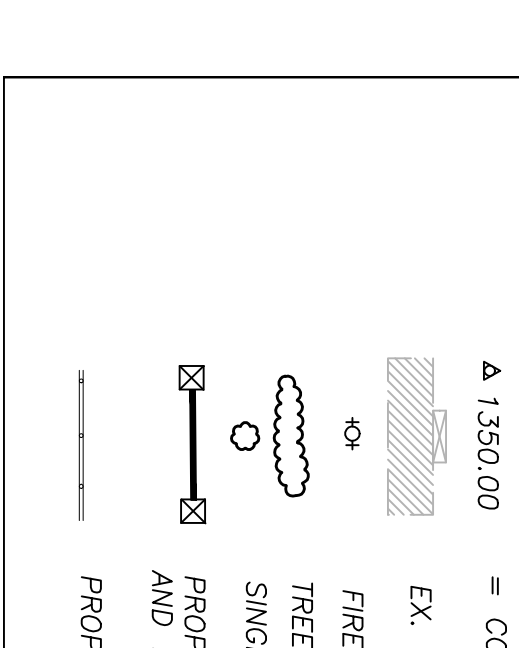
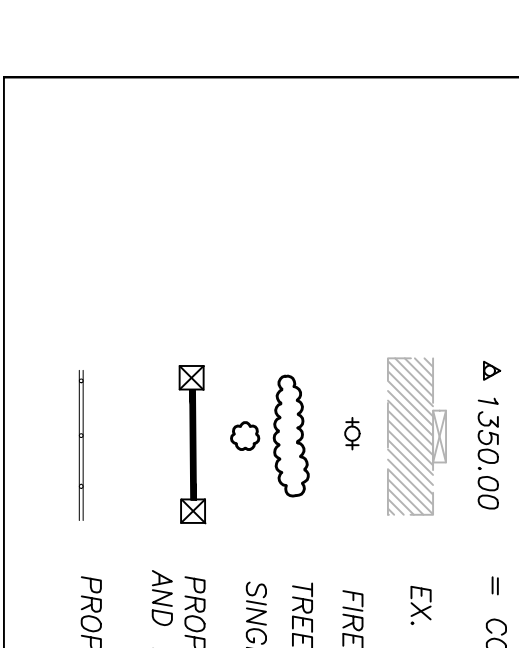
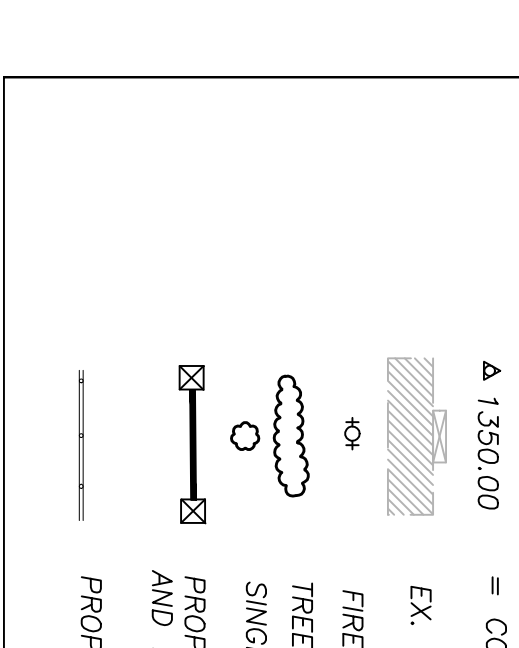
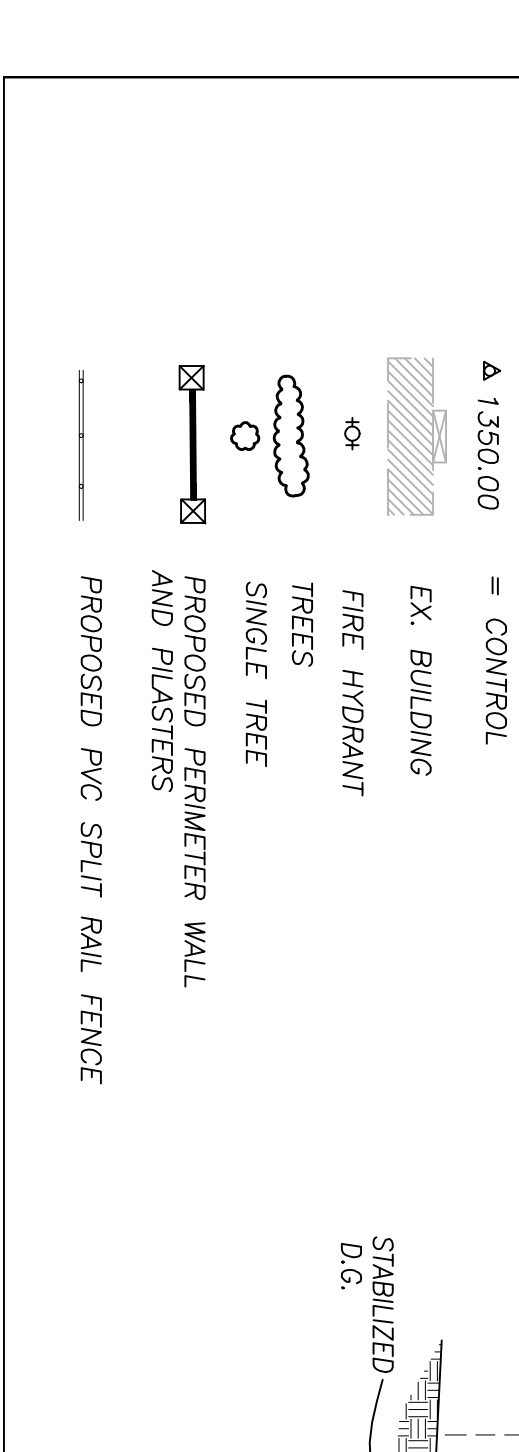
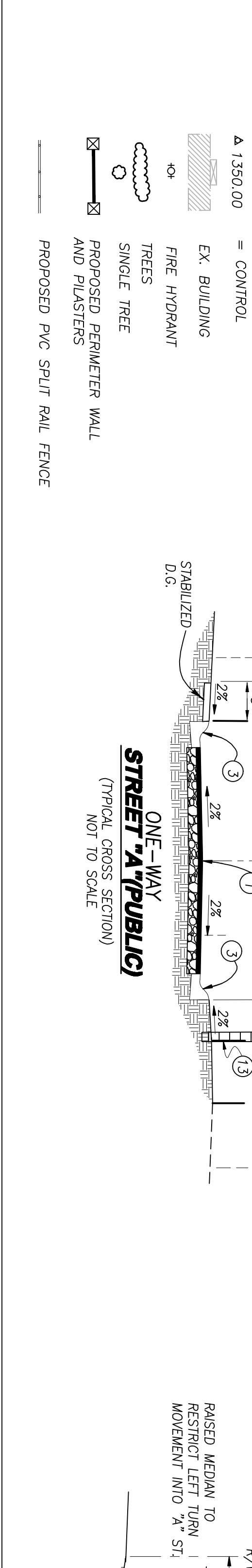
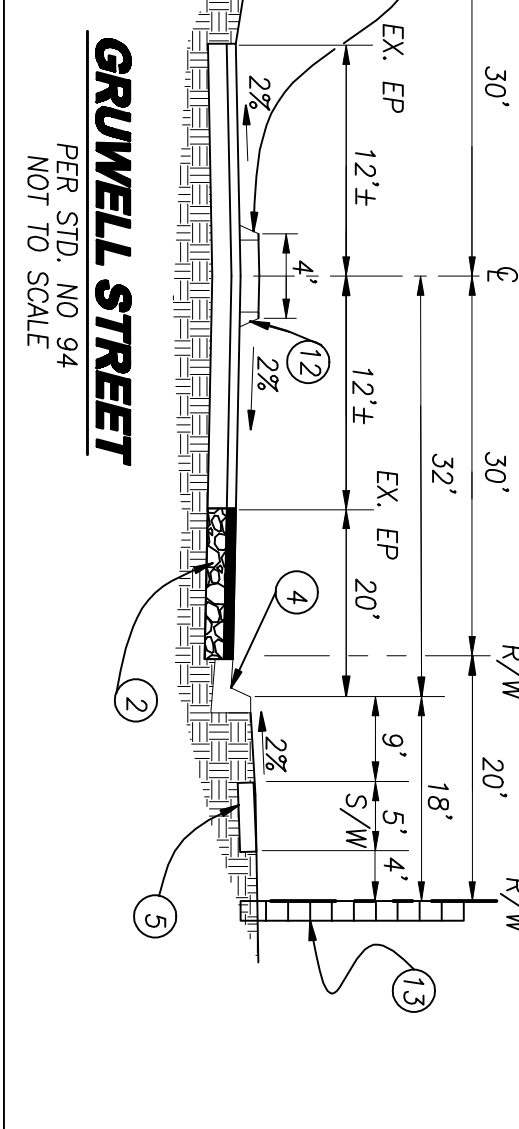
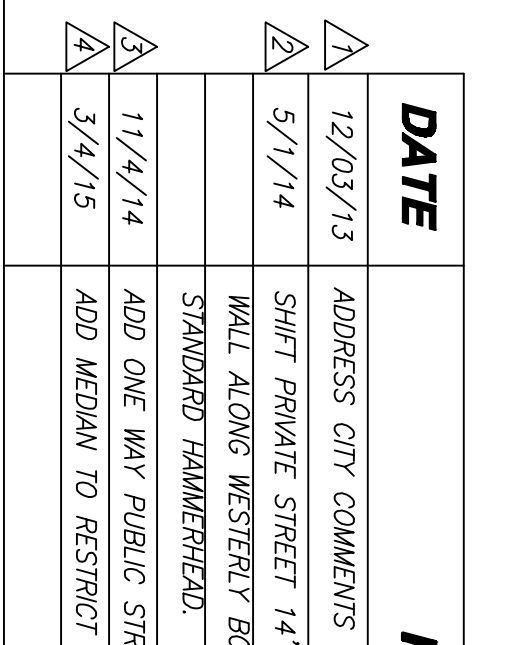
ZONING:
 MDR
 MDR
 MDR
 R-R
 R-1

CITY OF WILDOMAR

TENTATIVE TRACT MAP 33840
 APN# 376-043-027
 MAY 2, 2013

UTILITIES

DATE	REVISIONS
12/03/13	ADDRESS CITY COMMENTS
5/17/14	SHIFT R/W LINE STREET 14' EASTERLY AND TRAIL, REMOVE PERIMETER WALL ALONG WESTERLY BOUNDARY, REPLACE CUL-DE-SAC WITH STANDARD TRIANGULAR
11/4/14	ADD ONE WAY PUBLIC STREET, ELIMINATE W/V TRAIL
3/4/15	ADD MEAN TO RESTRICT LEFT TURN MOVEMENT TO 'A' STREET



APPENDIX 2: SITE PHOTOS



NE corner of project site seen from Gruwell Street



Project site seen from Central Street



Project site seen from Elm Street entrance



Darby Street / Elm Street intersection looking to the project site



Project site seen from SE portion looking NW



SE portion of project site looking NW

Appendix 2: Site Photos

APPENDIX 3:
AIR QUALITY ANNUAL MODELING

**APPENDIX 3A:
AIR QUALITY SUMMER MODELING**

Elm Street Tract Map

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	15.00	Dwelling Unit	4.16	27,000.00	43

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/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Site acreage total = 4.16 acres

Construction Phase - Building construction, paving, and painting assumed of occur simultaneously

Construction Off-road Equipment Mitigation - PM reduction values per SCAQMD CEQA Handbook Tables 11-4, 11-15, A11-9-A

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstructionPhase	NumDays	18.00	230.00
tblConstructionPhase	NumDays	18.00	230.00
tblConstructionPhase	PhaseEndDate	10/24/2017	12/6/2016
tblConstructionPhase	PhaseEndDate	10/24/2017	12/6/2016
tblConstructionPhase	PhaseStartDate	12/7/2016	1/20/2016
tblConstructionPhase	PhaseStartDate	12/7/2016	1/20/2016
tblLandUse	LotAcreage	4.87	4.16
tblProjectCharacteristics	OperationalYear	2014	2016

2.0 Emissions Summary

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	4.5625	0.1144	8.7944	0.0121		1.1526	1.1526		1.1524	1.1524	140.5038	272.2283	412.7321	0.4213	9.5400e-003	424.5352
Energy	0.0150	0.1279	0.0544	8.2000e-004		0.0103	0.0103		0.0103	0.0103		163.2567	163.2567	3.1300e-003	2.9900e-003	164.2502
Mobile	0.5857	1.8476	6.5931	0.0161	1.0947	0.0269	1.1215	0.2921	0.0247	0.3168		1,409.9196	1,409.9196	0.0458		1,410.8814
Total	5.1632	2.0899	15.4419	0.0290	1.0947	1.1898	2.2844	0.2921	1.1874	1.4796	140.5038	1,845.4046	1,985.9084	0.4702	0.0125	1,999.6668

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	4.5625	0.1144	8.7944	0.0121		1.1526	1.1526		1.1524	1.1524	140.5038	272.2283	412.7321	0.4213	9.5400e-003	424.5352
Energy	0.0150	0.1279	0.0544	8.2000e-004		0.0103	0.0103		0.0103	0.0103		163.2567	163.2567	3.1300e-003	2.9900e-003	164.2502
Mobile	0.5857	1.8476	6.5931	0.0161	1.0947	0.0269	1.1215	0.2921	0.0247	0.3168		1,409.9196	1,409.9196	0.0458		1,410.8814
Total	5.1632	2.0899	15.4419	0.0290	1.0947	1.1898	2.2844	0.2921	1.1874	1.4796	140.5038	1,845.4046	1,985.9084	0.4702	0.0125	1,999.6668

	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	1/1/2016	1/7/2016	5	5	
2	Grading	Grading	1/8/2016	1/19/2016	5	8	
3	Building Construction	Building Construction	1/20/2016	12/6/2016	5	230	
4	Paving	Paving	1/20/2016	12/6/2016	5	230	
5	Architectural Coating	Architectural Coating	1/20/2016	12/6/2016	5	230	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 54,675; Residential Outdoor: 18,225; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

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	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	5.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved 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		4,065.005 3	4,065.005 3	1.2262		4,090.754 4
Total	5.0771	54.6323	41.1053	0.0391	18.0663	2.9387	21.0049	9.9307	2.7036	12.6343		4,065.005 3	4,065.005 3	1.2262		4,090.754 4

3.2 Site Preparation - 2016

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					6.9103	0.0000	6.9103	3.7985	0.0000	3.7985			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	6.9103	2.9387	9.8490	3.7985	2.7036	6.5021	0.0000	4,065.0053	4,065.0053	1.2262			4,090.7544

3.2 Site Preparation - 2016

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	0.0690	0.0814	1.0208	2.4100e-003	0.1312	1.2600e-003	0.1325	0.0362	1.1600e-003	0.0373		199.7247	199.7247	8.6100e-003		199.9056
Total	0.0690	0.0814	1.0208	2.4100e-003	0.1312	1.2600e-003	0.1325	0.0362	1.1600e-003	0.0373		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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.6669	38.4466	26.0787	0.0298		2.1984	2.1984		2.0225	2.0225		3,093.7889	3,093.7889	0.9332		3,113.3860
Total	3.6669	38.4466	26.0787	0.0298	6.5523	2.1984	8.7507	3.3675	2.0225	5.3900		3,093.7889	3,093.7889	0.9332		3,113.3860

3.3 Grading - 2016

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						
Fugitive Dust					2.5063	0.0000	2.5063	1.2881	0.0000	1.2881			0.0000				0.0000
Off-Road	3.6669	38.4466	26.0787	0.0298		2.1984	2.1984		2.0225	2.0225	0.0000	3,093.7889	3,093.7889	0.9332			3,113.3860
Total	3.6669	38.4466	26.0787	0.0298	2.5063	2.1984	4.7047	1.2881	2.0225	3.3106	0.0000	3,093.7889	3,093.7889	0.9332			3,113.3860

3.3 Grading - 2016

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	0.1094	1.0500e-003	0.1104	0.0302	9.6000e-004	0.0311		166.4372	166.4372	7.1800e-003			166.5880
Total	0.0575	0.0679	0.8507	2.0100e-003	0.1094	1.0500e-003	0.1104	0.0302	9.6000e-004	0.0311		166.4372	166.4372	7.1800e-003			166.5880

3.4 Building 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						
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620			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	0.6620			2,683.1890

3.4 Building Construction - 2016

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	0.0156	0.1678	0.1758	4.2000e-004	0.0126	3.2600e-003	0.0158	3.5900e-003	3.0000e-003	6.5900e-003		42.2560	42.2560	2.7000e-004			42.2618
Worker	0.0192	0.0226	0.2836	6.7000e-004	0.0559	3.5000e-004	0.0562	0.0148	3.2000e-004	0.0151		55.4791	55.4791	2.3900e-003			55.5293
Total	0.0347	0.1905	0.4593	1.0900e-003	0.0685	3.6100e-003	0.0721	0.0184	3.3200e-003	0.0217		97.7351	97.7351	2.6600e-003			97.7911

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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620			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	0.6620			2,683.1890

3.4 Building Construction - 2016

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	0.0156	0.1678	0.1758	4.2000e-004	8.9300e-003	3.2600e-003	0.0122	2.7000e-003	3.0000e-003	5.6900e-003		42.2560	42.2560	2.7000e-004			42.2618
Worker	0.0192	0.0226	0.2836	6.7000e-004	0.0365	3.5000e-004	0.0368	0.0101	3.2000e-004	0.0104		55.4791	55.4791	2.3900e-003			55.5293
Total	0.0347	0.1905	0.4593	1.0900e-003	0.0454	3.6100e-003	0.0490	0.0128	3.3200e-003	0.0161		97.7351	97.7351	2.6600e-003			97.7911

3.5 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	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198		1,902.2212	1,902.2212	0.5588			1,913.9557
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198		1,902.2212	1,902.2212	0.5588			1,913.9557

3.5 Paving - 2016

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						
Off-Road	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198	0.0000	1,902.221 2	1,902.221 2	0.5588			1,913.955 7
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198	0.0000	1,902.221 2	1,902.221 2	0.5588			1,913.955 7

3.5 Paving - 2016

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	0.0766	0.0905	1.1342	2.6800e-003	0.1458	1.4000e-003	0.1472	0.0402	1.2800e-003	0.0415		221.9163	221.9163	9.5700e-003			222.1173
Total	0.0766	0.0905	1.1342	2.6800e-003	0.1458	1.4000e-003	0.1472	0.0402	1.2800e-003	0.0415		221.9163	221.9163	9.5700e-003			222.1173

3.6 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	0.9182					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	1.2866	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332			282.1449

3.6 Architectural Coating - 2016

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	3.8300e-003	4.5200e-003	0.0567	1.3000e-004	0.0112	7.0000e-005	0.0113	2.9600e-003	6.0000e-005	3.0300e-003		11.0958	11.0958	4.8000e-004			11.1059
Total	3.8300e-003	4.5200e-003	0.0567	1.3000e-004	0.0112	7.0000e-005	0.0113	2.9600e-003	6.0000e-005	3.0300e-003		11.0958	11.0958	4.8000e-004			11.1059

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	0.9182					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	1.2866	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

3.6 Architectural Coating - 2016

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	3.8300e-003	4.5200e-003	0.0567	1.3000e-004	7.2900e-003	7.0000e-005	7.3600e-003	2.0100e-003	6.0000e-005	2.0700e-003		11.0958	11.0958	4.8000e-004		11.1059
Total	3.8300e-003	4.5200e-003	0.0567	1.3000e-004	7.2900e-003	7.0000e-005	7.3600e-003	2.0100e-003	6.0000e-005	2.0700e-003		11.0958	11.0958	4.8000e-004		11.1059

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	0.5857	1.8476	6.5931	0.0161	1.0947	0.0269	1.1215	0.2921	0.0247	0.3168		1,409.9196	1,409.9196	0.0458		1,410.8814
Unmitigated	0.5857	1.8476	6.5931	0.0161	1.0947	0.0269	1.1215	0.2921	0.0247	0.3168		1,409.9196	1,409.9196	0.0458		1,410.8814

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	143.55	151.20	131.55	488,409	488,409
Total	143.55	151.20	131.55	488,409	488,409

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-W	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
NaturalGas Mitigated	0.0150	0.1279	0.0544	8.2000e-004		0.0103	0.0103		0.0103	0.0103		163.2567	163.2567	3.1300e-003	2.9900e-003	164.2502
NaturalGas Unmitigated	0.0150	0.1279	0.0544	8.2000e-004		0.0103	0.0103		0.0103	0.0103		163.2567	163.2567	3.1300e-003	2.9900e-003	164.2502

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	1387.68	0.0150	0.1279	0.0544	8.2000e-004		0.0103	0.0103		0.0103	0.0103		163.2567	163.2567	3.1300e-003	2.9900e-003	164.2502
Total		0.0150	0.1279	0.0544	8.2000e-004		0.0103	0.0103		0.0103	0.0103		163.2567	163.2567	3.1300e-003	2.9900e-003	164.2502

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	1.38768	0.0150	0.1279	0.0544	8.2000e-004		0.0103	0.0103		0.0103	0.0103		163.2567	163.2567	3.1300e-003	2.9900e-003	164.2502
Total		0.0150	0.1279	0.0544	8.2000e-004		0.0103	0.0103		0.0103	0.0103		163.2567	163.2567	3.1300e-003	2.9900e-003	164.2502

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	4.5625	0.1144	8.7944	0.0121		1.1526	1.1526		1.1524	1.1524	140.5038	272.2283	412.7321	0.4213	9.5400e-003	424.5352
Unmitigated	4.5625	0.1144	8.7944	0.0121		1.1526	1.1526		1.1524	1.1524	140.5038	272.2283	412.7321	0.4213	9.5400e-003	424.5352

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	0.0579					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5346					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	3.9305	0.0997	7.5396	0.0120		1.1458	1.1458		1.1456	1.1456	140.5038	270.0000	410.5038	0.4190	9.5400e-003	422.2593
Landscaping	0.0395	0.0147	1.2548	7.0000e-005		6.7700e-003	6.7700e-003		6.7700e-003	6.7700e-003		2.2283	2.2283	2.2700e-003		2.2760
Total	4.5625	0.1144	8.7944	0.0121		1.1526	1.1526		1.1524	1.1524	140.5038	272.2283	412.7321	0.4213	9.5400e-003	424.5352

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0579					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5346					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	3.9305	0.0997	7.5396	0.0120		1.1458	1.1458		1.1456	1.1456	140.5038	270.0000	410.5038	0.4190	9.5400e-003	422.2593
Landscaping	0.0395	0.0147	1.2548	7.0000e-005		6.7700e-003	6.7700e-003		6.7700e-003	6.7700e-003		2.2283	2.2283	2.2700e-003		2.2760
Total	4.5625	0.1144	8.7944	0.0121		1.1526	1.1526		1.1524	1.1524	140.5038	272.2283	412.7321	0.4213	9.5400e-003	424.5352

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

APPENDIX 3B:
AIR QUALITY WINTER MODELING

Elm Street Tract Map 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	15.00	Dwelling Unit	4.16	27,000.00	43

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/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Site acreage total = 4.16 acres

Construction Phase - Building construction, paving, and painting assumed of occur simultaneously

Construction Off-road Equipment Mitigation - PM reduction values per SCAQMD CEQA Handbook Tables 11-4, 11-15, A11-9-A

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstructionPhase	NumDays	18.00	230.00
tblConstructionPhase	NumDays	18.00	230.00
tblConstructionPhase	PhaseEndDate	10/24/2017	12/6/2016
tblConstructionPhase	PhaseEndDate	10/24/2017	12/6/2016
tblConstructionPhase	PhaseStartDate	12/7/2016	1/20/2016
tblConstructionPhase	PhaseStartDate	12/7/2016	1/20/2016
tblLandUse	LotAcreage	4.87	4.16
tblProjectCharacteristics	OperationalYear	2014	2016

2.0 Emissions Summary

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	4.5625	0.1144	8.7944	0.0121		1.1526	1.1526		1.1524	1.1524	140.5038	272.2283	412.7321	0.4213	9.5400e-003	424.5352
Energy	0.0150	0.1279	0.0544	8.2000e-004		0.0103	0.0103		0.0103	0.0103		163.2567	163.2567	3.1300e-003	2.9900e-003	164.2502
Mobile	0.5720	1.9267	6.1305	0.0150	1.0947	0.0270	1.1216	0.2921	0.0248	0.3169		1,319.1654	1,319.1654	0.0459		1,320.1282
Total	5.1495	2.1690	14.9793	0.0279	1.0947	1.1899	2.2845	0.2921	1.1875	1.4797	140.5038	1,754.6504	1,895.1542	0.4703	0.0125	1,908.9137

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	4.5625	0.1144	8.7944	0.0121		1.1526	1.1526		1.1524	1.1524	140.5038	272.2283	412.7321	0.4213	9.5400e-003	424.5352
Energy	0.0150	0.1279	0.0544	8.2000e-004		0.0103	0.0103		0.0103	0.0103		163.2567	163.2567	3.1300e-003	2.9900e-003	164.2502
Mobile	0.5720	1.9267	6.1305	0.0150	1.0947	0.0270	1.1216	0.2921	0.0248	0.3169		1,319.1654	1,319.1654	0.0459		1,320.1282
Total	5.1495	2.1690	14.9793	0.0279	1.0947	1.1899	2.2845	0.2921	1.1875	1.4797	140.5038	1,754.6504	1,895.1542	0.4703	0.0125	1,908.9137

	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	1/1/2016	1/7/2016	5	5	
2	Grading	Grading	1/8/2016	1/19/2016	5	8	
3	Building Construction	Building Construction	1/20/2016	12/6/2016	5	230	
4	Paving	Paving	1/20/2016	12/6/2016	5	230	
5	Architectural Coating	Architectural Coating	1/20/2016	12/6/2016	5	230	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 54,675; Residential Outdoor: 18,225; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

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	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	5.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved 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		4,065.005 3	4,065.005 3	1.2262		4,090.754 4
Total	5.0771	54.6323	41.1053	0.0391	18.0663	2.9387	21.0049	9.9307	2.7036	12.6343		4,065.005 3	4,065.005 3	1.2262		4,090.754 4

3.2 Site Preparation - 2016

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	8.6100e-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	8.6100e-003			182.6986

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					6.9103	0.0000	6.9103	3.7985	0.0000	3.7985			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	6.9103	2.9387	9.8490	3.7985	2.7036	6.5021	0.0000	4,065.0053	4,065.0053	1.2262			4,090.7544

3.2 Site Preparation - 2016

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	0.0658	0.0868	0.8796	2.2000e-003	0.1312	1.2600e-003	0.1325	0.0362	1.1600e-003	0.0373		182.5176	182.5176	8.6100e-003			182.6986
Total	0.0658	0.0868	0.8796	2.2000e-003	0.1312	1.2600e-003	0.1325	0.0362	1.1600e-003	0.0373		182.5176	182.5176	8.6100e-003			182.6986

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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.6669	38.4466	26.0787	0.0298		2.1984	2.1984		2.0225	2.0225		3,093.7889	3,093.7889	0.9332		3,113.3860
Total	3.6669	38.4466	26.0787	0.0298	6.5523	2.1984	8.7507	3.3675	2.0225	5.3900		3,093.7889	3,093.7889	0.9332		3,113.3860

3.3 Grading - 2016

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	0.0548	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

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					2.5063	0.0000	2.5063	1.2881	0.0000	1.2881			0.0000			0.0000
Off-Road	3.6669	38.4466	26.0787	0.0298		2.1984	2.1984		2.0225	2.0225	0.0000	3,093.7889	3,093.7889	0.9332		3,113.3860
Total	3.6669	38.4466	26.0787	0.0298	2.5063	2.1984	4.7047	1.2881	2.0225	3.3106	0.0000	3,093.7889	3,093.7889	0.9332		3,113.3860

3.3 Grading - 2016

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	0.1094	1.0500e-003	0.1104	0.0302	9.6000e-004	0.0311		152.0980	152.0980	7.1800e-003			152.2488
Total	0.0548	0.0723	0.7330	1.8400e-003	0.1094	1.0500e-003	0.1104	0.0302	9.6000e-004	0.0311		152.0980	152.0980	7.1800e-003			152.2488

3.4 Building 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						
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620			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	0.6620			2,683.1890

3.4 Building Construction - 2016

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	0.0166	0.1721	0.1998	4.2000e-004	0.0126	3.2900e-003	0.0159	3.5900e-003	3.0200e-003	6.6200e-003		41.8903	41.8903	2.8000e-004			41.8963
Worker	0.0183	0.0241	0.2443	6.1000e-004	0.0559	3.5000e-004	0.0562	0.0148	3.2000e-004	0.0151		50.6994	50.6994	2.3900e-003			50.7496
Total	0.0349	0.1962	0.4441	1.0300e-003	0.0685	3.6400e-003	0.0721	0.0184	3.3400e-003	0.0218		92.5897	92.5897	2.6700e-003			92.6459

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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620			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	0.6620			2,683.1890

3.4 Building Construction - 2016

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	0.0166	0.1721	0.1998	4.2000e-004	8.9300e-003	3.2900e-003	0.0122	2.7000e-003	3.0200e-003	5.7200e-003		41.8903	41.8903	2.8000e-004			41.8963
Worker	0.0183	0.0241	0.2443	6.1000e-004	0.0365	3.5000e-004	0.0368	0.0101	3.2000e-004	0.0104		50.6994	50.6994	2.3900e-003			50.7496
Total	0.0349	0.1962	0.4441	1.0300e-003	0.0454	3.6400e-003	0.0490	0.0128	3.3400e-003	0.0161		92.5897	92.5897	2.6700e-003			92.6459

3.5 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	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198		1,902.2212	1,902.2212	0.5588			1,913.9557
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198		1,902.2212	1,902.2212	0.5588			1,913.9557

3.5 Paving - 2016

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	0.0731	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

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	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198	0.0000	1,902.221 2	1,902.221 2	0.5588			1,913.955 7
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198	0.0000	1,902.221 2	1,902.221 2	0.5588			1,913.955 7

3.5 Paving - 2016

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	0.1458	1.4000e-003	0.1472	0.0402	1.2800e-003	0.0415		202.7974	202.7974	9.5700e-003		202.9984
Total	0.0731	0.0964	0.9773	2.4500e-003	0.1458	1.4000e-003	0.1472	0.0402	1.2800e-003	0.0415		202.7974	202.7974	9.5700e-003		202.9984

3.6 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	0.9182					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	1.2866	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449

3.6 Architectural Coating - 2016

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	3.6600e-003	4.8200e-003	0.0489	1.2000e-004	0.0112	7.0000e-005	0.0113	2.9600e-003	6.0000e-005	3.0300e-003		10.1399	10.1399	4.8000e-004			10.1499
Total	3.6600e-003	4.8200e-003	0.0489	1.2000e-004	0.0112	7.0000e-005	0.0113	2.9600e-003	6.0000e-005	3.0300e-003		10.1399	10.1399	4.8000e-004			10.1499

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	0.9182					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	1.2866	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

3.6 Architectural Coating - 2016

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	3.6600e-003	4.8200e-003	0.0489	1.2000e-004	7.2900e-003	7.0000e-005	7.3600e-003	2.0100e-003	6.0000e-005	2.0700e-003		10.1399	10.1399	4.8000e-004		10.1499
Total	3.6600e-003	4.8200e-003	0.0489	1.2000e-004	7.2900e-003	7.0000e-005	7.3600e-003	2.0100e-003	6.0000e-005	2.0700e-003		10.1399	10.1399	4.8000e-004		10.1499

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	0.5720	1.9267	6.1305	0.0150	1.0947	0.0270	1.1216	0.2921	0.0248	0.3169		1,319.1654	1,319.1654	0.0459		1,320.1282
Unmitigated	0.5720	1.9267	6.1305	0.0150	1.0947	0.0270	1.1216	0.2921	0.0248	0.3169		1,319.1654	1,319.1654	0.0459		1,320.1282

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	143.55	151.20	131.55	488,409	488,409
Total	143.55	151.20	131.55	488,409	488,409

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-W	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
NaturalGas Mitigated	0.0150	0.1279	0.0544	8.2000e-004		0.0103	0.0103		0.0103	0.0103		163.2567	163.2567	3.1300e-003	2.9900e-003	164.2502
NaturalGas Unmitigated	0.0150	0.1279	0.0544	8.2000e-004		0.0103	0.0103		0.0103	0.0103		163.2567	163.2567	3.1300e-003	2.9900e-003	164.2502

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	1387.68	0.0150	0.1279	0.0544	8.2000e-004		0.0103	0.0103		0.0103	0.0103		163.2567	163.2567	3.1300e-003	2.9900e-003	164.2502
Total		0.0150	0.1279	0.0544	8.2000e-004		0.0103	0.0103		0.0103	0.0103		163.2567	163.2567	3.1300e-003	2.9900e-003	164.2502

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	1.38768	0.0150	0.1279	0.0544	8.2000e-004		0.0103	0.0103		0.0103	0.0103		163.2567	163.2567	3.1300e-003	2.9900e-003	164.2502
Total		0.0150	0.1279	0.0544	8.2000e-004		0.0103	0.0103		0.0103	0.0103		163.2567	163.2567	3.1300e-003	2.9900e-003	164.2502

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	4.5625	0.1144	8.7944	0.0121		1.1526	1.1526		1.1524	1.1524	140.5038	272.2283	412.7321	0.4213	9.5400e-003	424.5352
Unmitigated	4.5625	0.1144	8.7944	0.0121		1.1526	1.1526		1.1524	1.1524	140.5038	272.2283	412.7321	0.4213	9.5400e-003	424.5352

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	0.0579					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5346					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	3.9305	0.0997	7.5396	0.0120		1.1458	1.1458		1.1456	1.1456	140.5038	270.0000	410.5038	0.4190	9.5400e-003	422.2593
Landscaping	0.0395	0.0147	1.2548	7.0000e-005		6.7700e-003	6.7700e-003		6.7700e-003	6.7700e-003		2.2283	2.2283	2.2700e-003		2.2760
Total	4.5625	0.1144	8.7944	0.0121		1.1526	1.1526		1.1524	1.1524	140.5038	272.2283	412.7321	0.4213	9.5400e-003	424.5352

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0579					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5346					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	3.9305	0.0997	7.5396	0.0120		1.1458	1.1458		1.1456	1.1456	140.5038	270.0000	410.5038	0.4190	9.5400e-003	422.2593
Landscaping	0.0395	0.0147	1.2548	7.0000e-005		6.7700e-003	6.7700e-003		6.7700e-003	6.7700e-003		2.2283	2.2283	2.2700e-003		2.2760
Total	4.5625	0.1144	8.7944	0.0121		1.1526	1.1526		1.1524	1.1524	140.5038	272.2283	412.7321	0.4213	9.5400e-003	424.5352

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

**APPENDIX 3C:
AIR QUALITY MODEL FILE**

Elm Street Tract Map 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	15.00	Dwelling Unit	4.16	27,000.00	43

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/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Site acreage total = 4.16 acres

Construction Phase - Building construction, paving, and painting assumed of occur simultaneously

Construction Off-road Equipment Mitigation - PM reduction values per SCAQMD CEQA Handbook Tables 11-4, 11-15, A11-9-A

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstructionPhase	NumDays	18.00	230.00
tblConstructionPhase	NumDays	18.00	230.00
tblConstructionPhase	PhaseEndDate	10/24/2017	12/6/2016
tblConstructionPhase	PhaseEndDate	10/24/2017	12/6/2016
tblConstructionPhase	PhaseStartDate	12/7/2016	1/20/2016
tblConstructionPhase	PhaseStartDate	12/7/2016	1/20/2016
tblLandUse	LotAcreage	4.87	4.16
tblProjectCharacteristics	OperationalYear	2014	2016

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	0.7861	5.9864	4.1770	6.2200e-003	0.1068	0.3928	0.4997	0.0477	0.3679	0.4156	0.0000	559.9871	559.9871	0.1384	0.0000	562.8928
Total	0.7861	5.9864	4.1770	6.2200e-003	0.1068	0.3928	0.4997	0.0477	0.3679	0.4156	0.0000	559.9871	559.9871	0.1384	0.0000	562.8928

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	0.7861	5.9864	4.1770	6.2200e-003	0.0505	0.3928	0.4434	0.0211	0.3679	0.3889	0.0000	559.9865	559.9865	0.1384	0.0000	562.8922
Total	0.7861	5.9864	4.1770	6.2200e-003	0.0505	0.3928	0.4434	0.0211	0.3679	0.3889	0.0000	559.9865	559.9865	0.1384	0.0000	562.8922

	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	52.70	0.00	11.27	55.82	0.00	6.41	0.00	0.00	0.00	0.01	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	0.1622	3.0800e-003	0.2511	1.6000e-004		0.0152	0.0152		0.0152	0.0152	1.5933	3.3144	4.9077	5.0100e-003	1.1000e-004	5.0464
Energy	2.7300e-003	0.0233	9.9300e-003	1.5000e-004		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	59.9939	59.9939	2.0300e-003	8.1000e-004	60.2874
Mobile	0.0941	0.3387	1.0887	2.6100e-003	0.1852	4.6200e-003	0.1899	0.0495	4.2500e-003	0.0538	0.0000	207.7956	207.7956	7.1400e-003	0.0000	207.9456
Waste						0.0000	0.0000		0.0000	0.0000	3.5787	0.0000	3.5787	0.2115	0.0000	8.0202
Water						0.0000	0.0000		0.0000	0.0000	0.3101	5.6005	5.9106	0.0321	8.1000e-004	6.8343
Total	0.2591	0.3651	1.3498	2.9200e-003	0.1852	0.0217	0.2069	0.0495	0.0213	0.0708	5.4821	276.7044	282.1865	0.2578	1.7300e-003	288.1339

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1622	3.0800e-003	0.2511	1.6000e-004		0.0152	0.0152		0.0152	0.0152	1.5933	3.3144	4.9077	5.0100e-003	1.1000e-004	5.0464
Energy	2.7300e-003	0.0233	9.9300e-003	1.5000e-004		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	59.9939	59.9939	2.0300e-003	8.1000e-004	60.2874
Mobile	0.0941	0.3387	1.0887	2.6100e-003	0.1852	4.6200e-003	0.1899	0.0495	4.2500e-003	0.0538	0.0000	207.7956	207.7956	7.1400e-003	0.0000	207.9456
Waste						0.0000	0.0000		0.0000	0.0000	3.5787	0.0000	3.5787	0.2115	0.0000	8.0202
Water						0.0000	0.0000		0.0000	0.0000	0.3101	5.6005	5.9106	0.0321	8.0000e-004	6.8339
Total	0.2591	0.3651	1.3498	2.9200e-003	0.1852	0.0217	0.2069	0.0495	0.0213	0.0708	5.4821	276.7044	282.1865	0.2578	1.7200e-003	288.1334

	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	0.58	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	1/1/2016	1/7/2016	5	5	
2	Grading	Grading	1/8/2016	1/19/2016	5	8	
3	Building Construction	Building Construction	1/20/2016	12/6/2016	5	230	
4	Paving	Paving	1/20/2016	12/6/2016	5	230	
5	Architectural Coating	Architectural Coating	1/20/2016	12/6/2016	5	230	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 54,675; Residential Outdoor: 18,225; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

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	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	5.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved 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					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1366	0.1028	1.0000e-004	7.3500e-003	7.3500e-003		6.7600e-003	6.7600e-003		0.0000	9.2193	9.2193	2.7800e-003	0.0000	9.2777
Total	0.0127	0.1366	0.1028	1.0000e-004	0.0452	7.3500e-003	0.0525	0.0248	6.7600e-003	0.0316	0.0000	9.2193	9.2193	2.7800e-003	0.0000	9.2777

3.2 Site Preparation - 2016

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	1.5000e-004	2.3000e-004	2.2800e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4196	0.4196	2.0000e-005	0.0000	0.4200
Total	1.5000e-004	2.3000e-004	2.2800e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4196	0.4196	2.0000e-005	0.0000	0.4200

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					0.0173	0.0000	0.0173	9.5000e-003	0.0000	9.5000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1366	0.1028	1.0000e-004		7.3500e-003	7.3500e-003		6.7600e-003	6.7600e-003	0.0000	9.2193	9.2193	2.7800e-003	0.0000	9.2777
Total	0.0127	0.1366	0.1028	1.0000e-004	0.0173	7.3500e-003	0.0246	9.5000e-003	6.7600e-003	0.0163	0.0000	9.2193	9.2193	2.7800e-003	0.0000	9.2777

3.2 Site Preparation - 2016

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	1.5000e-004	2.3000e-004	2.2800e-003	1.0000e-005	3.2000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.4196	0.4196	2.0000e-005	0.0000	0.4200
Total	1.5000e-004	2.3000e-004	2.2800e-003	1.0000e-005	3.2000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.4196	0.4196	2.0000e-005	0.0000	0.4200

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					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0147	0.1538	0.1043	1.2000e-004		8.7900e-003	8.7900e-003		8.0900e-003	8.0900e-003	0.0000	11.2266	11.2266	3.3900e-003	0.0000	11.2977
Total	0.0147	0.1538	0.1043	1.2000e-004	0.0262	8.7900e-003	0.0350	0.0135	8.0900e-003	0.0216	0.0000	11.2266	11.2266	3.3900e-003	0.0000	11.2977

3.3 Grading - 2016

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	2.1000e-004	3.0000e-004	3.0400e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5595	0.5595	3.0000e-005	0.0000	0.5600
Total	2.1000e-004	3.0000e-004	3.0400e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5595	0.5595	3.0000e-005	0.0000	0.5600

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					0.0100	0.0000	0.0100	5.1500e-003	0.0000	5.1500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0147	0.1538	0.1043	1.2000e-004		8.7900e-003	8.7900e-003		8.0900e-003	8.0900e-003	0.0000	11.2265	11.2265	3.3900e-003	0.0000	11.2977
Total	0.0147	0.1538	0.1043	1.2000e-004	0.0100	8.7900e-003	0.0188	5.1500e-003	8.0900e-003	0.0132	0.0000	11.2265	11.2265	3.3900e-003	0.0000	11.2977

3.3 Grading - 2016

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	2.1000e-004	3.0000e-004	3.0400e-003	1.0000e-005	4.3000e-004	0.0000	4.3000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.5595	0.5595	3.0000e-005	0.0000	0.5600
Total	2.1000e-004	3.0000e-004	3.0400e-003	1.0000e-005	4.3000e-004	0.0000	4.3000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.5595	0.5595	3.0000e-005	0.0000	0.5600

3.4 Building 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	0.3917	3.2782	2.1283	3.0800e-003		0.2263	0.2263		0.2126	0.2126	0.0000	278.4766	278.4766	0.0691	0.0000	279.9270
Total	0.3917	3.2782	2.1283	3.0800e-003		0.2263	0.2263		0.2126	0.2126	0.0000	278.4766	278.4766	0.0691	0.0000	279.9270

3.4 Building Construction - 2016

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	0.0000
Vendor	1.8900e-003	0.0202	0.0236	5.0000e-005	1.4300e-003	3.8000e-004	1.8000e-003	4.1000e-004	3.5000e-004	7.5000e-004	0.0000	4.3924	4.3924	3.0000e-005	0.0000	4.3930	
Worker	1.9800e-003	2.8900e-003	0.0291	7.0000e-005	6.3200e-003	4.0000e-005	6.3600e-003	1.6800e-003	4.0000e-005	1.7200e-003	0.0000	5.3614	5.3614	2.5000e-004	0.0000	5.3666	
Total	3.8700e-003	0.0231	0.0527	1.2000e-004	7.7500e-003	4.2000e-004	8.1600e-003	2.0900e-003	3.9000e-004	2.4700e-003	0.0000	9.7538	9.7538	2.8000e-004	0.0000	9.7596	

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	0.3917	3.2782	2.1283	3.0800e-003		0.2263	0.2263		0.2126	0.2126	0.0000	278.4763	278.4763	0.0691	0.0000	279.9267
Total	0.3917	3.2782	2.1283	3.0800e-003		0.2263	0.2263		0.2126	0.2126	0.0000	278.4763	278.4763	0.0691	0.0000	279.9267

3.4 Building Construction - 2016

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	1.8900e-003	0.0202	0.0236	5.0000e-005	1.0200e-003	3.8000e-004	1.3900e-003	3.1000e-004	3.5000e-004	6.5000e-004	0.0000	4.3924	4.3924	3.0000e-005	0.0000	4.3930
Worker	1.9800e-003	2.8900e-003	0.0291	7.0000e-005	4.1300e-003	4.0000e-005	4.1700e-003	1.1400e-003	4.0000e-005	1.1800e-003	0.0000	5.3614	5.3614	2.5000e-004	0.0000	5.3666
Total	3.8700e-003	0.0231	0.0527	1.2000e-004	5.1500e-003	4.2000e-004	5.5600e-003	1.4500e-003	3.9000e-004	1.8300e-003	0.0000	9.7538	9.7538	2.8000e-004	0.0000	9.7596

3.5 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	0.2065	2.1093	1.4447	2.1400e-003		0.1273	0.1273		0.1173	0.1173	0.0000	198.4516	198.4516	0.0583	0.0000	199.6758
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.2065	2.1093	1.4447	2.1400e-003		0.1273	0.1273		0.1173	0.1173	0.0000	198.4516	198.4516	0.0583	0.0000	199.6758

3.5 Paving - 2016

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	7.9000e-003	0.0116	0.1165	2.9000e-004	0.0253	1.6000e-004	0.0254	6.7100e-003	1.5000e-004	6.8600e-003	0.0000	21.4456	21.4456	1.0000e-003	0.0000	21.4665
Total	7.9000e-003	0.0116	0.1165	2.9000e-004	0.0253	1.6000e-004	0.0254	6.7100e-003	1.5000e-004	6.8600e-003	0.0000	21.4456	21.4456	1.0000e-003	0.0000	21.4665

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	0.2065	2.1093	1.4447	2.1400e-003		0.1273	0.1273		0.1173	0.1173	0.0000	198.4514	198.4514	0.0583	0.0000	199.6756
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.2065	2.1093	1.4447	2.1400e-003		0.1273	0.1273		0.1173	0.1173	0.0000	198.4514	198.4514	0.0583	0.0000	199.6756

3.5 Paving - 2016

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	7.9000e-003	0.0116	0.1165	2.9000e-004	0.0165	1.6000e-004	0.0167	4.5600e-003	1.5000e-004	4.7100e-003	0.0000	21.4456	21.4456	1.0000e-003	0.0000	21.4665
Total	7.9000e-003	0.0116	0.1165	2.9000e-004	0.0165	1.6000e-004	0.0167	4.5600e-003	1.5000e-004	4.7100e-003	0.0000	21.4456	21.4456	1.0000e-003	0.0000	21.4665

3.6 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	0.1056					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0424	0.2728	0.2167	3.4000e-004		0.0226	0.0226		0.0226	0.0226	0.0000	29.3624	29.3624	3.4600e-003	0.0000	29.4351
Total	0.1480	0.2728	0.2167	3.4000e-004		0.0226	0.0226		0.0226	0.0226	0.0000	29.3624	29.3624	3.4600e-003	0.0000	29.4351

3.6 Architectural Coating - 2016

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	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	0.0000
Worker	4.0000e-004	5.8000e-004	5.8200e-003	1.0000e-005	1.2600e-003	1.0000e-005	1.2700e-003	3.4000e-004	1.0000e-005	3.4000e-004	0.0000	1.0723	1.0723	5.0000e-005	0.0000	1.0733	
Total	4.0000e-004	5.8000e-004	5.8200e-003	1.0000e-005	1.2600e-003	1.0000e-005	1.2700e-003	3.4000e-004	1.0000e-005	3.4000e-004	0.0000	1.0723	1.0723	5.0000e-005	0.0000	1.0733	

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	0.1056					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0424	0.2728	0.2167	3.4000e-004		0.0226	0.0226		0.0226	0.0226	0.0000	29.3624	29.3624	3.4600e-003	0.0000	29.4351	
Total	0.1480	0.2728	0.2167	3.4000e-004		0.0226	0.0226		0.0226	0.0226	0.0000	29.3624	29.3624	3.4600e-003	0.0000	29.4351	

3.6 Architectural Coating - 2016

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	4.0000e-004	5.8000e-004	5.8200e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.3000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	1.0723	1.0723	5.0000e-005	0.0000	1.0733
Total	4.0000e-004	5.8000e-004	5.8200e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.3000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	1.0723	1.0723	5.0000e-005	0.0000	1.0733

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	0.0941	0.3387	1.0887	2.6100e-003	0.1852	4.6200e-003	0.1899	0.0495	4.2500e-003	0.0538	0.0000	207.7956	207.7956	7.1400e-003	0.0000	207.9456
Unmitigated	0.0941	0.3387	1.0887	2.6100e-003	0.1852	4.6200e-003	0.1899	0.0495	4.2500e-003	0.0538	0.0000	207.7956	207.7956	7.1400e-003	0.0000	207.9456

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	143.55	151.20	131.55	488,409	488,409
Total	143.55	151.20	131.55	488,409	488,409

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-W	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	32.9649	32.9649	1.5200e-003	3.1000e-004	33.0939
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	32.9649	32.9649	1.5200e-003	3.1000e-004	33.0939
NaturalGas Mitigated	2.7300e-003	0.0233	9.9300e-003	1.5000e-004		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	27.0290	27.0290	5.2000e-004	5.0000e-004	27.1935
NaturalGas Unmitigated	2.7300e-003	0.0233	9.9300e-003	1.5000e-004		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	27.0290	27.0290	5.2000e-004	5.0000e-004	27.1935

5.2 Energy by Land Use - NaturalGas
Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	506504	2.7300e-003	0.0233	9.9300e-003	1.5000e-004		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	27.0290	27.0290	5.2000e-004	5.0000e-004	27.1935
Total		2.7300e-003	0.0233	9.9300e-003	1.5000e-004		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	27.0290	27.0290	5.2000e-004	5.0000e-004	27.1935

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	506504	2.7300e-003	0.0233	9.9300e-003	1.5000e-004		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	27.0290	27.0290	5.2000e-004	5.0000e-004	27.1935
Total		2.7300e-003	0.0233	9.9300e-003	1.5000e-004		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	27.0290	27.0290	5.2000e-004	5.0000e-004	27.1935

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	115195	32.9649	1.5200e-003	3.1000e-004	33.0939
Total		32.9649	1.5200e-003	3.1000e-004	33.0939

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	115195	32.9649	1.5200e-003	3.1000e-004	33.0939
Total		32.9649	1.5200e-003	3.1000e-004	33.0939

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1622	3.0800e-003	0.2511	1.6000e-004		0.0152	0.0152		0.0152	0.0152	1.5933	3.3144	4.9077	5.0100e-003	1.1000e-004	5.0464
Unmitigated	0.1622	3.0800e-003	0.2511	1.6000e-004		0.0152	0.0152		0.0152	0.0152	1.5933	3.3144	4.9077	5.0100e-003	1.1000e-004	5.0464

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	0.0106					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0976					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0491	1.2500e-003	0.0943	1.5000e-004		0.0143	0.0143		0.0143	0.0143	1.5933	3.0618	4.6550	4.7500e-003	1.1000e-004	4.7883
Landscaping	4.9400e-003	1.8400e-003	0.1569	1.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	0.2527	0.2527	2.6000e-004	0.0000	0.2581
Total	0.1622	3.0900e-003	0.2511	1.6000e-004		0.0152	0.0152		0.0152	0.0152	1.5933	3.3144	4.9077	5.0100e-003	1.1000e-004	5.0464

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0106					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0976					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0491	1.2500e-003	0.0943	1.5000e-004		0.0143	0.0143		0.0143	0.0143	1.5933	3.0618	4.6550	4.7500e-003	1.1000e-004	4.7883
Landscaping	4.9400e-003	1.8400e-003	0.1569	1.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	0.2527	0.2527	2.6000e-004	0.0000	0.2581
Total	0.1622	3.0900e-003	0.2511	1.6000e-004		0.0152	0.0152		0.0152	0.0152	1.5933	3.3144	4.9077	5.0100e-003	1.1000e-004	5.0464

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	5.9106	0.0321	8.0000e-004	6.8339
Unmitigated	5.9106	0.0321	8.1000e-004	6.8343

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.97731 / 0.61613	5.9106	0.0321	8.1000e-004	6.8343
Total		5.9106	0.0321	8.1000e-004	6.8343

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.97731 / 0.61613	5.9106	0.0321	8.0000e-004	6.8339
Total		5.9106	0.0321	8.0000e-004	6.8339

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.5787	0.2115	0.0000	8.0202
Unmitigated	3.5787	0.2115	0.0000	8.0202

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	17.63	3.5787	0.2115	0.0000	8.0202
Total		3.5787	0.2115	0.0000	8.0202

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	17.63	3.5787	0.2115	0.0000	8.0202
Total		3.5787	0.2115	0.0000	8.0202

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

APPENDIX 4: HABITAT ASSESSMENT

Ken H. Osborne
Osborne Biological Consulting
6675 Avenue Juan Diaz
Riverside, CA 92509

Attn: Mr. Zareh Hookasian
3173 Vera Valley Rd.
Franklin, TN 37064

RE: Pre grading Burrowing Owl follow-up for Case Number TR 33840; APN 376-043-027

To Whom It May Concern:

On Behalf of Mr Zareh Hookasian, Mr. Richard Soltysiak of RDS and Associates has requested my follow-up evaluation of Burrowing Owl status on Tract number 33840. I have previously investigated and reported on this site, finding negative for Burrowing Owl (see Osborne 2007).

Following the Burrowing Owl survey protocol as previously (Osborne 2007), I visited the site on four dates between August 21 and August 25 (table below). I found vegetation conditions on the site to remain unchanged from my previous site investigation. I mapped ground squirrel burrows and burrow complexes and found them essentially unchanged from the distribution previously mapped (Osborne 2007). During the course of this survey, I found no sign of Burrowing Owl (such as pellets, plumage, guano on nearby perches, or tracks). Burrowing Owl was not observed on the site, and I am satisfied that Burrowing Owl remains absent from the site. Additional field notes and/or a formal report on these latest survey results can be prepared if deemed necessary.

Respectfully submitted,



Ken H. Osborne

Table 1. Year 2013 Burrowing Owl Focused Survey Schedule and Site Weather Conditions.

Date and area	Hours (PDT)	Weather Conditions
21 August	0720-0820	Clear, 70° F, calm
23 August	0725-0825	5% cloud cover, 70-75° F, calm
24 August	0649-0749	Clear, 60° F, calm
25 August	0726-0826	Clear, 65-70° F, calm

References:

Osborne K. H. 2007. Habitat Assessment and Breeding Season Survey for Burrowing Owl, on a 4.04 acre site (Assessor's Parcel No. 376-043-027), Wildomar, Riverside County, California. Submitted to County of Riverside Environmental Programs Department, December 2007.

1019-01

Information Summary

Report preparation date: December 8, 2007.

Fieldwork performed: August 8 - 16, and December 7, 2007.

Title: Habitat Assessment and Breeding Season Survey for Burrowing Owl, on a 4.04 acre site (Assessor's Parcel No. 376-043-027), Wildomar, Riverside County, California.

Project site location: South side of Murrieta Creek, between Grewell St. and Central Ave., Wildomar, Riverside County, California. Wildomar U.S.G.S.-75.7 Quadrangle, Township 6 S., Range 4 W., unsectioned area.

Assessor's Parcel Number 376-043-027: Case Number TTM 33840

Owner/Applicant: Zareth Hookasian 4036 Old Hillsboro Rd., Franklin, TN 37064-9546.

Principle Investigator: Ken H. Osborne, Osborne Biological Consulting 6675 Avenue Juan Diaz, Riverside, CA 92509.

Report Summary: Results of biological assessments and surveys:

Habitat for Burrowing Owl is present on the site due to ground squirrel burrows on open lands. Survey results are negative for a Burrowing Owl Survey.

There are no riparian or riverine habitats on the site, and no vernal pools. There are no potential federal or state jurisdictional waters on the site.

Oak trees are present on the site.

Name and contact of Report Preparer: Ken H. Osborne (951) 360-6461

**Habitat Assessment and Breeding Season Survey for Burrowing Owl,
on a 4.04 acre site (Assessor's Parcel No. 376-043-027), Wildomar,
Riverside County, California.**

Prepared for:

**Zareth Hookasian
4036 Old Hillsboro Rd.
Franklin, TN**

I hereby certify that the statements furnished above and in the attached exhibits present that data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.



**Kendall H. Osborne
6675 Avenue Juan Diaz
Riverside, CA 92509**

12/8/2007
Date

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SUMMARY

On behalf of their client, Mr. Hookasian, Prestige Developers, Inc. has requested a habitat assessment and survey for Burrowing Owl (*Athene cunicularia*) on a 4.5-acre site (Assessor's Parcel No. 376-043-027), in Wildomar, Riverside County, California.

In order to assess the subject site for potential as habitat for these species, and conduct the appropriate surveys, field investigations were conducted on four dates from August 8 to August 16, 2007. Notes were taken on vegetation communities and structure, as well as plant and animal species observed on the site, along with photographs of the subject site.

Burrowing Owl: Fields of disturbed annual grassland with a few active ground squirrel burrows found on the subject site is typical Burrowing Owl habitat. Although focused survey effort determined ground squirrel and their burrows to be present, I found no sign of Burrowing Owl (such as pellets, plumage, guano on nearby perches, or tracks at burrow entrances). Burrowing Owl was not found in the course of the survey.

Miscellaneous: There are no wetlands on the subject site. There are no Federal or State jurisdictional waters on the site, however, a canal which carries Murrieta Creek is located near the northern boundary of the site. Oak trees (*Quercus agrifolia*) are present on the subject site.

1.0 INTRODUCTION

This report presents the methods and results of a habitat assessment and survey for Burrowing Owl (*Athene cunicularia*) on a 4.5-acre site (Assessor's Parcel No. 376-043-027), located in Wildomar, Riverside County, California. A residential tract is proposed for the site.

In order to assess the subject site for potential as habitat for Burrowing Owl, an initial field investigation was conducted on August 8, 2007. A focused survey for Burrowing Owl was undertaken from August 8 (beginning immediately after habitat evaluation) through August 16, 2007.

In the conduct of the field work, additional consideration was given to presence or absence of riparian or riverine habitats, vernal pools, or any other potential jurisdictional waters or wetlands. Consideration was also given to presence or absence of any native oak trees on the site (important to compliance with County Oak tree management programs and some local ordinances).

Figure 1 shows the general vicinity of the survey site at 50% scale on the Wildomar, 7.5' USGS quadrangle. Figure 2 shows the site at 200% scale on this quadrangle

2.0 SITE DISPOSITION

The subject site is located at South side of Murrieta Creek, between Grewell St. and Central Ave., Wildomar. Specifically, the site is located on the Wildomar U.S.G.S.-75.7 quadrangle, in Township 6 S., Range 5 W, in an unsectioned area.

3.0 METHODS

The initial field investigation of the site was conducted on the evening of August 8, 2007. On this date, evaluation of habitat conditions and potential for Burrowing Owl was undertaken along with documentation of all plants species on the site.

3.1 Burrowing Owl

With respect to Burrowing Owl, open fields on the subject site, along with availability of open burrows from ground squirrel, suggested suitability for Burrowing Owl. Overall, the site was considered to represent potential habitat for the owl. Ground squirrel was found to be present on northern and western margins of the subject site. A burrow survey was undertaken wherein all potentially suitable burrows or cavities were mapped and checked for owl sign such as pellets (composed of insects and small rodents), plumage, tracks at burrow entrances, and guano deposits on perches near burrow entrances.

Methods for this Burrowing Owl habitat assessment follow the survey protocol recommended by the Burrowing Owl Consortium (www2.ucsc.edu/scpbrg/owls.htm). These methods are published as follows (in relevant part):

“Phase I: Habitat Assessment

The first step in the survey process is to assess the presence of Burrowing Owl habitat on the project site including a 150-meter (approx. 500 ft.) buffer zone around the project boundary (Thomsen 1971, Martin 1973).

Burrowing Owl Habitat Description

Burrowing Owl habitat can be found in annual and perennial grasslands, deserts, and scrublands characterized by low-growing vegetation (Zarn 1974). Suitable owl habitat may also include trees and shrubs if the canopy covers less than 30 percent of the ground surface. Burrows are the essential component of Burrowing Owl habitat: both natural and artificial burrows provide protection, shelter, and nests for Burrowing Owls (Henny and Blus 1981). Burrowing Owls typically use burrows made by fossorial mammals, such as ground squirrels or badgers, but also may use man-made structures, such as cement culverts; cement, asphalt, or wood debris piles; or openings beneath cement or asphalt pavement.

Occupied Burrowing Owl Habitat

Burrowing Owls may use a site for breeding, wintering, foraging, and/or migration stopovers. Occupancy of suitable Burrowing Owl habitat can be verified at a site by an observation of at least one Burrowing Owl, or, alternatively, its molted feathers, cast pellets, prey remains, eggshell fragments, or excrement at or near a burrow entrance. Burrowing Owls exhibit high site fidelity, reusing burrows year after year (Rich 1984, Feeney 1992). A site should be assumed occupied if at least one Burrowing Owl has been observed occupying a burrow there within the last three years (Rich 1984).

The Phase II burrow survey is required if Burrowing Owl habitat occurs on the site. If Burrowing Owl habitat is not present on the project site and buffer zone, the Phase II burrow survey is not necessary. A written report of the habitat assessment should be prepared (Phase IV), stating the reason(s) why the area is not Burrowing Owl habitat.

Phase II: Burrow Survey

1. A survey for burrows and owls should be conducted by walking through suitable habitat over the entire project site and in areas within 150 meters (approx. 500 ft.) of the project impact zone. This 150-meter buffer zone is included to account for adjacent burrows and foraging habitat outside the project area and impacts from factors such as noise and vibration due to heavy equipment which could impact resources outside the project area.
2. Pedestrian survey transects should be spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines should be no more than 30 meters (approx. 100 ft.), and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more surveyors conduct concurrent survey. Surveyors should maintain a minimum distance of 50 meters (approx. 160 ft.) from any owls or occupied burrows. It is important to minimize disturbance near occupied burrows during all seasons.
3. If burrows or Burrowing Owls are recorded on the site, a map should be prepared of the burrow concentration areas. A breeding season survey and census (Phase III) of Burrowing Owls is the next step required.

3.1.1 Phase I: Habitat Assessment

The site visit on August 8, 2007 was conducted to determine the need for an owl survey and to gain an understanding of the scope of any required survey. During this visit, potential Burrowing Owl habitat areas were assessed. No Burrowing Owl was observed in the course of this site visit (which carried over into survey efforts), and no sign of owl (such as pellets, plumage, insect parts, tracks, whitewash) was found at any burrow

entrance. Throughout the course of this habitat assessment and subsequent survey efforts, general notes were taken on vegetation communities and structure, as well as plant and animal species (or their sign) observed on the site, along with photographs of the subject site. Animal burrows and other structures suitable for Burrowing Owl were mapped using GPS.

3.1.2 Phase II: Burrow Survey

A burrow survey was carried out during the initial site investigation. The site was systematically searched for any animal burrows or natural soil cavities that might support Burrowing Owl. During this phase, burrows were carefully inspected for evidence of Burrowing Owl. All burrows and soil cavities were mapped for the purposes of subsequent focused survey work.

3.1.3 Phase III: Burrowing Owl Survey, Census and Mapping

Following identification of animal burrows or erosional cavities suitable for Burrowing Owl, a focused survey was undertaken on four site visits between August 8 and August 16, 2007. These surveys were conducted by Kendall Osborne. This survey was undertaken during the potential nesting season for Burrowing Owl. For the purposes of these survey efforts, sunrise was considered to occur at approximately 0612 hours and sunset at approximately 1945 hours (PDT). Table 1 provides a schedule and site weather conditions during surveys of the subject property and adjacent lands.

Table 1. Year 2007 Burrowing Owl Focused Survey Schedule and Site Weather Conditions.

Date and area	Hours (PDT)	Weather Conditions
8 August	1946-2032	Clear, 74-70° F, calm
13 August	1930-2030	Clear, 83-79° F, calm
15 August	1930-2020	Clear, 91-88° F, calm
16 th August	0705-0805	Clear, 75-77° F, calm

3.2 Miscellaneous

In the conduct of the field work, additional consideration was given to presence or absence of riparian or riverine habitats, vernal pools, or any other potential jurisdictional waters or wetlands.

Consideration was also given to presence or absence of any Oak trees on the site (important to compliance with County Oak tree management programs). General notes were taken on vegetation communities and structure, as well as plant and animal species (or their sign) observed on the site, along with photographs of the subject site. Oak trees were mapped by GPS, and measured to Breast-Height diameter on December 7, 2007.

4.0 RESULTS

This investigation determined that the subject site currently supports primarily open and highly disturbed fields of open soil with a history of use for storage of trucks and grading equipment. Figures 3 through 8 are photographs of representative of landscapes and habitats found on the subject property. Figure 9 provides a key as to where on the site these photographs were taken.

4.1 Burrowing Owl

Open disturbed ground with some active ground squirrel burrows found on the subject site is typical Burrowing Owl habitat. The investigation determined ground squirrel and their burrows to be present. Ground squirrel burrows potentially suitable for Burrowing Owl were found along the eastern and northern margins of subject site (Figure 12). GPS locations of ground squirrel burrows are listed in the field notes (appendix). I found no sign of Burrowing Owl (such as pellets, plumage, guano on nearby perches, or tracks at burrow entrances).

4.2 Miscellaneous

There are no wetlands on the subject site

Several Coast Live Oak trees (*Quercus agrifolia*) are present along the southern fence-line on the subject site. The locations and breast-height diameters of these oak trees are given in the appendix.

5.0 EXISTING ENVIRONMENT

5.1 Topography

The site is generally flat. Elevation on the subject property is approximately 1248-1243'.

5.2 Soils

The predominant on-site soils are predominantly Greenfield sandy loams. Pachappa fine sandy loams occur on the western end of the site (Knecht 1971). A soils map adapted from Knecht (1971) is presented in Figure 11.

5.3 Plant Communities

The majority of the site consists of an open field with exotic annual grasses and large areas of bare soil with few plants. Southern margins of the site (along the southern fence-lines) support exotic woodlands with a few native oaks. Conditions on the site are generally shown in Figures 3 through 8. Figure 10 provides a mapped general

distribution of vegetation types on the site. A list of plant species encountered is given in the appendix.

6.0 CONCLUSIONS

Habitat conditions on the subject site were found to be suitable for Burrowing Owl Ground squirrel burrows as well as piles of rubble or debris on the site have potential to support the owl. Survey results are negative for a Burrowing Owl Survey.

There are no riparian or riverine habitats on the site, and no vernal pools. Potential Federal or State jurisdictional waters do not occur on the site. However, the site is adjacent to (and south of) a canal which carries Murrieta Creek.

Oak trees on the subject site may be subject to protection under local ordinance.

7.0 REFERENCES

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8.0 FIGURES

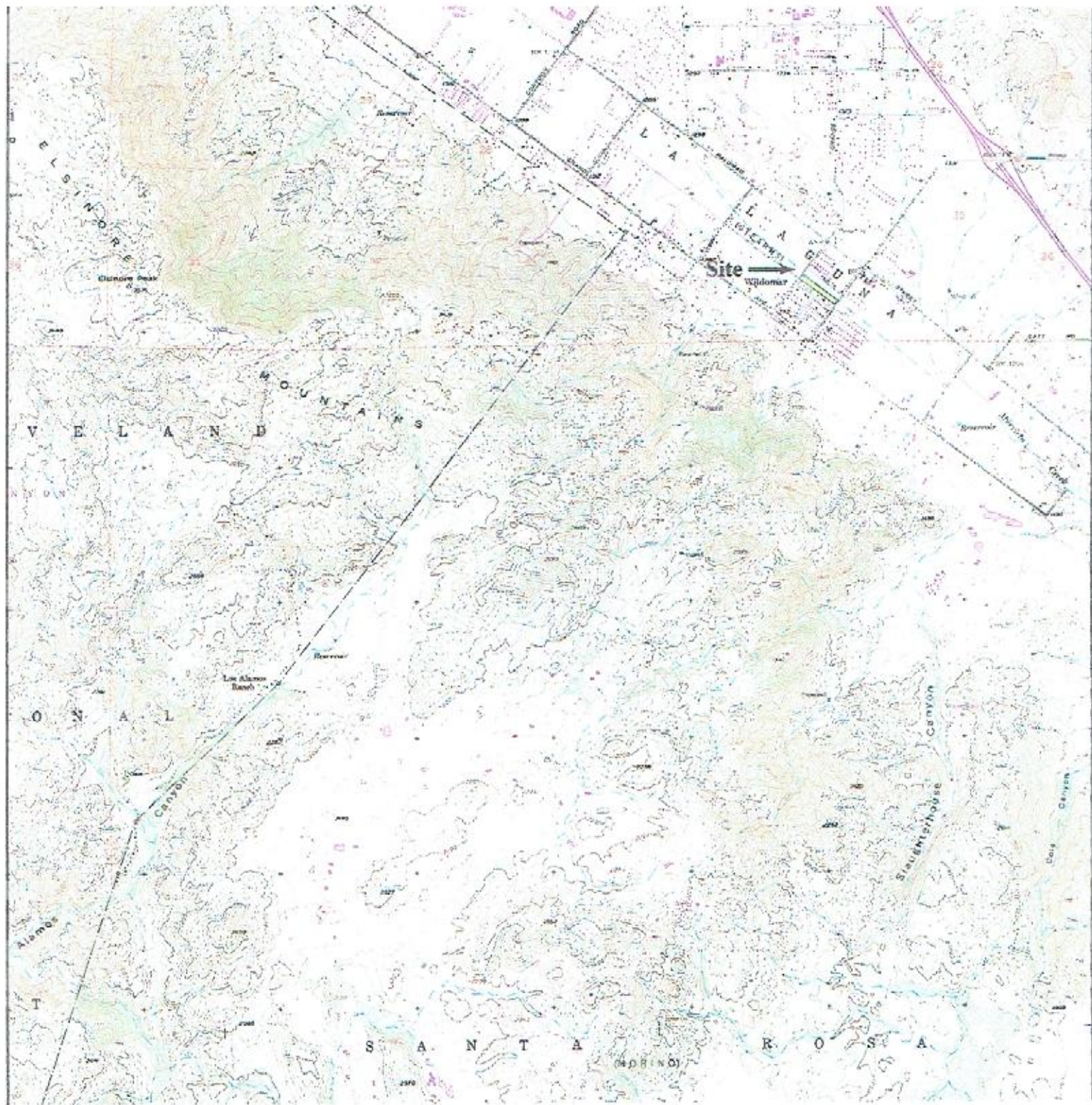


Figure 1. General vicinity of survey site, Wildomar, California USGS 7.5" quadrangle at 50%. 4.5-acre subject site is outlined in blue and highlighted in yellow.

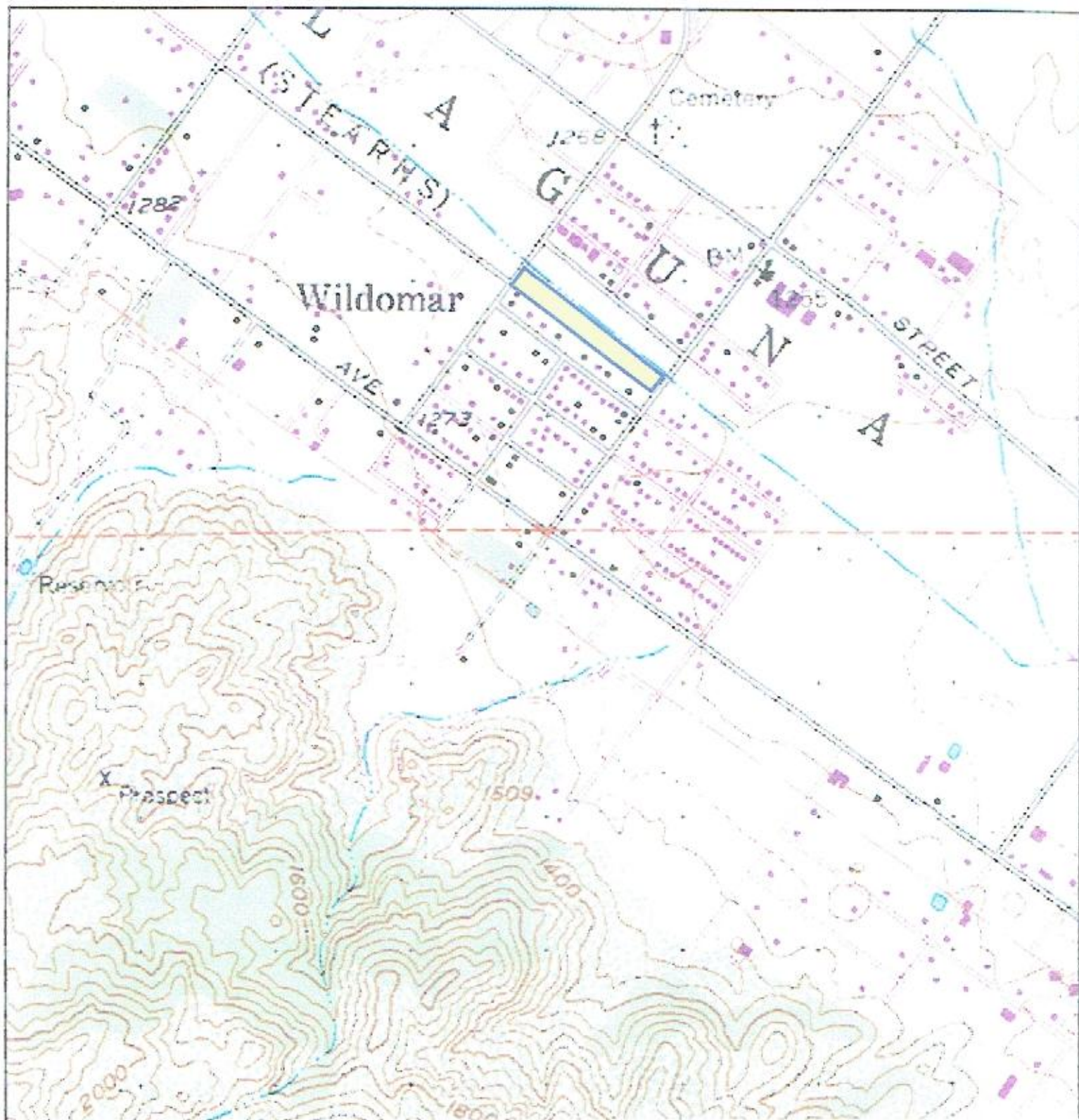


Figure 2. General vicinity of survey site, Wildomar, California USGS 7.5" quadrangle at 200%. 4.5-acre subject site is outlined in blue and highlighted in yellow.



Figure 3. Photograph of the western site looking east from near the southwestern corner of the site. Oak tree (dark) at right is shown in figure 8.



Figure 4. Photograph of open grasslands on the western and central site as viewed from the northwestern corner of the site. Fence at left is the northern site boundary. Dark tree at upper right is the oak tree shown in Figure 8.



Figure 5. Photograph of the eastern and central portions of the site as looking west from the eastern site.



Figure 6. Photograph of extensive exotic woodlands along the fence-line on the site southern boundary. View looks west northwest from the eastern portion of the site.



Figure 7. Photograph of refuse (mainly wood) pile on the central western site. View looks to the east.



Figure 8. Photograph of large oak tree on the western site, along the southern fence-line.

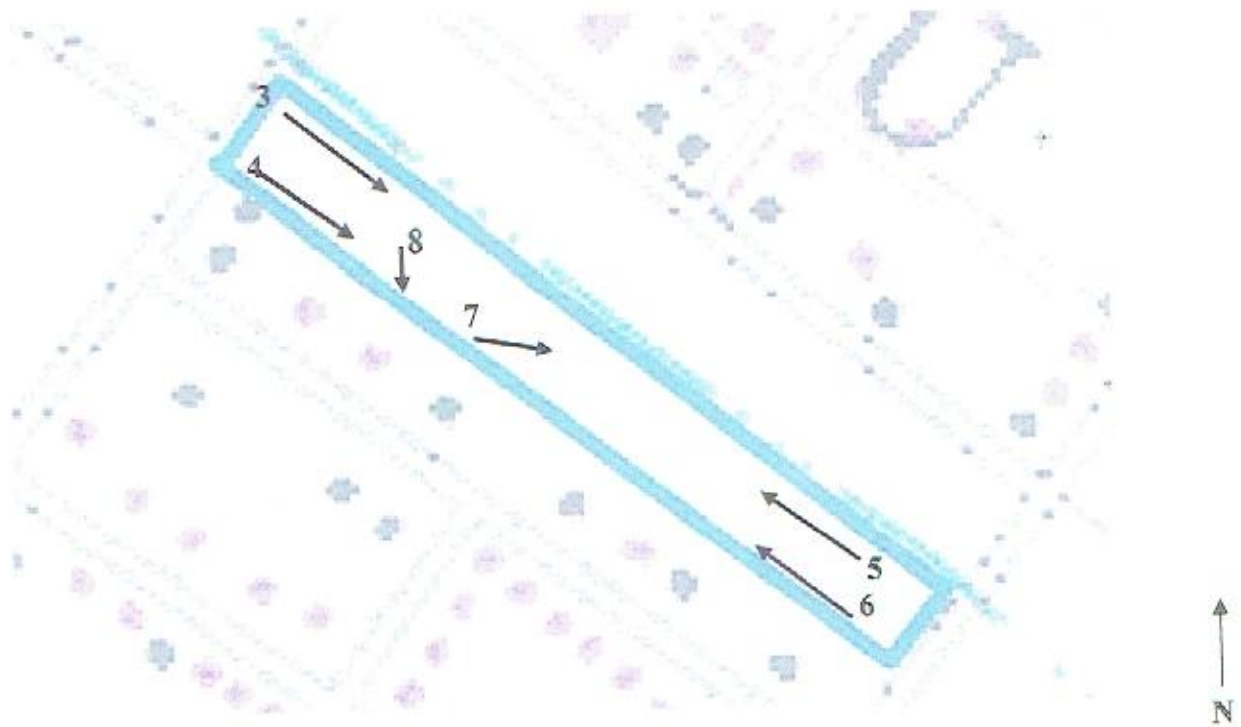


Figure 9. Approximate locations around survey site from which photographs were taken (base of arrows). Arrow indicates the direction a photograph was taken. Numbers next to the arrows indicate figure numbers (Figures 3-8).

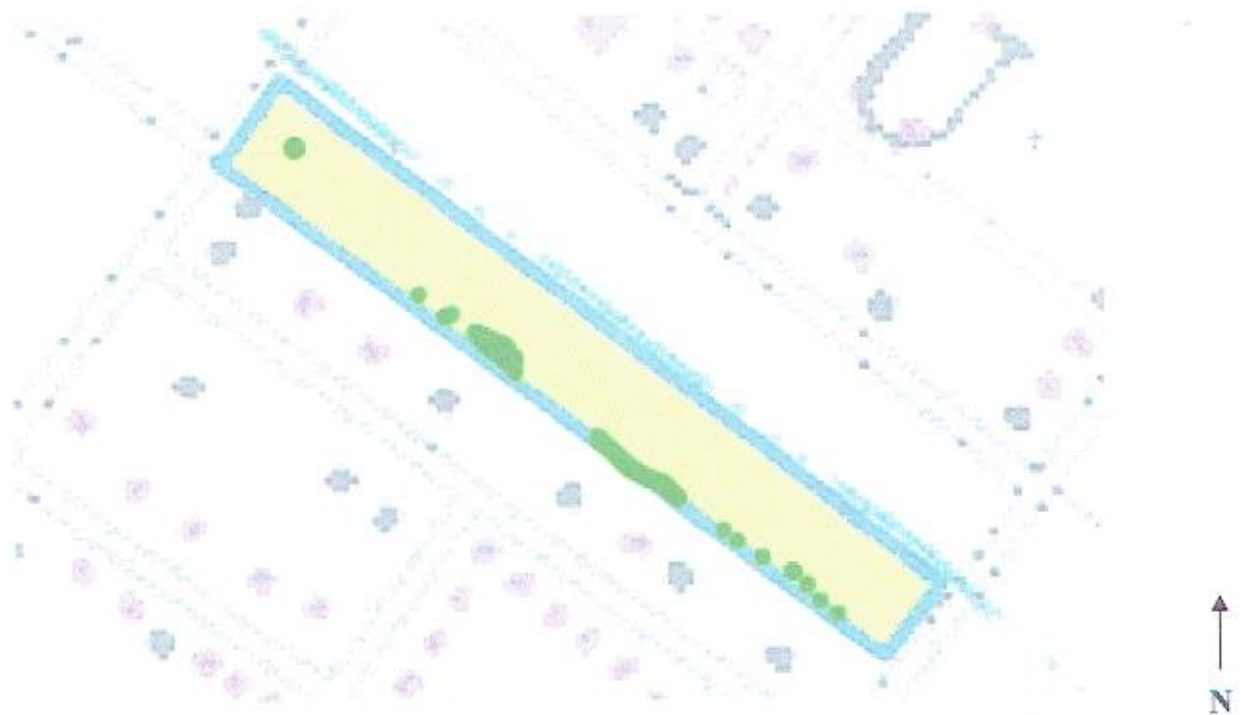


Figure 10. Approximate distribution of vegetation types on aerial depiction of site: Unshaded = Highly disturbed bare soils and annual grassland; Green = exotic woodland (with some native oak); Blue = site boundary.



Figure 11. Soils map showing vicinity around (highlighted) survey site. Soil types, mapped by the U.S. Department of Agriculture, are indicated by letter abbreviations within mapped polygons of soil type. Soils on study site: GyA = Greenfield sandy loams; PaC2 = Pachappa fine sandy loams. Soils are shown over aerial photographs with features shown on USGS topographic maps (Knecht 1971).

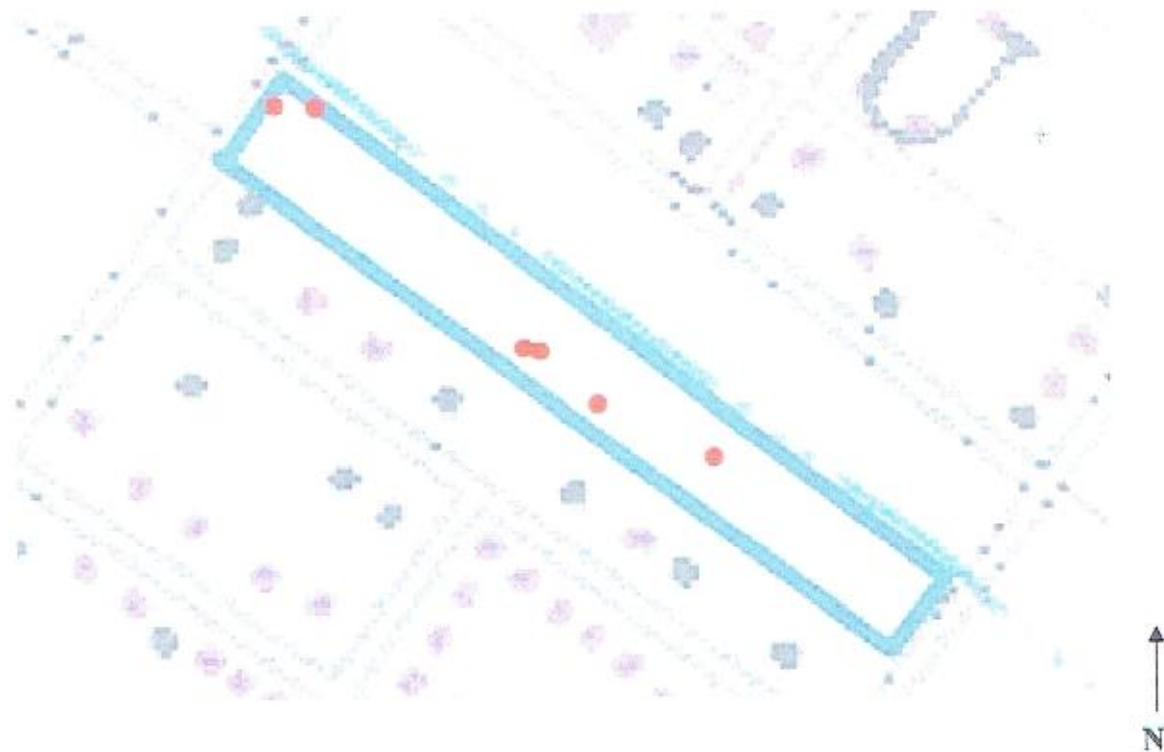


Figure 12. Approximate locations around survey site of ground squirrel burrows and other structures with potential to harbor Burrowing Owl (red dots).

9.0 APPENDIX

Vertebrate species encountered

Plant species encountered

Location of Ground Squirrel burrow complexes, soil cavities, and wood piles found on the subject site

Location and BHD of oak trees found on the site.

Field notes

Maps provided by client

County forms

Vertebrate species (or sign) encountered on the survey site.

<u>Common name</u>	<u>Species</u>
Reptiles	
Side-blotched lizard	<i>Uta stansburiana</i>
Western fence lizard	<i>Sceloporus occidentalis</i>
Birds	
American crow	<i>Corvus brachyrhynchos</i>
Anna's hummingbird	<i>Calypte anna</i>
Barn owl	<i>Tyto alba</i>
Bushtit	<i>Psaltriparus minimus</i>
House finch	<i>Carpodacus mexicanus</i>
Morning dove	<i>Zenaida macroura</i>
Northern mockingbird	<i>Mimus polyglottos</i>
Mammals	
Botta's pocket gopher	<i>Thomomys bottae</i>
California ground squirrel	<i>Spermophilus beecheyi</i>
Reptiles	
Side-blotched lizard	<i>Uta stansburiana</i>

Plant species encountered on the survey site.

FAMILY	Species
ADOXACEAE	
Mexican elderberry	<i>Sambucus mexicana</i>
AMERANTHACEAE	
white tumbleweed	<i>Amaranthus albus</i>
ANACARDIACEAE	
Peruvian Peppertree	<i>Schinus molle</i>
ASTERACEAE	
western ragweed	<i>Ambrosia psilostachya</i>
horseweed	<i>Conyza canadensis</i>
sunflower	<i>Helianthus annua</i>
telegraphweed	<i>Heterotheca grandiflora</i>
prickly lettuce	<i>Lactuca serriola</i>
BORAGINACEAE	
ranchers fiddleneck	<i>Amsinkia menziesii</i>
BRASSICACEAE	
shortpod mustard	<i>Hirschfeldia incana</i>
CHENOPODIACEAE	
lamb's quarters	<i>Chenopodium album</i>
CUCURBITACEAE	
coyote gourd	<i>Cucurbita palmata</i>
EUPHORBIACEAE	
spurge	<i>Chamaesyce micromeria</i>
California croton	<i>Croton californicus</i>
Dove weed	<i>Croton setigerus</i>
FAGACEAE	
coast live oak	<i>Quercus agrifolia</i>
SIMAROUBACEAE	
tree of heaven	<i>Ailanthus altissima</i>
SIMMONDSIACEAE	
Jojoba	<i>Simmondsia chinensis</i>
SOLANACEAE	
Jimson weed	<i>Datura wrightii</i>
tree tobacco	<i>Nicotiana glauca</i>
ZYGOPHYLLACEAE	
Puncture vine	<i>Tribulus terrestris</i>
POACEAE	
wild oats	<i>Avena fatua</i>
Foxtail chess/red brome	<i>Bromus madritensis</i>
Bermuda grass	<i>Cynodon dactylon</i>

Location of Ground Squirrel burrow complexes, soil cavities, and wood piles found on the subject site. Latitude and Longitude for selected burrows is indicated (as "XXX" decimal fractions of the appropriate minute). These location estimates are approximate, usually with at least 16 foot error in each dimension.

Description	Latitude 35° 36.XXX' N	Longitude 117° 16.XXX' W
Wood and rubble pile with burrows	137	645
Wood and rubble pile with burrows	131	637
Pile of rubble and wood	114	626
Burrow in fence-line	195	708
Burrow a roadside	200	719
Pile of rubble and wood	099	999

Location of oak trees (*Quercus agrifolia*), with breast-height diameters (BHD) larger than two inches, found on the subject site. Latitude and Longitude for trees is indicated (as "XXX" decimal fractions of the appropriate minute). These location estimates are approximate, usually with at least 16 foot error in each dimension.

BHD (inches)	Latitude 35° 36.XXX' N	Longitude 117° 16.XXX' W
2 (two stems)	121	656
8	136	663
3 (two stems)	137	667
20	149	678
6	150	682
5	061	545

Date 8/8/07 Time 746 to 832 pm Job Hookasian
 Miles 192948 Location Wildomar
 Biologists 1/4/0
 Survey for: Burrowing Owl
 Habitat Assessment for: Burrowing Owl

Weather: Temp 74 - Wind 0 Cloud cover 0 Rain 0
~~58~~ to 70°

Biological elements:

Vegetative communities:

Open field covered grass.

Soil type _____

Plant species:

Vertebrates

Coyote Good Sp. AMR

Arthropods

Oak Woodlands ___ Riparian Veg ___ type _____

Vernal Pools _____

Comments:

Survey @ 745 pm

<u>Wood/Rubble Pile w/ burrows</u>	<u>22</u>	<u>36.137</u>	<u>117</u>	<u>16.645</u>
<u>Wood/Rubble Pile</u>		<u>36.114</u>		<u>16.626</u>
<u>Burrows w/ burrows w/ wood</u>		<u>36.195</u>		<u>16.708</u>
<u>Burrows w/ wood</u>		<u>36.200</u>		<u>16.719</u>
<u>Rubble/wood</u>		<u>36.099</u>		<u>16.999</u>

FAMILY	Species	
ADOXACEAE		
Mexican elderberry	<i>Sambucus mexicana</i>	✓
AGAVACEAE		
Mojave yucca	<i>Yucca schidigera</i>	
Our Lord's candle	<i>Yucca whipplei</i>	
AMERANTHACEAE		
white tumbleweed	<i>Amaranthus albus</i>	✓
Palmer's amaranth	<i>Amaranthus palmeri</i>	
ANACARDIACEAE		
laurel sumac	<i>Malosma laurina</i>	
lemonade berry	<i>Rhus integrifolia</i>	
sugar bush	<i>Rhus ovata</i>	
basketbush	<i>Rhus trilobata</i>	
Brazilian Peppertree	<i>Schinus terebinthifolius</i>	
Peruvian Peppertree	<i>Schinus molle</i>	✓
poison oak	<i>Toxicodendron diversilobum</i>	
APIACEAE		
anise	<i>Foeniculum vulgare</i>	
woolly-fruit lomatium	<i>Lomatium dasycarpum</i>	
southern tauschia	<i>Tauschia arguta</i>	
APOCYNACEAE		
oleander	<i>Nerium oleander</i>	
ARECACEAE		
fan palm	<i>Washingtonia</i>	
ASCLEPIADACEAE		
Narrow-leaved milkweed	<i>Asclepias fascicularis</i>	
milkvine	<i>Funistrum cynanchoides</i>	
ASTERACEAE		
California yarrow	<i>Achillea millefolium</i>	
pineapple weed	<i>Amblyopappus pusillus</i>	
Annual bur-weed	<i>Ambrosia acanthicarpa</i>	
	<i>Ambrosia dumosa</i>	
western ragweed	<i>Ambrosia psilostachya</i>	✓
California sage	<i>Artemisia californica</i>	
tarragon	<i>Artemisia dracunculus</i>	
great basin sagebrush	<i>Artemisia tridentata</i>	
mule fat	<i>Baccharis salicifolia</i>	
coyote bush	<i>Baccharis sarathroides</i>	
Sweetbush	<i>Bebbia juncea</i>	
California brickellbush	<i>Brickellia californica</i>	
Tocalote	<i>Centaurea melitensis</i>	
smooth tarplant	<i>Centromadia pungens laevis</i>	
white pinchusion	<i>Chaenactis fremontii</i>	
yellow pinchusion	<i>Chaenactis glabriuscula</i>	
common pineapple weed	<i>Chamomilla suaveolens</i>	
bull thistle	<i>Cincium vulgare</i>	
flax-leaved horseweed	<i>Conyza bonariensis</i>	
horseweed	<i>Conyza canadensis</i>	✓
fascicled tarplant	<i>Deinandra fasciculata</i>	
Kellogg's tarplant	<i>Deinandra kelloggii</i>	
paniculate tarplant	<i>Deinandra paniculata</i>	
southern tarweed	<i>Deinandra parryi</i> (CNPS list)	
brittlebush	<i>Encelia farinosa</i>	

goldenbush	<i>Ericameria cooperi</i>	
interior goldenbush	<i>Ericameria linearifolia</i>	
Palmer's goldenbush	<i>Ericameria palmeri</i>	
California filago	<i>Filago californica</i>	
narrow-leaved filago	<i>Filago gallica</i>	
California everlasting	<i>Gnaphalium californicum</i>	
	<i>Gnaphalium canescens</i>	
matchweed	<i>Gutierrezia</i>	
	<i>Haplopappus palmeri</i>	
sunflower	<i>Helianthus annuus</i>	✓
slender sunflower	<i>Helianthus gracilentus</i>	•
telegraphweed	<i>Heterotheca grandiflora</i>	✓
goldenaster	<i>Heterotheca sessiliflora</i>	
goldenbush	<i>Isocoma menziesii</i>	
western poverty weed	<i>Iva axillaris</i>	
prickly lettuce	<i>Lactuca serriola</i>	✓
southern goldfields	<i>Lasthenia coronaria</i>	
Scalebroom	<i>Lepidospartum squamatum</i>	
cudweed aster	<i>Lessingia filaginifolia</i>	
fall vinegar weed	<i>Lessingia glandulifera</i>	
chicoree	<i>Malacothrix californica</i>	
chicoree	<i>Malacothrix saxatilis</i>	
woolly marbles	<i>Psilocarpus brevissimus</i>	
round woolly marbles	<i>Psilocarpus tenellus</i>	
	<i>Rafinesquia neomexicana</i>	
Senecio	<i>Senecio douglasii</i>	
prickly sow-thistle	<i>Sonchus asper</i>	
common sow-thistle	<i>Sonchus oleraceus</i>	
short wreath plant	<i>Stephanomeria exigua</i>	
tall wreath plant	<i>Stephanomeria virgata</i>	
dandelion	<i>Taraxacum officinale</i>	
cotton-thorn	<i>Tetradymia comosa</i>	
golden crownbeard	<i>Verbesina encelioides</i>	
spiny cocklebur	<i>Xanthium spinosum</i>	
cocklebur	<i>Xanthium strumarium</i>	
BORAGINACEAE		
ranchers fiddleneck	<i>Amsinckia menziesii</i>	✓
cryptantha	<i>Cryptantha</i>	
Cleveland's cryptantha	<i>Cryptantha clevelandii</i>	
common cryptantha	<i>Cryptantha intermedia</i>	
Guadalupe cryptantha	<i>Cryptantha maritima</i>	
heliotrope	<i>Heliotropium crassavicum</i>	
slender pectocarya	<i>Pectocarya linearis</i>	
wire-stemmed popcorn flower	<i>Plagiobothrys leptoladus</i>	
BRASSICACEAE		
elegant rock-cress	<i>Arabis sparsiflora</i>	
Sahara mustard	<i>Brassica tournefortii</i>	
black mustard	<i>Brassica nigra</i>	
shortpod mustard	<i>Hirschfeldia incana</i>	✓
peppergrass	<i>Lepidium nitidum</i>	
	<i>Lepidium virginicum</i>	
tall tumbled mustard	<i>Sisymbrium altissimum</i>	
	<i>Sisymbrium erisimoides</i>	
London rocket	<i>Sisymbrium irio</i>	
wild radish	<i>Raphanus sativus</i>	

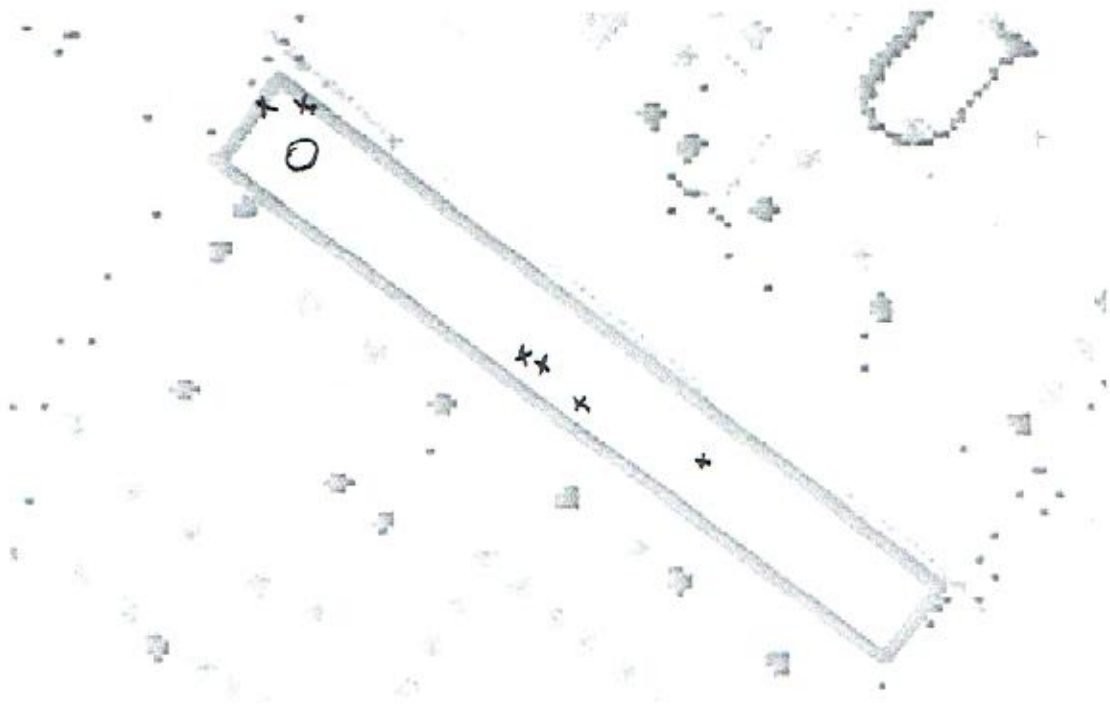
CACTACEAE	
California barrel cactus	<i>Ferocactus cylindraceus</i>
common beavertail	<i>Opuntia basilaris</i>
	<i>Opuntia ficus-indica</i>
prickly pear	<i>Opuntia littoralis</i>
valley cholla	<i>Opuntia parryi</i>
silver cholla	<i>Opuntia echinocarpa</i>
CAPPARACEAE	
bladderpod	<i>Isomeris arborea</i>
CARYOPHYLLACEAE	
windmill pink	<i>Silene gallica</i>
Boccone's sand spurry	<i>Spergularia bocconeii</i>
CHENOPODIACEAE	
Saltbush	<i>Atriplex canescens</i>
red saltbush	<i>Atriplex rosea</i>
Australian saltbush	<i>Atriplex semibaccata</i>
bract saltbush	<i>Atriplex serenana</i>
lamb's quarters	<i>Chenopodium album</i> ✓
pitseed goosefoot	<i>Chenopodium berlandieri</i>
Kochia	<i>Kochia scoparia</i>
Russian thistle	<i>Salsola tragus</i>
CONVOLVULACEAE	
morning-glory	<i>Calystegia macrostegia</i>
CRASSULACEAE	
sand pygmy-stonecrop	<i>Crassula connata</i>
lance-leaved dudleya	<i>Dudleya lanceolata</i>
many-stemmed dudleya	<i>Dudleya multicaulis</i>
chalky live-forever	<i>Dudleya pulverulenta</i>
CUCURBITACEAE	
coyote gourd	<i>Cucurbita palmata</i> ✓
melon	<i>Cucurbita</i>
wild cucumber	<i>Marah macrocarpus</i>
CUPRESSACEAE	
California juniper	<i>Juniperus californica</i>
CUSCUTACEAE	
Dodder	<i>Cuscuta californica</i>
ERICACEAE	
Adam's manzanita	<i>Arctostaphylos glandulosa</i>
Summer-holly	<i>Comarostaphylis diversifolia</i>
EUPHORBIACEAE	
spurge	<i>Chamaesyce micromeria</i> ✓
California croton	<i>Croton californicus</i> ✓
dove weed	<i>Croton setigerus</i> ✓
spurge	<i>Euphorbia peplus</i>
castor-bean	<i>Ricinus communis</i>
FABACEAE	
catclaw	<i>Acacia greggii</i>
Pomona milkvetch	<i>Astragalus pomonensis</i>
locoweed	<i>Astragalus</i> spp.
Palo verde	<i>Cercidium floridum</i>
Spanish clover	<i>Lotus purshianus</i>
silverleaf lotus	<i>Lotus argophyllus</i>
deer weed	<i>Lotus scoparius</i>
strigose bird's-foot trefoil	<i>Lotus strigosus</i>
mesquite	<i>Prosopis glandulosa</i>

	<i>Lotus sp.</i>	
	<i>Lupinus sp.</i>	
miniature lupine	<i>Lupinus bicolor</i>	
dense-flowered chick lupine	<i>Lupinus microcarpus</i>	
arroyo lupine	<i>Lupinus succulentus</i>	
bur clover	<i>Medicago polymorpha</i>	
alfalfa	<i>Medicago sativa</i>	
white sweet-clover	<i>Medicago albus</i>	
sourclover	<i>Medicago indicus</i>	
tall nasty clover	<i>Melilotus indica</i>	
Psorothamnus	<i>Psorothamnus arborescens</i>	
clover	<i>Trifolium</i>	
common vetch	<i>Vicia sativa</i>	
winter vetch	<i>Vicia villosa</i>	
FAGACEAE		
coast live oak	<i>Quercus agrifolia</i>	✓
Engelmann	<i>Quercus engelmannii</i>	
California scrub	<i>Quercus berberidifolia</i>	
GERANIACEAE		
long-beak filaree	<i>Erodium botrys</i>	
red-stem filaree	<i>Erodium cicutarium</i>	
GROSSULARIACEAE		
hillside gooseberry	<i>Ribes californicum</i>	
HYDROPHYLLACEAE		
baby blue-eyes	<i>Nemophila menziesii</i>	
thickleaf yerba santa	<i>Eriodictyon crassifolium</i>	
hairy yerba santa	<i>Eriodictyon trichocalyx</i>	
caterpillar phacelia	<i>Phacelia cicutaria</i>	
common phacelia	<i>Phacelia distans</i>	
wild canterbury-bell	<i>Phacelia minor</i>	
branching phacelia	<i>Phacelia ramosissima</i>	
JUGLANDACEAE		
Black Walnut	<i>Juglans</i>	
LAMINACEAE		
Horehound	<i>Marubium vulgare</i>	
vinegar weed	<i>Tricostema lanceolatum</i>	
white sage	<i>Salvia apiana</i>	
chia	<i>Salvia columbariae</i>	
black sage	<i>Salvia mellifera</i>	
LOASACEAE		
sandpaper plant	<i>Petalonyx linearis</i>	
sandpaper plant	<i>Petalonyx thurberi</i>	
LYTHRACEAE		
grass poly	<i>Lythrum hyssopifolium</i>	
MYRTACEAE		
Eucalyptus	<i>Eucalyptus</i>	
MALVACEAE		
Chingma velvet leaf	<i>Abutilon theophrasti</i>	
bush mallow	<i>Malacothamnus fasciculatus</i>	
alkali-mallow	<i>Malva leprosa</i>	
cheeseweed	<i>Malva parviflora</i>	
checker-bloom	<i>Sidalcea malvaeflora</i>	
NYCTAGINACEAE		
California wishbone plant	<i>Mirabilis californica</i>	
OLEACEAE		

Ash	<i>Fraxinus</i>
Olive	<i>Olea europaea</i>
ONAGRACEAE	
California sun cup	<i>Camissonia bistorta</i>
	<i>Camissonia campestris</i>
	<i>Camissonia claviformis</i>
hairy sun-cups	<i>Camissonia hirtella</i>
miniature suncup	<i>Camissonia micrantha</i>
four-spot clarkia	<i>Clarkia purpurea</i>
California fuchsia	<i>Epilobium canum</i>
willow-herb	<i>Epilobium ciliatum</i>
California evening primrose	<i>Oenothera californica</i>
common evening primrose	<i>Oenothera elata</i>
Primrose	<i>Oenothera deltoides?</i>
PAPAVERACEAE	
California poppy	<i>Eschscholzia californica</i>
PINACEAE	
Pine	<i>Pinus</i>
PLANTAGINACEAE	
California plantain	<i>Plantago erecta</i>
English plantain	<i>Plantago lanceolata</i>
PLATANACEAE	
western sycamore	<i>Platanus racemosa</i>
POLEMONIACEAE	
white eriastrum	<i>Eriastrum densifolium</i>
Spineflower	<i>Eriastrum sapphirinum</i>
holly-leaved skunkweed	<i>Navarretia atractyloides</i>
hooked skunkweed	<i>Navarretia hamata</i>
Gilia	<i>Gilia sp.</i>
POLYGONACEAE	
Spineflower	<i>Chorizanthe</i>
	<i>Eriogonum inflatum</i>
slender buckwheat	<i>Eriogonum gracile</i>
Cal buckwheat	<i>Eriogonum fasciculatum</i>
Thrubers buckwheat	<i>Eriogonum thuberi</i>
common knotweed	<i>Polygonum arenastrum</i>
curly dock	<i>Rumex crispus</i>
California dock	<i>Rumex salicifolius</i>
PORTULACACEAE	
red maids	<i>Calandrinia ciliata</i>
miner's lettuce	<i>Claytonia perfoliata</i>
purslane	<i>Portulaca oleracea</i>
PRIMULACEAE	
scarlet pimpernel	<i>Anagallis arvensis</i>
RHAMNACEAE	
thick-leaf wild-lilac	<i>Ceanothus crasifolius</i>
buck bush	<i>Ceanothus cuneatus</i>
chaparral whitethorn	<i>Ceanothus leucodermis</i>
holly-leaved redberry	<i>Rhamnus ilicifolia</i>
California coffee berry	<i>Rhamnus californica</i>
Spiny redberry	<i>Rhamnus crocea</i>
ROSACEAE	
Toyon	<i>Heteromeles arbutifolia</i>
holly-leaved cherry	<i>Prunus ilicifolia</i>
cliff-rose	<i>Purshia mexicana</i>

chamise	<i>Adenostoma fasciculatum</i>	
red shank	<i>Adenostoma sparsifolium</i>	
RUBIACEAE		
phlox-leaved bedstraw	<i>Galium angustifolium</i>	
common bedstraw	<i>Galium aparine</i>	
SALICACEAE		
cottonwood	<i>Populus fremontii</i>	
poplar	<i>Populus sp.</i>	
Black willow	<i>Salix gooddingii</i>	
arroyo willow	<i>Salix lasiolepis</i>	
sandbar willow	<i>Salix exigua</i>	
SCROPHULARIACEAE		
coastal paintbrush	<i>Castilleja affinis</i>	
purple owl's clover	<i>Castilleja exserta</i>	
white snapdragon	<i>Antirrhinum coulterianum</i>	
southern Chinese houses	<i>Collinsia concolor</i>	
dark-tipped bird's beak	<i>Cordylanthus rigidus</i>	
yellow bush-penstemon	<i>Keckiella antirrhinoides</i>	
heart-leaved bush-penstemo	<i>Keckiella cordifolia</i>	
bush monkey flower	<i>Mimulus aurantiacus</i>	
seep monkey flower	<i>Mimulus guttatus</i>	
scarlet bugler	<i>Penstemon centranthifolius</i>	
royal penstemon	<i>Penstemon spectabilis</i>	
California figwort	<i>Scrophularia californica</i>	
SIMAROUBACEAE		
tree of heaven	<i>Ailanthus altissima</i>	✓
SIMMONDSIACEAE		
Jojoba	<i>Simmondsia chinensis</i>	
SOLANACEAE		
small flrs Jimson	<i>Datura stramonium</i>	
Jimson weed	<i>Datura wrightii</i>	✓
Nightshade	<i>Solanum douglasi</i>	
white horse-nettle	<i>Solanum elaeagnifolium</i>	
chaparral nightshade	<i>Solanum xanti</i>	
Wallace's Tobacco	<i>Nicotiana bigelovii</i>	
tree tobacco	<i>Nicotiana glauca</i>	✓
tomato	<i>Lycopersicon esculentum</i>	
TAMARICACEAE		
Mediterranean tamarisk	<i>Tamarix ramosissima</i>	
THEMIDACEAE		
blue-dicks	<i>Dichelostemma pulchellum</i>	
URTICACEAE		
Fig	<i>Ficus</i>	
hoary nettle	<i>Urtica dioica</i>	
VIOLACEAE		
yellow Johnny Jump-ups	<i>Viola pedunculata</i>	
VITACEAE		
Grape	<i>Vitis vinifera</i>	
ZYGOPHYLLACEAE		
Creosote bush	<i>Larrea tridentata</i>	
Puncture vine	<i>Tribulus terrestris</i>	✓
POACEAE		
near Lolium	<i>Agropyron sp.</i>	
Giant cane	<i>Arundo donax</i>	
slender oat	<i>Avena barbata</i>	

wild oats	<i>Avena fatua</i>				
purple false=brome	<i>Brachypodium distachyon</i>				
rescue grassx	<i>Bromus catharticus</i>				
ripgut	<i>Bromus diandrus</i>				
Brome	<i>Bromus hordeaceus</i>				
Foxtail chess/red brome	<i>Bromus madritensis</i>				
Bermuda grass	<i>Cynodon dactylon</i>				
salt grass	<i>Distichlis spicata</i>				
giant wildrye	<i>Elymus condensatus</i>				
jungle-rice	<i>Echinochloa colona</i>				
Mediterranean barley	<i>Hordeum murinum</i>				
Common Barley	<i>Hordeum vulgare</i>				
goldentop	<i>Lamarckia aurea</i>				
	<i>Leptochloa sp.</i>				
Ryegrass	<i>Lolium multiflorum</i>				
littleseed canary grass	<i>Phalaris minor</i>				
paradox canary grass	<i>Phalaris paradoxa</i>				
	<i>Polypogon aviculare</i>				
rabbits foot grass	<i>Polypogon monspeliensis</i>				
Schismus	<i>Schismus barbatus</i>				
giant stipa	<i>Stipa coronata</i>				
foothill stipa	<i>Stipa lepida</i>				
purple stipa	<i>Stipa pulcra</i>				
foxtail fescue	<i>Vulpia myuros</i>				
TYPHACEAE					
cat-tail	<i>Typha</i>				



Date 8/13/2007 Time 7:30 to 8:30 pm Job Hookasian
Miles 193924 Location Wildwood
Biologists KAC
Survey for: Barn Owl
Habitat Assessment for: _____

Weather: Temp 83-79° Wind calm Cloud cover 0 Rain 0

Biological elements:

Vegetative communities:

Soil type _____

Plant species:

See list

Vertebrates

BACW Coyote

Arthropods

Oak Woodlands _____ Riparian Veg _____ type _____

Vernal Pools _____

Comments:

focal neighbor comes out back what
is happening

Date 8/15/07 Time 7:30 to 8:30 pm Job Hookasian
Miles 194052 to Location W/8/Donner
Biologists KHTJ
Survey for: Burrowing owl
Habitat Assessment for: _____

Weather: Temp 91° Wind 0 Cloud cover 0 Rain 0
88°

Biological elements:

Vegetative communities:

Soil type _____

Plant species:

Vertebrates

NO NO

Arthropods

Oak Woodlands _____ Riparian Veg _____ type _____
Vernal Pools _____

Comments:

Date 8/16/2007 Time 7:05 to 8:05 AM Job Hookasian
Miles 194-174 on US Location Walden
Biologists KLTU
Survey for: Birds and Mammals
Habitat Assessment for: _____

Weather: Temp 75-77 Wind / Cloud cover / Rain /

Biological elements:

Vegetative communities:

Soil type _____

Plant species:

Vertebrates

MORP HTDP AMCR ANHA BUT NUMD
Great Sp. Owl Wt Schwarzha
Downy Wood Pecker

Arthropods

Oak Woodlands _____ Riparian Veg _____ type _____

Vernal Pools _____

Comments:

Summers @ 6:12 am

Date 12/7/07 Time 1045 to _____ Job Hwy 65. in
 Miles 052609 Location _____ Job 02/7/07
 Biologists KSO
 Survey for: Measure Oak trees.
 Habitat Assessment for: _____

Weather: Temp _____ Wind _____ Cloud cover _____ Rain _____

Biological elements:

Vegetative communities:

Soil type _____

Plant species:

Vertebrates

Arthropods

Oak Woodlands _____ Riparian Veg _____ type _____

Vernal Pools _____

Comments:

<u>83</u>	<u>36.131</u>	<u>117</u>	<u>16.656</u>	<u>2x2"</u>
	<u>136</u>		<u>663</u>	<u>8"</u>
	<u>137</u>		<u>667</u>	<u>2x3"</u>
	<u>149</u>		<u>678</u>	<u>5'2" = circumference @ 1H</u>
	<u>150</u>		<u>682</u>	<u>6"</u>
	<u>.061</u>		<u>545</u>	<u>5"</u>

CHECK SPECIES SURVEYED FOR	SPECIES or ENVIRONMENTAL ISSUE OF CONCERN	(Circle Yes, No or N/A regarding species findings on the referenced site)		
✓	Other <i>Burrowing Owl</i>	Yes	<u>No</u>	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A

Species of concern shall be any unique, rare, endangered, or threatened species. It shall include species used to delineate wetlands and riparian corridors. It shall also include any hosts, perching, or food plants used by any animals listed as rare, endangered, threatened or candidate species by either State, or Federal regulations, or for Riverside County as listed by the California Department of Fish and Game Natural Diversity Data Base (NDDDB).

I declare under penalty of perjury that the information provided on this summary sheet is in accordance with the information provided in the biological report.


Signature and Company Name

Osborne Biological Consulting

12/8/2007
Report Date

10(a) Permit Number (if applicable)

Permit Expiration Date

<i>County Use Only</i>	
Received by: _____	Date: _____
PD-B# _____	

BIOLOGICAL REPORT SUMMARY SHEET

(Submit two copies to the County)

Applicant Name: Zareth Hoekasian
 Assessor's Parcel Number (APN): 376-043-027
 APN cont: _____
 Site Location: Section: _____ Township: 6 S Range: 4 W
 Site Address: between Central Ave. and Wilhelmina Grewell St, Wildomar
 Related Case Number(s): TTM 33840 PDB Number: _____

CHECK SPECIES SURVEYED FOR	SPECIES or ENVIRONMENTAL ISSUE OF CONCERN	(Circle Yes, No or N/A regarding species findings on the referenced site)		
		Yes	No	N/A
	Arroyo Southwestern Toad	Yes	No	N/A
✓	Blueline Stream(s)	Yes	No	N/A
	Coachella Valley Fringed-Toed Lizard	Yes	No	N/A
	Coastal California Gnatcatcher	Yes	No	N/A
	Coastal Sage Scrub	Yes	No	N/A
	Delhi Sands Flower-Loving Fly	Yes	No	N/A
	Desert Pupfish	Yes	No	N/A
	Desert Slender Salamander	Yes	No	N/A
	Desert Tortoise	Yes	No	N/A
	Flat-Tailed Horned Lizard	Yes	No	N/A
	Least Bell's Vireo	Yes	No	N/A
✓	Oak Woodlands	Yes	No	N/A
	Quino Checkerspot Butterfly	Yes	No	N/A
	Riverside Fairy Shrimp	Yes	No	N/A
	Santa Ana River Woollystar	Yes	No	N/A
	San Bernardino Kangaroo Rat	Yes	No	N/A
	Slender Horned Spineflower	Yes	No	N/A
	Stephen's Kangaroo Rat	Yes	No	N/A
✓	Vernal Pools	Yes	No	N/A
✓	Wetlands	Yes	No	N/A

LEVEL OF SIGNIFICANCE CHECKLIST
For Biological Resources
 (Submit Two Copies)

Case Number: ^{TTH} 33840 Lot/Parcel No. ³⁷⁶⁻⁰⁴³ -027 EA Number _____

Wildlife & Vegetation

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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(Check the level of impact the applies to the following questions)

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

- b) Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12)?

- c) 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. Wildlife Service?

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

- e) 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?

- f) 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?

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

Source: CGP Fig. VI.36-VI.40

Findings of Fact:

*Burrowing Owl absent from site
 One large oak tree present on western site*

Proposed Mitigation:

*Avoidance of oak tree if required by
 local ordinance.*

Monitoring Recommended:

None

**APPENDIX 4A:
SPECIAL-STATUS SPECIES KNOWN TO OCCUR
NEAR PROJECT SITE**

Scientific Name	Common Name	Federal Status	State Status	CNPS Rare Plant Rank	General Habitat Characteristics	MSHCP Covered Species	Habitat Present/Absent	Rationale
Plants								
<i>Allium munzii</i>	Munz's onion	FE	ST	1B.1	Mesic clay soils in chaparral, cismontane woodland, coastal scrub, pinyon and juniper woodland, as well as valley and foothill grassland. Elev: 980-3531ft. Blooms: Mar-May (CNPS 2013).	Yes	A	No effect, Suitable soil not present.
<i>Arctostaphylos rainbowensis</i>	rainbow manzanita	-	-	1B.1	Chaparral. Elev: 675-2210ft. Blooms: Dec-Mar (CNPS 2013).	Yes	A	No effect, Suitable habitat not present.
<i>Ayenia compacta</i>	California ayenia	-	-	2B.3	Rocky soils in Mojavean desert scrub and Sonoran desert scrub. Elev: 495-3610ft. Blooms Mar-Apr (CNPS 2013).	No	A	No effect, Suitable habitat not present.
<i>Brodiaea filifolia</i>	thread-leaved brodiaea	FT	SE	1B.1	Prefers clay soils in chaparral openings, cismontane woodland, coastal scrub, playas, vernal pools, valley and foothill grasslands. Elev: 82.5-3696ft. Blooms: Mar-June (CNPS 2013).	Yes	A	No effect, Suitable soil not present.
<i>Brodiaea orcuttii</i>	Orcutt's brodiaea	-	-	1B.1	Mesic clay, sometimes serpentinite soils in closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, as well as vernal pools. Elev: 99-5583ft. Blooms: May-Jul (CNPS 2013).	Yes	A	No effect, Suitable soil not present.
<i>Brodiaea santarosae</i>	Santa Rosa Basalt brodiaea	-	-	1B.2	Basaltic soils in valley and foothill grassland. Elev: 1864.5-3448.5ft. Blooms: May-Jun (CNPS 2013).	No	A	No effect, Suitable soil not present.
<i>Centromadia pungens ssp. laevis</i>	smooth tarplant	-	-	1B.1	Alkaline soils in meadows, seeps, playas, chenopod scrub, riparian woodland, valley and foothill grassland. Elev: 0-2112ft. Blooms: Apr-Sep (CNPS 2013).	Yes	A	No effect, Suitable soil not present.
<i>Chorizanthe parryi var. parryi</i>	Parry's spineflower	-	-	1B.1	Sandy or rocky soils in openings in chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Elev: 907.5-4026ft. Blooms: Apr-Jun (CNPS 2013).	Yes	P	May affect. Suitable soil and habitat present.
<i>Chorizanthe polygonoides var. longispina</i>	long-spined spineflower	-	-	1B.2	Prefers clay soils in chaparral, coastal scrub, meadows, seeps, vernal pools and foothill and valley grassland. Elev: 99-5049ft. Blooms: Apr-Jul (CNPS 2013).	Yes	A	No effect, Suitable soil not present.
<i>Clinopodium chandleri</i>	San Miguel savory	-	-	1B.2	Rocky, gabbroic or metavolcanic soils in chaparral, cismontane woodland, coastal scrub, riparian woodland, as well as valley and foothill grassland. Elev: 396-3547.5ft. Blooms: Mar-Jul (CNPS 2013).	Yes	A	No effect, Suitable soil not present.
<i>Dodecahema leptoceras</i>	slender-horned spineflower	FE	SE	1B.1	Sandy soils in chaparral, cismontane woodland, and alluvial fan coastal scrub. Elev: 656-2493ft. Blooms: Apr-Jun (CNPS 2013).	Yes	A	No effect, Suitable habitat not present.
<i>Eryngium aristulatum var. parishii</i>	San Diego button-celery	FE	SE	1B.1	Mesic soils in coastal scrub, valley and foothill grassland, as well as vernal pools. Elev: 66-2046ft. Blooms: Apr-June	Yes	A	No effect, Suitable soil not present.
<i>Geothallus tuberosus</i>	Campbell's liverwort	-	-	1B.1	Grows on soil in vernal pools and mesic coastal scrub. Elev: 33-1969ft (CNPS 2013).	No	A	No effect, Suitable habitat not present.
<i>Hesperocyparis forbesii</i>	Tecate cypress	-	-	1B.1	Clay, gabbroic or metavolcanic soil in chaparral and closed-cone coniferous forest. Elev: 262-4921ft (CNPS 2013).	No	A	No effect, Suitable soil not present.
<i>Juncus luciensis</i>	Santa Lucia dwarf rush	-	-	1B.2	Chaparral, Great Basin scrub, lower montane coniferous forest, meadows and seeps, as well as vernal pools. Elev: 990-6732ft. Blooms: Apr-Jul (CNPS 2013).	No	A	No effect, Suitable habitat not present.
<i>Lasthenia glabrata ssp. coulteri</i>	Coulter's goldfields	-	-	1B.1	Coastal salt marshes and swamps, playas and vernal pools. Elev: 3.3-4026ft. Blooms: Feb-Jun (CNPS 2013).	Yes	A	No effect, Suitable habitat not present.
<i>Lilium parryi</i>	lemon lily	-	-	1B.2	Mesic areas in meadows and seeps, riparian forest, and upper and lower montane coniferous forests. Elev: 4003-9035ft. Blooms: Jul-Aug (CNPS 2013).	Yes	A	No effect, Suitable habitat not present and outside elevation range.
<i>Limnanthes alba ssp. parishii</i>	Parish's meadowfoam	-	SE	1B.2	Vernally mesic areas in lower montane coniferous forest, meadows and seeps, and vernal pools. Elev: 1969-6562ft. Blooms: Apr-Jun (CNPS 2013).	Yes	A	No effect, Suitable habitat not present and outside elevation range.
<i>Monardella hypoleuca ssp. intermedia</i>	intermediate monardella	-	-	1B.3	Usually in the understory of chaparral, cismontane woodland, and sometimes lower montane coniferous forest. Elev: 1312-4101ft. Blooms: Apr-Sep (CNPS 2013).	Yes	A	No effect, Suitable habitat not present and outside elevation range.
<i>Navarretia fossalis</i>	spreading navarretia	FT	-	1B.1	Assorted shallow freshwater marshes and swamps, vernal pools, playas and chenopod scrub. Elev: 99-2161.5ft. Blooms: Apr-Jun (CNPS 2013).	Yes	A	No effect, Suitable habitat not present.
<i>Navarretia prostrata</i>	prostrate vernal pool navarretia	-	-	1B.1	Mesic soils in coastal scrub, vernal pools, meadows and seeps, as well as alkaline valley and foothill grasslands. Elev: 49.5-3993ft. Blooms: Apr-Jul (CNPS 2013).	Yes	A	No effect. Suitable soil not present.
<i>Orcuttia californica</i>	California Orcutt grass	FE	SE	1B.1	Vernal pools. Elev: 49.5-2178ft. Blooms: Apr-Aug (CNPS 2013).	Yes	A	No effect, Suitable habitat not present.
<i>Pseudognaphalim leucocephalum</i>	white rabbit-tobacco	-	-	2B.2	Sandy, gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian woodland. Elev: 0-6930ft. Blooms: Jul-Dec (CNPS 2013).	No	A	No effect, Suitable habitat not present.
<i>Scutellaria bolanderi ssp. austromontana</i>	southern mountains skullcap	-	-	1B.2	Mesic soils in chaparral, cismontane woodland, and lower montane coniferous forest. Elev: 1402.5-6600ft. Blooms: Jun-Aug (CNPS 2013).	No	A	No effect, Suitable habitat not present and outside elevation range.
<i>Sibaropsis hammittii</i>	Hammitt's clay-cress	-	-	1B.2	Clay soil in chaparral openings, and valley and foothill grassland. Elev: 2362-3494ft. Blooms: Mar-Apr (CNPS 2013).	Yes	A	No effect, Suitable habitat not present and outside elevation range.
<i>Sphaerocarpos drewei</i>	bottle liverwort	-	-	1B.1	Soil openings in chaparral and coastal scrub. Elev: 297-1980ft (CNPS 2013).	No	A	No effect, Suitable habitat not present.

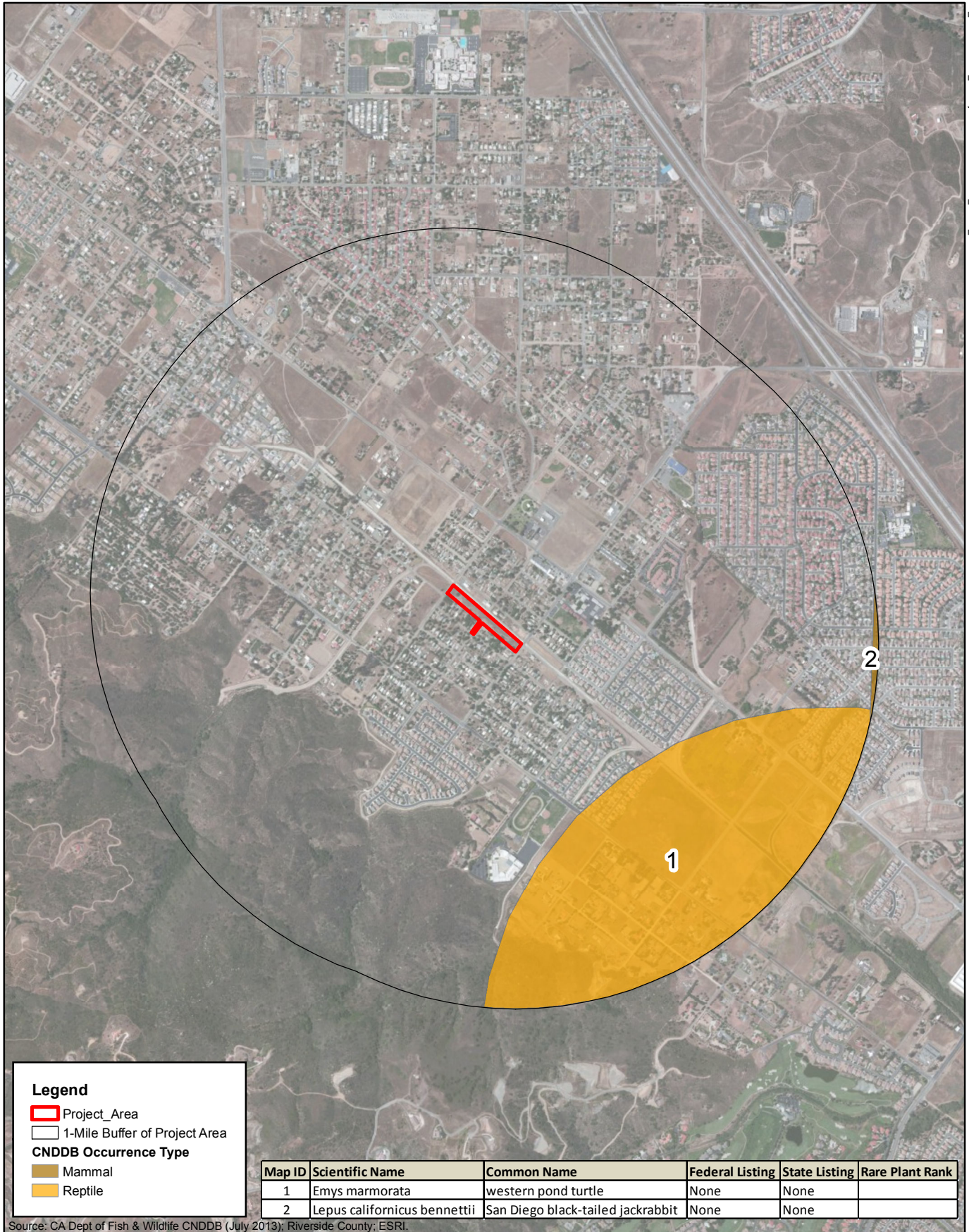
Scientific Name	Common Name	Federal Status	State Status	CNPS Rare Plant Rank	General Habitat Characteristics	MSHCP Covered Species	Habitat Present/Absent	Rationale
<i>Symphytotrichum defoliatum</i>	San Bernadino aster	-	-	1B.2	Near ditches, streams and springs in coastal scrub, cismontane woodland, lower montane coniferous forest, marshes, meadows, seeps, swamps, and vernally mesic valley and foothill grasslands. Elev: 6.6-6732ft. Blooms: Jul-Nov (CNPS 2013).	No	A	No effect. Suitable habitat not present.
Invertebrates								
<i>Branchinecta lynchi</i>	vernal pool fairy shrimp	FT			Restricted to vernal pools and vernal pool-like habitats (USFWS 2005).	Yes	A	No effect. Suitable habitat not present.
<i>Euphydryas editha quino</i>	quino checkerspot butterfly	FE	-		Inhabit grasslands, remnant forbland, juniper woodland, and open scrub and chaparral communities. Hostplants include dwarf plantain (<i>Plantago erecta</i>) and white snapdragon (<i>Antirrhinum coulterianum</i>) (USFWS 2003).	Yes	A	No effect. Hostplants not present.
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE	-		Restricted to vernal pools and non-vegetated ephemeral pools deeper than 12 inches. Inland areas of Riverside, Orange, Ramona and San Diego counties. Coastal areas of San Diego County and Northwestern Baja California (USFWS 2008).	Yes	A	No effect. Suitable habitat not present.
Amphibians								
<i>Anaxyrus californicus</i>	arroyo toad	FE			Breeding habitat = slow moving streams with shallow pools, nearby sandbars and adjacent stream terraces. Often breed in shallow, sandy pools bordered by sand/gravel flood terraces. Inhabit upland habitats when not breeding, such as sycamore-cottonwood woodlands, oak woodlands, coastal sage scrub, chaparral and grassland (USFWS 2009).	Yes	A	No effect. Suitable habitat not present.
<i>Rana draytonii</i>	California red-legged frog	FT	SSC		Occurs in various aquatic, riparian and upland habitats. They need aquatic habitats to breed, whether they be natural or artificial, such as stock ponds (USFWS 2002a). Ponds/streams in humid forests, woodlands, grasslands, coastal scrub, and streamsides with plant cover in lowlands or foothills. Breeding habitat = permanent or ephemeral water sources; lakes, ponds, reservoirs, slow streams, marshes, bogs, and swamps. Ephemeral wetland habitats require animal burrows or other moist refuges for estivation when the wetlands are dry. From sea level to 5000ft (Nafis 2013).	Yes	A	No effect. Suitable habitat not present.
<i>Spea hammondi</i>	western spadefoot	-	SSC		Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rainpools which do not contain bullfrogs, fish, or crayfish are necessary for breeding (Nafis 2013).	Yes	A	No effect. Suitable habitat not present.
<i>Taricha torosa</i>	Coast Range newt	-	SSC		Found in wet forests, oak forests, chaparral and rolling grasslands. In southern California, drier chaparral, oak woodland and grassland are used (Nafis 2013).	Yes	A	No effect. Suitable habitat not present.
Reptiles								
<i>Aspidoscelis hyperythra</i>	orangethroat whiptail	-	SSC		Semi-arid brushy areas typically with loose soil and rocks, including washes, streamsides, rocky hillsides, and coastal chaparral (Nafis 2013).	Yes	A	No effect. Suitable habitat not present.
<i>Crotalus ruber</i>	red-diamond rattlesnake	-	SSC		Inhabits chaparral, woodland, and arid desert habitats in rocky areas and dense vegetation (Nafis 2013).	Yes	A	No effect. Suitable habitat not present.
<i>Emys marmorata</i>	western pond turtle	-	SSC		Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, and either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking (Nafis 2013).	Yes	A	No effect. Suitable habitat not present.
<i>Phrynosoma blainvillii</i>	coast horned lizard	-	SSC		Occurs in valley-foothill hardwood, conifer, pine-cypress, juniper, annual grassland and riparian habitats. Distributed throughout the central and southern California coast, and the Sierra Nevada foothills (CDFW 2013b).	Yes	P	May affect. Suitable habitat present.
<i>Thamnospma hammondii</i>	two-striped garter snake	-	SSC		Found around pools, creeks, cattle tanks, and other water sources, often in rocky areas, in oak woodland, chaparral, brushland and coniferous forest (Nafis 2013).	No	A	No effect. Suitable habitat not present.
Birds								
<i>Aquila chrysaetos</i>	golden eagle	-	FP		Rolling hills and mountain terrain, desert, sag-juniper flates, wide arid plateaus deeply cut by streams and canyons, open mountain slopes and cliffs and rock outcrops. Nests on cliffs of all heights and in large trees in open areas. Ranges from sea level to 12,575 ft (CDFW 2013b).	Yes	A	No effect. Suitable habitat not present.
<i>Athene cunicularia</i>	burrowing owl	-	SSC		Nesting habitat includes open areas with mammal burrows, including rolling hills, grasslands, fallow fields, sparsely vegetated desert scrub, vacant lots and human disturbed lands. Soils must be friable for burrows (Bates 2006).	Yes	P	May affect. Suitable habitat present.

Scientific Name	Common Name	Federal Status	State Status	CNPS Rare Plant Rank	General Habitat Characteristics	MSHCP Covered Species	Habitat Present/Absent	Rationale
<i>Charadrius alexandrinus nivosus</i>	western snowy plover	FT	SSC		Breed on barren to sparsely vegetated flats and along shores of alkaline and saline lakes, reservoirs, ponds, etc (Shuford 2008).	No	A	No effect. Suitable habitat not present.
<i>Empidonax traillii extimus</i>	southwestern willow flycatcher	FE	SE		Breeds in relatively dense riparian tree and shrub communities associated with rivers, swamps, and other wetlands, including lakes (e.g., reservoirs). Most of these habitats are classified as forested wetlands or scrub-shrub wetlands. Habitat requirements for wintering are not well known, but include brushy savanna edges, second growth, shrubby clearings and pastures, and woodlands near water (USFWS 2002).	Yes	A	No effect. Suitable habitat not present.
<i>Lanius ludovicianus</i>	loggerhead shrike	-	SSC		Breed in shrublands or open woodlands with a fair amount of grass cover and areas of bare ground. Require tall shrubs, trees, fences or powerlines for hunting perches; open areas for hunting; and large shrubs or trees for nests. Also need impaling sites for prey manipulation (Shuford 2008).	No	A	No effect. Suitable habitat not present.
<i>Polioptila californica californica</i>	coastal California gnatcatcher	FT	SSC		Scrub dominated plant communities, strongly associated with sage scrub. Distribution ranges from southern Ventura County down through Los Angeles, Orange, Riverside, San Bernardino and San Diego counties (USFWS 1997).	Yes	A	No effect. Suitable habitat not present.
<i>Vireo bellii pusillus</i>	Least Bell's vireo	FE	SE		Obligate riparian breeder, preferring structurally diverse riparian woodlands with a dense understory. Community structures typically utilized include cottonwood-willow woodlands, oak woodlands, and mule fat scrub (Kus 2002).	Yes	A	No effect. Suitable habitat not present.
Mammals								
<i>Chaetodipus fallax fallax</i>	northwestern San Diego pocket mouse	-	SSC		Sandy herbaceous areas in coastal scrub, chaparral, sagebrush, deserts scrub and washes, and annual grassland (CDFW 2013b).	Yes	A	No effect. Suitable habitat not present.
<i>Dipodomys stephensi</i>	Stephens' kangaroo rat	FE	ST		Often found in transition areas between grassland and coastal sage scrub habitat where perennial vegetation is covering less than 50% of the ground, including disturbed areas. Deep, friable soil is needed for burrowing. Plants commonly associated with suitable habitat are chamise, buckwheat, brome grass and filaree (Riverside 2003).	Yes	A	No effect. Suitable habitat not present.
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	-	SSC		Herbaceous and desert-shrub areas and open, early stages of forest and chaparral habitats (CDFW 2013b).	Yes	P	May affect. Suitable habitat present.

Key	
Federal & State Status	CNPS Rare Plant Rank
(FE) Federal Endangered	Rareness Ranks
(FT) Federal Threatened	(1A) Presumed Extinct in California
(FC) Federal Candidate	Elsewhere
(FD) Federally Delisted	(2B) Rare, Threatened, or Endangered in California, But More Common Elsewhere
(SE) State Endangered	Threat Ranks
(ST) State Threatened	(0.1) Seriously threatened in California
(SSC) State Species of Special Concern	(0.2) Fairly threatened in California
(FP) Fully Protected	(0.3) Not very threatened in California

Source: CNDDDB 2013a,
CNPS 2013, USFWS 2013

**APPENDIX 4B:
SPECIAL-STATUS SPECIES OCCURRENCES WITHIN
1 MILE**



Legend

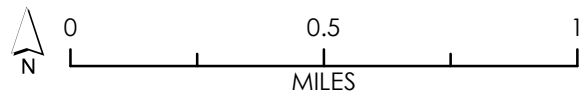
- Project_Area
- 1-Mile Buffer of Project Area

CNDB Occurrence Type

- Mammal
- Reptile

Map ID	Scientific Name	Common Name	Federal Listing	State Listing	Rare Plant Rank
1	<i>Emys marmorata</i>	western pond turtle	None	None	
2	<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	None	None	

Source: CA Dept of Fish & Wildlife CNDB (July 2013); Riverside County; ESRI.



Appendix 4b
 Previously Recorded Occurrences of Special-Status Species Within 1 Mile of Project Study Area

**APPENDIX 4C:
SPECIAL-STATUS SPECIES OCCURRENCES
WITHIN 5 MILES**

**APPENDIX 5:
ARCHEOLOGICAL/HISTORICAL
RESOURCES SURVEY**

**CRM TECH**

1016 E. Cooley Drive, Suite A/B
Colton, CA 92324

August 14, 2013

Zareh Hookasian
3173 Vera Valley Road
Franklin, TN 37064

Re: Update to Historical/ Archaeological Resources Survey
Tentative Tract Map 33840; Assessor's Parcel No. 376-043-027
City of Wildomar, Riverside County, California
CRM TECH Contract No. 2730

Dear Mr. Hookasian:

At your request, we have conducted a historical/archaeological resources records search and an archaeological field survey on the property referenced above. The subject property of this study consists of approximately three acres of vacant land located on the southwest side of Murrieta Creek, between Gruwell Street and Central Street, in the City of Wildomar, as depicted in the USGS Wildomar, Calif., 7.5' quadrangle (Fig. 1).

As you know, the project area was previously the subject of a standard Phase I historical/archaeological resources survey that our firm completed in 2007 under provisions of the California Environmental Quality Act (CEQA; copy attached). The scope of that study also included a records search and an archaeological field survey, along with historical background research and Native American consultation. No cultural resources of either prehistoric or historic origin were encountered within or adjacent to the project area during that survey. The present study is intended to be an update to the 2007 survey.

Records Search

The records search for this study was conducted on July 23, 2013, by CRM TECH archaeologist Nina Gallardo, B.A., at the Eastern Information Center (EIC), University of California, Riverside. The results of the records search indicate that four additional cultural resources studies within a one-mile radius of the project area have been reported to the EIC since 2007, including a linear survey along Central Street at the southeastern end of the project area. None of these recent studies covered any portion of the project area, and no additional historical/archaeological sites were recorded within the scope of the records search.

Field Survey

On July 31, 2013, CRM TECH archaeologist Daniel Ballester, B.A., carried out a reconnaissance-level field survey of the entire project area. The survey was conducted on foot along parallel northwest-southeast transects spaced 30 meters (approx. 100 feet) apart. At the time, most of the project area was covered by dense vegetation, although

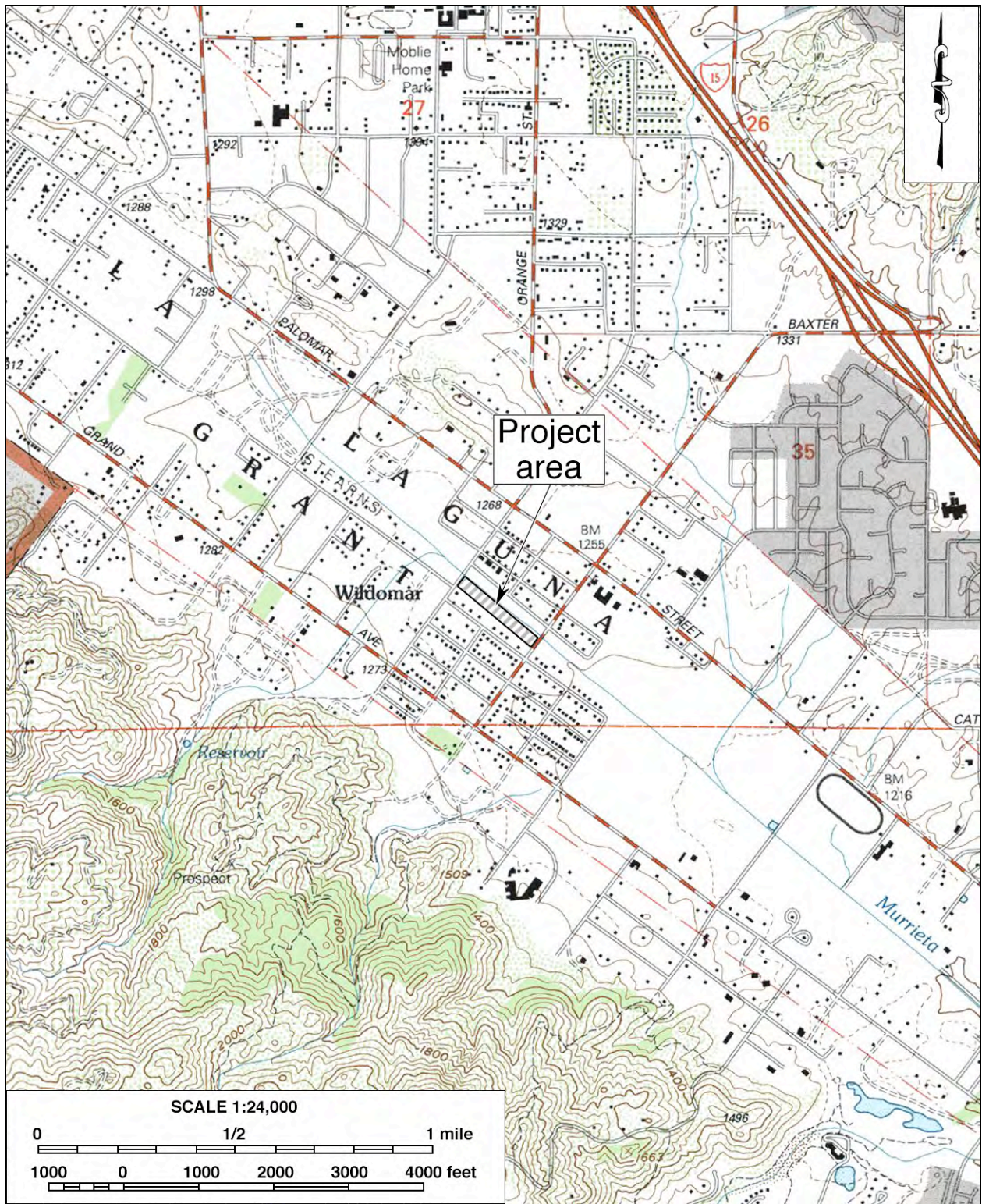


Figure 1. Project area. (Based on USGS Wildomar, Calif., 1:24,000 quadrangle)



Figure 2. Overview of the project area. (Photo taken on July 31, 2013; view to the northwest)

certain portions had been cleared, particularly along the southwestern boundary (Fig. 2). Dictated by the varying density of vegetation growth, ground visibility during the survey ranged from poor (10%) to good (80%).

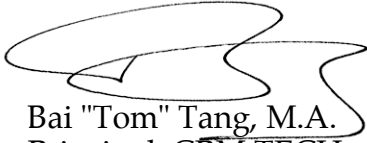
As in 2007, the field survey produced completely negative results for potential cultural resources, and no buildings, structures, objects, sites, features, or artifacts more than 50 years of age were encountered. Portions of the property had evidently been leveled since 2007, and several large piles of landscaping waste were noted along the southwestern boundary. Scattered modern refuse was also observed in that area, near a residential neighborhood on adjacent land, but none of the items is of any historical/ archaeological interest.

Conclusion

Based on the research results summarized above, we conclude that the original finding of the 2007 study—that no "historical resources," as defined by CEQA, are present within the project area—remains valid and appropriate. No further cultural resources investigation is recommended for this property unless development plans undergo such changes as to include areas not covered by the 2007 study and the present study. If buried cultural materials are discovered during earth-moving operations associated with the project, however, all work in that area should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.

Thank you for this opportunity to be of service. If you have any questions regarding this study or need any further information, please feel free to contact our office.

Sincerely,

A handwritten signature in black ink, appearing to read "Bai 'Tom' Tang". The signature is stylized with several loops and a long horizontal stroke.

Bai "Tom" Tang, M.A.
Principal, CRM TECH

ATTACHMENT
2007 CULTURAL RESOURCES SURVEY REPORT

HISTORICAL/ARCHAEOLOGICAL RESOURCES SURVEY REPORT

TENTATIVE TRACT MAP 33840

**Near the Community of Wildomar
Riverside County, California**

For Submittal to:

Planning Department
County of Riverside
4080 Lemon Street
Riverside, CA 92502-1629

Prepared for:

Zareh Hookasian
4036 Old Hillsboro Road
Franklin, TN 37064-9546

Prepared by:

CRM TECH
1016 E. Cooley Drive, Suite A/B
Colton, CA 92324

Bai "Tom" Tang, Principal Investigator
Michael Hogan, Principal Investigator

August 15, 2007
CRM TECH Contract No. 2108

NATIONAL ARCHAEOLOGICAL DATABASE INFORMATION

Author(s): Bai "Tom" Tang, Principal Investigator/Historian
Deirdre Encarnación, Archaeologist/Report Writer
Daniel Ballester, Archaeologist/Field Director

Consulting Firm: CRM TECH
1016 E. Cooley Drive, Suite A/B
Colton, CA 92324
(909) 824-6400

Date: August 15, 2007

Title: Historical/Archaeological Resources Survey Report: Tentative Tract Map 33840, near the Community of Wildomar, Riverside County, California

For Submittal to: Planning Department
County of Riverside
4080 Lemon Street
Riverside, CA 92502-1629
(951) 955-3200

Prepared for: Zareh Hookasian
4036 Old Hillsboro Road
Franklin, TN 37064-9546

USGS Quadrangle: Wildomar, Calif., 7.5' quadrangle; in a portion of the Rancho La Laguna (Stearns) land grant, T6S R4W, San Bernardino Base Meridian

Project Size: Approximately three acres

Keywords: Wildomar area, Riverside County; historical/archaeological resources survey; Assessor's Parcel No. 376-043-027; no "historical resources" found

MANAGEMENT SUMMARY

In July and August 2007, at the request of Zareh Hookasian, CRM TECH performed a cultural resources study on approximately three acres of vacant land in an unincorporated area near the community of Wildomar, Riverside County, California. The subject property of the study, Tentative Tract Map No. 33840, consists of Assessor's Parcel No. 376-043-027 and is located on the southwest side of Murrieta Creek between Gruwell Street and Central Street, in a portion of the Rancho La Laguna (Stearns) land grant lying within T6S R4W, San Bernardino Base Meridian. The study is part of the environmental review process for a proposed development project on the property. The County of Riverside, as Lead Agency for the project, required the study in compliance with the California Environmental Quality Act (CEQA).

The purpose of the study is to provide the County of Riverside with the necessary information and analysis to determine whether the proposed project would cause substantial adverse changes to any historical/archaeological resources that may exist in or around the project area, as mandated by CEQA. In order to identify and evaluate such resources, CRM TECH conducted a historical/archaeological resources records search, pursued historical background research, contacted Native American representatives, and carried out an intensive-level field survey.

Through the various avenues of research, this study did not encounter any "historical resources," as defined by CEQA, within or adjacent to the project area. Therefore, CRM TECH recommends to the County of Riverside a finding of *No Impact* regarding cultural resources. No further cultural resources investigation is recommended for the project unless development plans undergo such changes as to include areas not covered by this study. However, if buried cultural materials are encountered during any earth-moving operations associated with the project, all work in that area should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.

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INTRODUCTION

In July and August 2007, at the request of Zareh Hookasian, CRM TECH performed a cultural resources study on approximately three acres of vacant land in an unincorporated area near the community of Wildomar, Riverside County, California (Fig. 1). The subject property of the study, Tentative Tract Map No. 33840, consists of Assessor's Parcel No. 376-043-027 and is located on the southwest side of Murrieta Creek between Gruwell Street and Central Street, in a portion of the Rancho La Laguna (Stearns) land grant lying within T6S R4W, San Bernardino Base Meridian (Fig. 2). The study is part of the environmental review process for a proposed development project on the property. The County of Riverside, as Lead Agency for the project, required the study in compliance with the California Environmental Quality Act (CEQA; PRC §21000, et seq.).

CRM TECH performed the present study to provide the County of Riverside with the necessary information and analysis to determine whether the proposed project would cause substantial adverse changes to any historical/archaeological resources that may exist in or around the project area, as mandated by CEQA. In order to identify and evaluate such resources, CRM TECH conducted a historical/archaeological resources records search, pursued historical background research, contacted Native American representatives, and carried out an intensive-level field survey. The following report is a complete account of the methods, results, and final conclusion of the study.

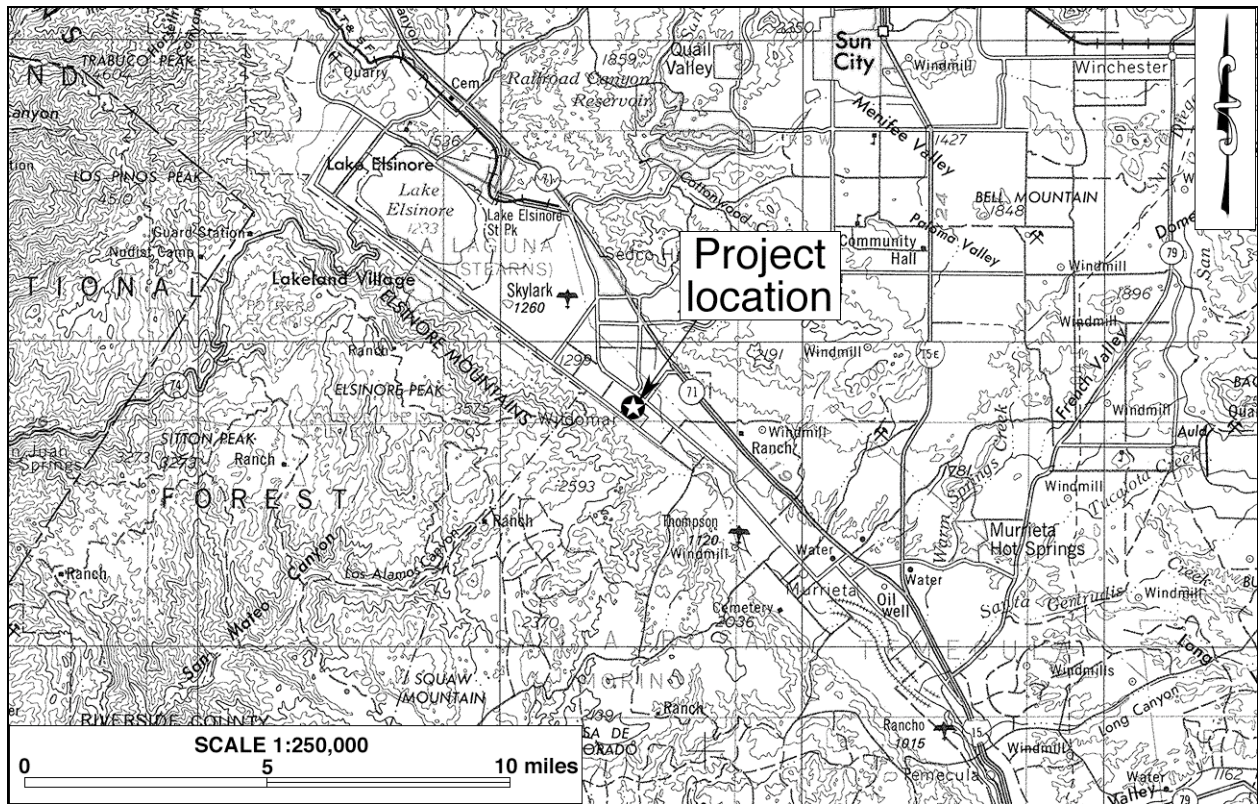


Figure 1. Project vicinity. (Based on USGS Santa Ana, Calif., 1:250,000 quadrangle [USGS 1979])

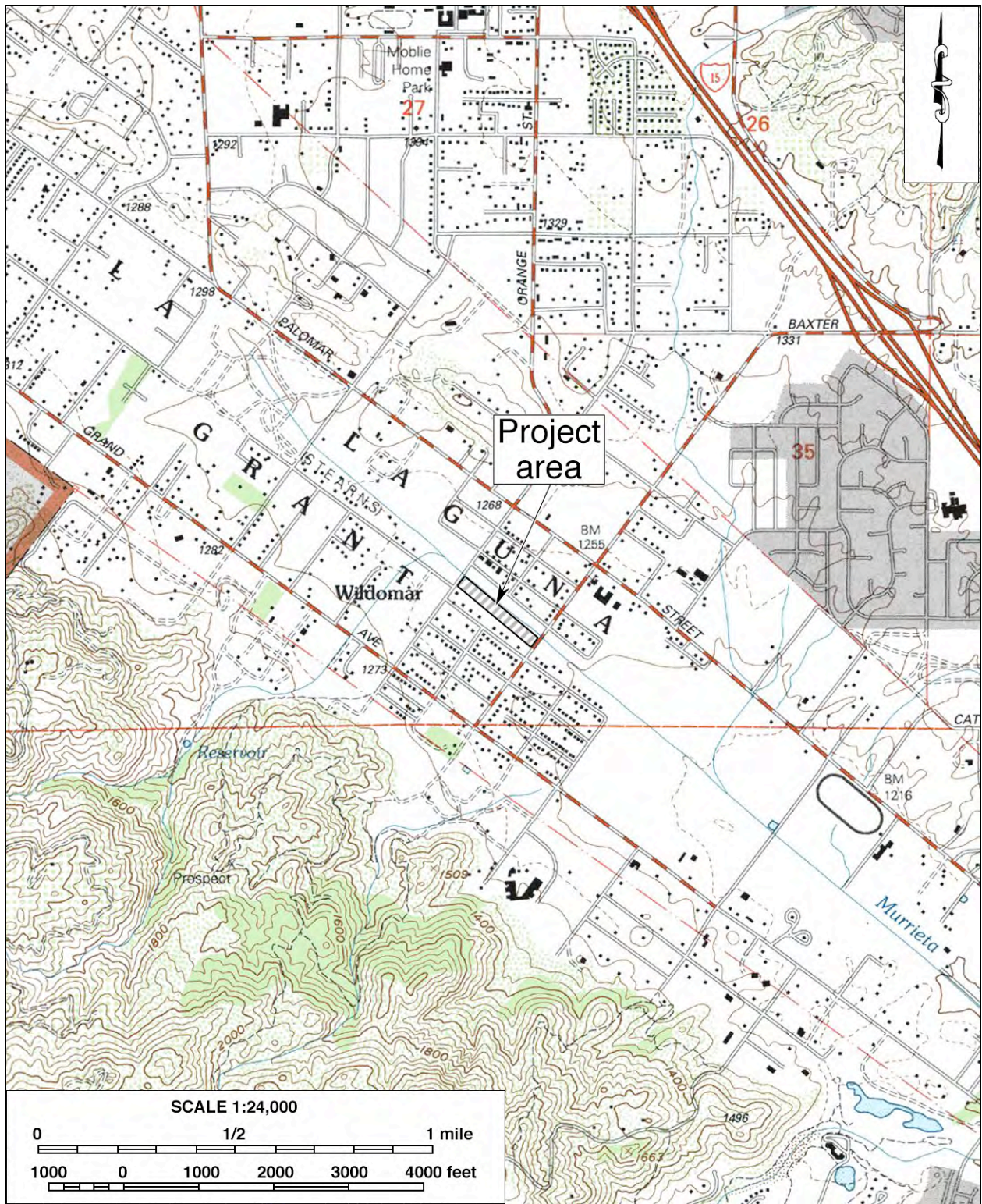


Figure 2. Project area. (Based on USGS Wildomar, Calif., 1:24,000 quadrangle [USGS 1997])

SETTING

CURRENT NATURAL SETTING

The project area is bounded by the Murietta Creek channel on the northeast, Central Avenue on the southeast, Gruwell Street on the northwest, and a residential neighborhood on the southwest. Elevations within the project area range from approximately 1,245 to 1,255 feet above mean sea level, with a fairly level terrain and a slight incline to the west. Soil within the project area consists of coarse sands with silt, clay, gravel, and small rocks. Most of the project area remains relatively undisturbed, although the portion along the southwestern boundary has been cleared in the recent past. Vegetation observed includes foxtails, wild mustard, datura, coyote melons, pepper trees, eucalyptus trees, and other introduced landscaping trees and plants (Fig. 3).

CULTURAL SETTING

Prehistoric Context

The Wildomar area has long been a part of the homeland of the Luiseño Indians, a Takiic-speaking people whose territory extended from present-day Riverside to Escondido and Oceanside. Luiseño history, as recorded in traditional songs, tells the creation story from the birth of the first people, the *kaamalam*, to the sickness, death, and cremation of *Wiyoot*, the most powerful and wise one, at Lake Elsinore. In modern anthropological literature, the leading sources on Luiseño culture and history are Kroeber (1925), Strong (1929), and Bean and Shipek (1978).

Archaeological discoveries at Lake Elsinore and Domenigoni Valley place humans in this part of southern California as early as 10,000 years ago. Over the years there have been many sequences and chronologies proposed for the prehistoric cultural history of inland southern California, but at the present time there are not enough archaeological data to



Figure 3. Overview of the current natural setting of the project area. (Photo taken on July 23, 2007; view to the southeast)

fine-tune these sequences into units any smaller than a few, very broadly defined periods. The various existing schemes were summarized by Grenda (1997:16-21), who offered the following basic timeline:

10,550-7,200 years ago	Early Holocene Period / San Dieguito Culture
7,200-3,440 years ago	Middle Holocene Period / La Jolla-Pauma Cultures
3,440-1,500 years ago	Archaic Period / Encinitas Culture
1,500-300 years ago	Late Prehistoric Period / Luiseño Culture

The more recent Native American history in California, beginning with the first European contact, is chronologized by anthropologists and historians as follows:

1500-1770s	Long-distance contact with Europeans
1770s-1830s	Mission Period
1830s-1850s	Rancho Period
1850s-1880s	American Migration to California
1880s-present	Reservation Period

Historic Context

After the beginning of Spanish colonization of Alta California in 1769, what is today the southwestern portion of Riverside County, consisting of Temescal, Elsinore, and Temecula Valleys, became the first region in the county to be settled by non-Indians. In 1818-1819, Leandro José Serrano, a Spanish soldier from San Diego, established a cattle ranch in the Temescal Valley under a temporary occupancy and grazing permit issued by Mission San Luis Rey (Jennings et al. 1993:91). Around the same time, with the Temecula Valley growing into Mission San Luis Rey's principal grain producer, the mission fathers established a granary, a chapel, and a residence for the *majordomo* at the Luiseño village of *Temeeeku*, near present-day Temecula (Hudson 1989:19).

Beginning in 1834, during secularization of the mission system, former mission ranchos throughout Alta California were surrendered to the Mexican government, and subsequently divided and granted to various prominent citizens in the province. In the vicinity of the project area, three large land grants were issued during this period, Rancho La Laguna, Rancho Temecula, and Rancho Santa Rosa. As elsewhere in Alta California, cattle raising was the most prevalent economic activity on these and other nearby ranchos, until the influx of American settlers eventually brought an end to this now-romanticized lifestyle in the second half of the 19th century.

In the wake of the massive waves of immigration from the eastern states, a land boom swept through much of southern California in the 1880s. The small community of Wildomar was one of the hundreds of boom towns created during this period. It was founded in 1886 by William Collier and Donald Graham at the site of a minor station on the Santa Fe Railroad (Gunther 1984:572). Initially named Wildon, the town was renamed Wildomar within the same year, a name coined from the first names of the founders and that of Margaret Graham, Collier's sister and Graham's wife (*ibid.*). Since its birth, "Wildomar has remained a quiet farming community, with a scattering of residents who liked living in its restful environment" (Hudson 1978:175). During recent decades, however, Wildomar has experienced a new boom in residential development and, like

many other communities in southwestern Riverside County, has begun to take on more and more the characteristics of a "bedroom community" in support of the fast growing industries in nearby Orange County.

RESEARCH METHODS

RECORDS SEARCH

On July 16, 2007, CRM TECH archaeologist Nina Gallardo (see App. 1 for qualifications) conducted the historical/archaeological resources records search at the Eastern Information Center (EIC), University of California, Riverside. During the records search, Gallardo examined maps and records on file at the EIC for previously identified cultural resources in or near the project area, and existing cultural resources reports pertaining to the vicinity. Previously identified cultural resources include properties designated as California Historical Landmarks, Points of Historical Interest, or Riverside County Landmarks, as well as those listed in the National Register of Historic Places, the California Register of Historical Resources, or the California Historical Resource Information System.

HISTORICAL RESEARCH

Historical background research for this study was conducted by CRM TECH historian Bai "Tom" Tang (see App. 1 for qualifications) on the basis of published literature in local and regional history and historic maps of the Wildomar area. Among maps consulted for this study were the U.S. General Land Office's (GLO) land survey plat map dated 1880 and the U.S. Geological Survey's (USGS) topographic maps dated 1901, 1942, and 1953. These maps are collected at the Science Library of the University of California, Riverside, and the California Desert District of the U.S. Bureau of Land Management, located in Moreno Valley.

NATIVE AMERICAN PARTICIPATION

As part of the research procedures, CRM TECH contacted the State of California's Native American Heritage Commission on July 13, 2007, to request a records search in the commission's sacred lands file. Following the commission's recommendations, CRM TECH further contacted a total of 11 Native American representatives in the region in writing on July 18 to solicit local Native American input regarding any possible cultural resources concerns over the proposed project. The correspondences between CRM TECH and the Native American representatives are attached to this report in Appendix 2.

FIELD SURVEY

On July 23, 2007, CRM TECH archaeologist Daniel Ballester (see App. 1 for qualifications) carried out the intensive-level, on-foot field survey of the project area. During the survey, Ballester walked parallel east-west transects spaced 15 meters (approx. 50 feet) apart. In this way, the ground surface in the entire project area was systematically and carefully examined for any evidence of human activities dating to the prehistoric or historic periods (i.e., 50 years ago or older). Ground visibility ranged from poor (10%) to good (80%) depending upon the density of the vegetation.

RESULTS AND FINDINGS

RECORDS SEARCH

According to records on file at the EIC, the project area may have been partially covered by a linear survey completed in 2006 for a power line project, but no cultural resources were previously recorded on or adjacent to the property. Outside the project boundaries but within a one-mile radius, EIC records show nearly 30 other previous cultural resources studies on various tracts of land and linear features (Fig. 4).

As a result of these and other similar studies in the vicinity, ten archaeological sites, seven historic-period buildings, and one isolate—i.e., a site with fewer than three artifacts— were previously recorded within the scope of the records search, as listed in Table 1. None of these previously recorded resources was located in the immediate vicinity of the project area, and thus none of them requires further consideration during this study.

Site No.	Recorded by/Date	Description
33-2766	McCarthy 1984	Bedrock milling features, since combined with 33-2767
33-2767	Smallwood 2003; Love and Moffit 1994	Bedrock milling features, groundstone, lithic scatter, and historic-period trash dump
33-2768	McCarthy 1984	Bedrock milling feature
33-2769	McCarthy 1984	Small camp site with bedrock milling features and groundstone
33-4722	Love 1992	Gate valve and pipe from ca. 1930s-1940s water system
33-4725	White 1989	Lithic scatter, groundstone
33-4726	White 1989	Lithic scatter, groundstone
33-7182	Meredith 1982	Single-family residence (Craftsman bungalow)
33-7420	O'Brien 1982	Single-family residence, ca. 1935
33-7783	O'Brien 1982	Single-family residence, ca. 1934
33-7784	O'Brien 1982	Single-family residence, ca. 1910
33-7785	O'Brien 1982	Farmhouse with associated structures, ca. 1888
33-7786	O'Brien 1982	Single-family residence, ca. 1885
33-7811	O'Brien 1982	Monument housing the Wildomar school bell
33-9641	White 2000	Bedrock milling feature
33-12289	Shepard 2002	Single-family residence
33-12815	Love 1992	Electrical insulator, ca. 1900-1920
33-13515	Swope 1988	Quartzite flake with cortex

HISTORICAL RESEARCH

Historic maps consulted for this study suggest that the project area has remained vacant and undeveloped throughout the historic period (Figs. 5-7). In the 1880s, when the U.S. government conducted an official land survey in the Wildomar area, the only man-made features observed in the project vicinity—but not within the project boundaries—were a "Road from Temecula and Temescal" and a "Road to Santa Rosa" (GLO 1880).

A decade later, the surrounding area presented a very different cultural landscape. In 1881-1883, the Atchison, Topeka and Santa Fe Railway Company launched a direct challenge to the Southern Pacific Railway Company's transportation monopoly in California by completing its first subsidiary in the state, the California Southern Railway,

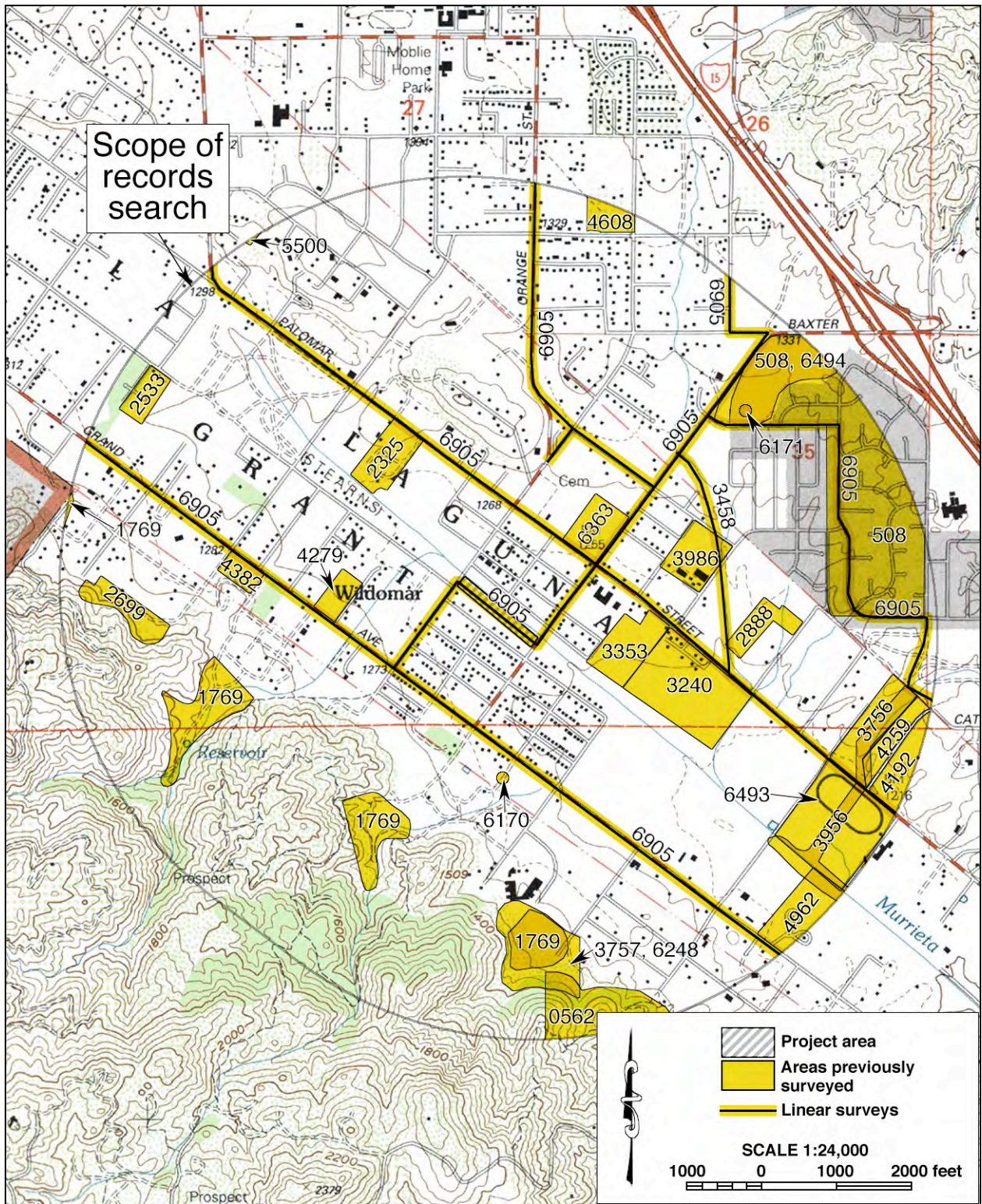


Figure 4. Previous cultural resources studies in the vicinity of the project area, listed by EIC file number. Locations of historical/archaeological sites are not shown as a protective measure.

from the San Diego area to San Bernardino. As Figure 5 shows, the California Southern Railway, later renamed the Southern California Railway, traversed in close proximity to the project area.

The arrival of the Santa Fe and its fierce competition with the Southern Pacific ushered in a phenomenal land boom in southern California during the 1880s, and was a direct factor in the creation of the town of Wildomar, as mentioned above. By the late 1890s, the Wildomar area demonstrated a settlement pattern that was typical in rural southern California, with crisscrossing roads lined by scattered buildings surrounding a more densely populated town center (Fig. 5). The project area was located within the general perimeters of the Wildomar town center, but apparently remained unsettled at the time (Fig. 5).

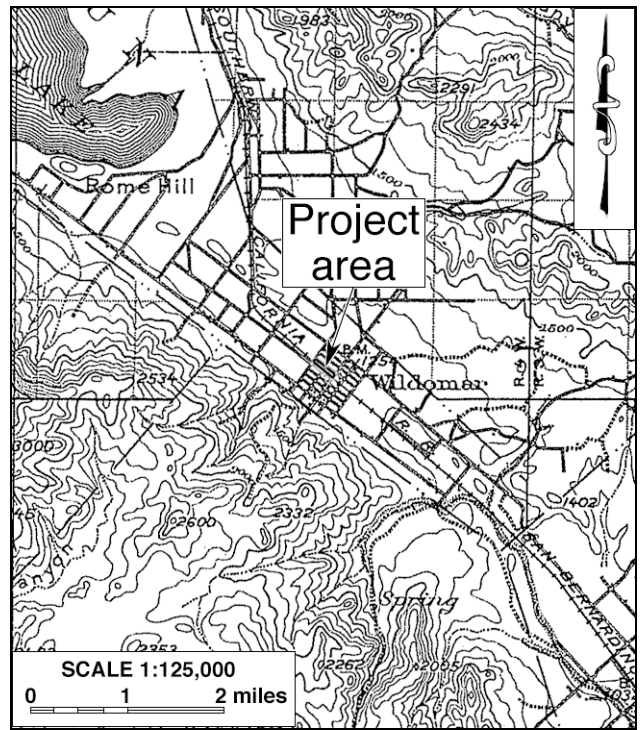


Figure 5. The project area and vicinity in 1897-1898. (Source: USGS 1901)

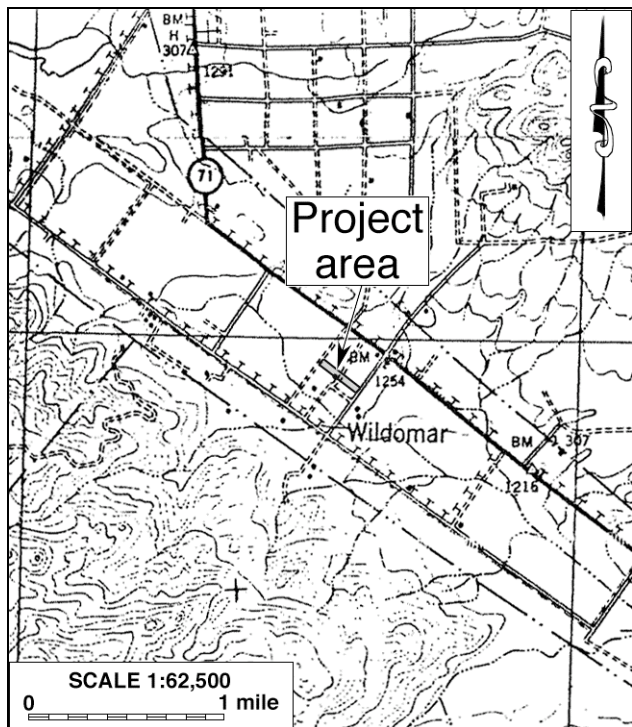


Figure 6. The project area and vicinity in 1939. (Source: USGS 1942)

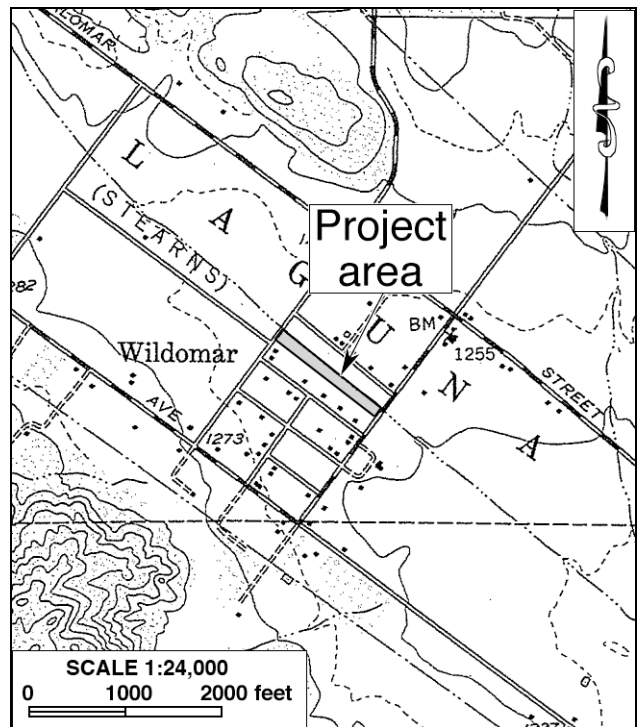


Figure 7. The project area and vicinity in 1951. (Source: USGS 1953)

After the original California Southern Railway was repeatedly washed out by floods in the Temecula and Railroad Canyons, the Santa Fe eventually abandoned its service between Elsinore and Temecula in 1935, and the rail line through Wildomar was subsequently removed (Hudson 1989:90). After that, the only notable cultural features present in the immediate vicinity of the project area during the historic period were a few roads, including the forerunners of today's Gruwell Street and Central Street (Figs. 6, 7). Based on its depiction in the historic maps, the project area appears to be relatively low in sensitivity for cultural resources from the historic period.

NATIVE AMERICAN PARTICIPATION

In response to CRM TECH's inquiry, the Native American Heritage Commission reported that the sacred lands record search identified no Native American cultural resources in the immediate project area. However, noting that "the absence of specific site information in the Sacred Lands File does not guarantee the absence of cultural resources in any 'area of potential effect'," the commission suggested that local Native American representatives be contacted for additional information, and provided a list of potential contacts in the region (see App. 2).

Upon receiving the commission's response, CRM TECH initiated correspondence with all nine individuals on the referral list and the organizations they represent. In addition, John Gomez, Jr., Cultural Resources Coordinator for the Ramona Band of Cahuilla Indians, and Erica Helms, Cultural Resource Administrator for the Soboba Band of Luiseño Indians, were also contacted. As of this time, two responses have been received (see App. 2).

John Gomez, Jr., responded in writing on July 18, 2007. In the letter, Mr. Gomez states that the Ramona Band of Cahuilla Indians is concerned about the protection of cultural resources and the proper treatment of sacred items and/or human remains that may be unearthed during the project. He requests a copy of the cultural resources report for review and reserves the right to comment further in the future.

In a letter dated August 7, 2007, Anna Hoover, Cultural Analyst for the Temecula Band of Luiseño Mission Indians, states that the project area lies within the boundaries of the tribe's ancestral territory. Therefore, the tribe requests copies of all archaeological reports and further consultation with the project proponent and the Lead Agency if subsurface cultural resources are encountered.

If any additional Native American responses over cultural resource issues are received in the future, they will be reported immediately to the project proponent.

FIELD SURVEY

The intensive-level field survey produced completely negative results for potential cultural resources. The entire project area was closely inspected for any evidence of human activities dating to the prehistoric or historic periods, but none was found. Modern trash was observed along the southwestern project boundary, which has been cleared of vegetation, and a tree house of recent origin was observed in the northwestern portion of the property. However, no buildings, structures, objects, sites, features, or artifacts more than 50 years of age were encountered during the field survey.

DISCUSSION

The purpose of this study is to identify any cultural resources within or adjacent to the project area, and to assist the County of Riverside in determining whether such resources meet the official definition of "historical resources," as provided in the California Public Resources Code, in particular CEQA.

According to PRC §5020.1(j), "'historical resource' includes, but is not limited to, any object, building, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California." More specifically, CEQA guidelines state that the term "historical resources" applies to any such resources listed in or determined to be eligible for listing in the California Register of Historical Resources, included in a local register of historical resources, or determined to be historically significant by the Lead Agency (Title 14 CCR §15064.5(a)(1)-(3)).

Regarding the proper criteria for the evaluation of historical significance, CEQA guidelines mandate that "a resource shall be considered by the lead agency to be 'historically significant' if the resource meets the criteria for listing on the California Register of Historical Resources" (Title 14 CCR §15064.5(a)(3)). A resource may be listed in the California Register if it meets any of the following criteria:

- (1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- (2) Is associated with the lives of persons important in our past.
- (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- (4) Has yielded, or may be likely to yield, information important in prehistory or history. (PRC §5024.1(c))

As discussed above, no potential "historical resources" were previously recorded within or adjacent to the project area, and none was encountered during the present survey. In addition, Native American input did not identify any sites of traditional cultural value in the vicinity, and historic maps suggest that the project area is relatively low in sensitivity for cultural resources from the historic period. Based on these findings, and in light of the criteria listed above, the present report concludes that *no historical resources exist within or adjacent to the project area.*

RECOMMENDATIONS

CEQA establishes that "a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (PRC §21084.1). "Substantial adverse change," according to PRC §5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired."

Since no "historical resources" were encountered during the course of this study, CRM TECH presents the following recommendations to the County of Riverside:

- No historical resources exist within or adjacent to the project area, and thus the project as currently proposed will not cause a substantial adverse change to any known historical resources.
- No further cultural resources investigation is necessary for the proposed project unless development plans undergo such changes as to include areas not covered by this study.
- If buried cultural materials are discovered during any earth-moving operations associated with the project, all work in that area should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.

CONCLUSION

The foregoing report has provided background information on the project area, outlined the methods used in the current study, and presented the results of the various avenues of research. Throughout the course of the study, no "historical resources," as defined by CEQA, were encountered within or adjacent to the project area. Therefore, the County of Riverside may reach a finding of *No Impact* regarding cultural resources, with the condition that any buried cultural materials unearthed during earth-moving activities be examined and evaluated by a qualified archaeologist prior to further disturbances.

CERTIFICATION: I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this archaeological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

DATE: _____

SIGNED: _____

REFERENCES

- Bean, Lowell John, and Florence C. Shipek
1978 Luiseño. In *Handbook of North American Indians*, Vol. 8: *California*, edited by Robert F. Heizer; pp. 550-563. Smithsonian Institution, Washington, D.C.
- GLO (General Land Office, U.S. Department of the Interior)
1880 Plat Map: Township No. 6 South Range No. 4 West, San Bernardino Meridian; surveyed in 1880.
- Grenda, Donn
1997 Continuity and Change: 8,500 Years of Lacustrine Adaptation on the Shores of Lake Elsinore. Statistical Research Technical Series 59. Statistical Research, Inc., Tucson, Arizona.
- Gunther, Jane Davies
1984 *Riverside County, California, Place Names: Their Origins and Their Stories*. Jane Davies Gunther, Riverside.
- Hudson, Tom
1978 *Lake Elsinore Valley: Its Story, 1776-1977*. Lake Elsinore Downtown Business Association and City of Lake Elsinore Centennial, Lake Elsinore.
1989 *A Thousand Years in Temecula Valley*. Reprinted by Old Town Temecula Museum, Temecula.
- Jennings, Bill, Ron Baker, Tom Patterson, and Diana Seider (ed.)
1993 *Guide to the Historic Landmarks of Riverside County, California*. Riverside County Historical Commission Press, Riverside.
- Kroeber, Alfred L.
1925 *Handbook of the Indians of California*. Bureau of American Ethnology Bulletin 78. U.S. Government Printing Office, Washington, D.C.
- Strong, William Duncan
1929 *Aboriginal Society in Southern California*. University of California Publications in American Archaeology and Ethnology 26. Reprinted by Malki Museum Press, Banning, California, 1972.
- USGS (United States Geological Survey, U.S. Department of the Interior)
1901 Map: Elsinore, Calif. (30', 1:125,000); surveyed in 1897-1898.
1942 Map: Lake Elsinore, Calif. (15', 1:62,500); aerial photographs taken in 1939.
1953 Map: Wildomar, Calif. (7.5', 1:24,000); aerial photographs taken in 1951.
1979 Map: Santa Ana, Calif. (1:250,000); 1959 edition revised.
1997 Map: Wildomar, Calif. (7.5', 1:24,000); imagery taken in 1994.

**APPENDIX 1:
PERSONNEL QUALIFICATIONS**

**PRINCIPAL INVESTIGATOR/HISTORIAN
Bai "Tom" Tang, M.A.**

Education

- 1988-1993 Graduate Program in Public History / Historic Preservation, UC Riverside.
1987 M.A., American History, Yale University, New Haven, Connecticut.
1982 B.A., History, Northwestern University, Xi'an, China.
- 2000 "Introduction to Section 106 Review," presented by the Advisory Council on
Historic Preservation and the University of Nevada, Reno.
- 1994 "Assessing the Significance of Historic Archaeological Sites," presented by the
Historic Preservation Program, University of Nevada, Reno.

Professional Experience

- 2002- Principal Investigator, CRM TECH, Riverside, California.
1993-2002 Project Historian / Architectural Historian, CRM TECH, Riverside, California.
1993-1997 Project Historian, Greenwood and Associates, Pacific Palisades, California.
1991-1993 Project Historian, Archaeological Research Unit, UC Riverside.
1990 Intern Researcher, California State Office of Historic Preservation,
Sacramento.
- 1990-1992 Teaching Assistant, History of Modern World, UC Riverside.
1988-1993 Research Assistant, American Social History, UC Riverside.
1985-1988 Research Assistant, Modern Chinese History, Yale University.
1985-1986 Teaching Assistant, Modern Chinese History, Yale University.
1982-1985 Lecturer, History, Xi'an Foreign Languages Institute, Xi'an, China.

Honors and Awards

- 1988-1990 University of California Graduate Fellowship, UC Riverside.
1985-1987 Yale University Fellowship, Yale University Graduate School.
1980, 1981 President's Honor List, Northwestern University, Xi'an, China.

Cultural Resources Management Reports

Preliminary Analyses and Recommendations Regarding California's Cultural Resources Inventory System (With Special Reference to Condition 14 of NPS 1990 Program Review Report). California State Office of Historic Preservation working paper, Sacramento, September 1990.

Numerous cultural resources management reports with the Archaeological Research Unit, Greenwood and Associates, and CRM TECH, since October 1991.

Membership

California Preservation Foundation.

PRINCIPAL INVESTIGATOR/ARCHAEOLOGIST
Michael Hogan, Ph.D., RPA*

Education

- 1991 Ph.D., Anthropology, University of California, Riverside.
1981 B.S., Anthropology, University of California, Riverside; with honors.
1980-1981 Education Abroad Program, Lima, Peru.
- 2002 Section 106—National Historic Preservation Act: Federal Law at the Local Level. UCLA Extension Course #888.
2002 "Recognizing Historic Artifacts," workshop presented by Richard Norwood, Historical Archaeologist.
2002 "Wending Your Way through the Regulatory Maze," symposium presented by the Association of Environmental Professionals.
1992 "Southern California Ceramics Workshop," presented by Jerry Schaefer.
1992 "Historic Artifact Workshop," presented by Anne Duffield-Stoll.

Professional Experience

- 2002- Principal Investigator, CRM TECH, Riverside, California.
1999-2002 Project Archaeologist/Field Director, CRM TECH, Riverside.
1996-1998 Project Director and Ethnographer, Statistical Research, Inc., Redlands.
1992-1998 Assistant Research Anthropologist, University of California, Riverside
1992-1995 Project Director, Archaeological Research Unit, U. C. Riverside.
1993-1994 Adjunct Professor, Riverside Community College, Mt. San Jacinto College, U.C. Riverside, Chapman University, and San Bernardino Valley College.
1991-1992 Crew Chief, Archaeological Research Unit, U. C. Riverside.
1984-1998 Archaeological Technician, Field Director, and Project Director for various southern California cultural resources management firms.

Research Interests

Cultural Resource Management, Southern Californian Archaeology, Settlement and Exchange Patterns, Specialization and Stratification, Culture Change, Native American Culture, Cultural Diversity.

Cultural Resources Management Reports

Author and co-author of, contributor to, and principal investigator for numerous cultural resources management study reports since 1986.

Memberships

* Register of Professional Archaeologists.
Society for American Archaeology.
Society for California Archaeology.
Pacific Coast Archaeological Society.
Coachella Valley Archaeological Society.

PROJECT ARCHAEOLOGIST/REPORT WRITER
Deirdre Encarnación, M.A.

Education

- 2003 M.A., Anthropology, San Diego State University, California.
2000 B.A., Anthropology, minor in Biology, with honors; San Diego State University, California.
1993 A.A., Communications, Nassau Community College, Garden City, N.Y.
- 2001 Archaeological Field School, San Diego State University.
2000 Archaeological Field School, San Diego State University.

Professional Experience

- 2004- Project Archaeologist/Report Writer, CRM TECH, Riverside, California.
2001-2003 Part-time Lecturer, San Diego State University, California.
2001 Research Assistant for Dr. Lynn Gamble, San Diego State University.
2001 Archaeological Collection Catalog, SDSU Foundation.

PROJECT ARCHAEOLOGIST
Nina Gallardo, B.A.

Education

- 2004 B.A., Anthropology/Law and Society, University of California, Riverside.

Professional Experience

- 2004- Project Archaeologist, CRM TECH, Riverside.
• Surveys, excavations, mapping, and records searches.

Honors and Awards

- 2000-2002 Dean's Honors List, University of California, Riverside.

**PROJECT ARCHAEOLOGIST/FIELD DIRECTOR
Daniel Ballester, B.A.**

Education

- 1998 B.A., Anthropology, California State University, San Bernardino.
1997 Archaeological Field School, University of Las Vegas and University of California, Riverside.
1994 University of Puerto Rico, Rio Piedras, Puerto Rico.
2002 "Historic Archaeology Workshop," presented by Richard Norwood, Base Archaeologist, Edwards Air Force Base; presented at CRM TECH, Riverside.

Professional Experience

- 2002- Field Director, CRM TECH, Riverside.
• Report writing, site record preparation, and supervisory responsibilities over all aspects of fieldwork and field crew.
- 1999-2002 Project Archaeologist, CRM TECH, Riverside.
• Survey, testing, data recovery, monitoring, and mapping.
- 1998-1999 Field Crew, K.E.A. Environmental, San Diego.
• Two and a half months of excavations on Topomai village site, Marine Corp Air Station, Camp Pendleton.
- 1998 Field Crew, A.S.M. Affiliates, Encinitas.
• Two weeks of excavations on a site on Red Beach, Camp Pendleton, and two weeks of survey in Camp Pendleton, Otay Mesa, and Encinitas.
- 1998 Field Crew, Archaeological Research Unit, University of California, Riverside.
• Two weeks of survey in Anza Borrego Desert State Park and Eureka Valley, Death Valley National Park.

APPENDIX 2

**CORRESPONDENCE WITH
NATIVE AMERICAN REPRESENTATIVES***

* A total of 11 local Native American representatives were contacted; a sample letter is included in this report.



CRM TECH

FAX COVER

SHEET

**1016 E. Cooley Drive
Suite B
Colton, CA 92324
909·824·6400·Tel
909·824·6405·Fax**

To: Native American
Heritage Commission

Fax: (916) 657-5390

From: Nina Gallardo

Date: July 13, 2007

Number of pages (including this cover sheet):

2

HARDCOPY:

will follow by mail

will not follow unless requested

RE: Sacred Land records search

This is to request a Sacred Lands records search

Name of project:

Tentative Tract Map 33840; APN 376-043-027
(Gruwell & Central)
CRM TECH #2108

Location:

In the Community of Wildomar
Riverside County

USGS 7.5' quad sheet data:

Wildomar, Calif.;
La Laguna (Stearns) land grant; T6S R4W, SBBM

Please call if you need more information or have any questions.

Results may be faxed to the number above.

I appreciate your assistance in this matter.

Map included

STATE OF CALIFORNIA

Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
e-mail: ds_nahc@pacbell.net



July 13, 2007

Nina Gallardo
CRM TECH
1016 E. Cooley Drive, Suite B
Colton, CA 92324

Sent by FAX: 909-824-6405
Number of pages: 3

Re: Proposed Tentative Tract Map 33840; APN 376-043-027 (Gruwell & Central PDI) CRM TECH #2108; Riverside County.

Dear Ms. Gallardo:

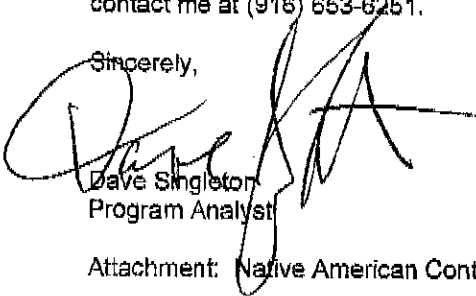
The Native American Heritage Commission was able to perform a record search of its Sacred Lands File (SLF) for the affected project area. The SLF failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the Sacred Lands File does not guarantee the absence of cultural resources in any 'area of potential effect (APE).'

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Enclosed are the nearest tribes that may have knowledge of cultural resources in the project area. A List of Native American contacts are attached to assist you. The Commission makes no recommendation of a single individual or group over another. It is advisable to contact the person listed; if they cannot supply you with specific information about the impact on cultural resources, they may be able to refer you to another tribe or person knowledgeable of the cultural resources in or near the affected project area (APE).

Lack of surface evidence of archeological resources does not preclude the existence of archeological resources. Lead agencies should consider avoidance, as defined in Section 15370 of the California Environmental Quality Act (CEQA) when significant cultural resources could be affected by a project. Also, Public Resources Code Section 5097.98 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery. Discussion of these should be included in your environmental documents, as appropriate.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,


Dave Singleton
Program Analyst

Attachment: Native American Contact List

Native American Contacts
Riverside County
 July 13, 2007

Cahuilla Band of Indians
Anthony Madrigal, Jr., Interim-Chairperson
 P.O. Box 391760 Cahuilla
 Anza , CA 92539
 tribalcouncil@cahuilla.net
 (951) 763-2631

(951) 763-2632 Fax

Pechanga Band of Mission Indians
Paul Macarro, Cultural Resource Center
 P.O. Box 1477 Luiseno
 Temecula , CA 92593
 (951) 308-9295 Ext 8106
 (951) 676-2768
 (951) 506-9491 Fax

Ramona Band of Mission Indians
Joseph Hamilton, vice chairman
 P.O. Box 391670 Cahuilla
 Anza , CA 92539
 admin@ramonatribe.com
 (951) 763-4105
 (951) 763-4325 Fax

Santa Rosa Band of Mission Indians
John Marcus, Chairman
 P.O. Box 609 Cahuilla
 Hemet , CA 92546
 srtribaloffice@aol.com
 (951) 658-5311
 (951) 658-6733 Fax

Soboba Band of Luisefio Indians
Bennae Calac, Cultural Resource Director
 P.O. Box 487 Luiseno
 San Jacinto , CA 92581
 bcalac@soboba-nsn.gov
 (951) 663-8332
 (951) 654-4198 - FAX

Pechanga Band of Mission Indians
Mark Macarro, Chairperson
 P.O. Box 1477 Luiseno
 Temecula , CA 92593
 tbrown@pechanga-nsn.gov
 (951) 676-2768
 (951) 695-1778 Fax

Willie Pink
 48310 Pechanga Road Luiseno
 Temecula , CA 92592
 wjpink@hotmail.com
 (909) 936-1216
 Prefers e-mail contact

Soboba Band of Luiseno Indians
Harold Arres, Cultural Resources Manager
 P.O. Box 487 Luiseno
 San Jacinto , CA 92581
 hares@soboba-nsn.gov
 (951) 654-2765
 FAX: (951) 654-4198

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7060.5 of the Health and Safety Code, Section 6097.94 of the Public Resources Code and Section 6097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American with regard to cultural resources for the proposed Gravel & Central PD, Tentative Tract Map 33840; located in the Community of Wildomar; Riverside County, California for which a Sacred Lands File search was requested.

**Native American Contacts
Riverside County
July 13, 2007**

Cahuilla Band of Indians
Maurice Chacon, Cultural Resources
P.O. Box 391760 Cahuilla
Anza , CA 92539
cbandodian@aol.com
(951) 763-2631

(951) 763-2632 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American with regard to cultural resources for the proposed Gravel & Central PDI, Tentative Tract Map 33840; located in the Community of Wildomar, Riverside County, California for which a Sacred Lands File search was requested.

July 18, 2007

Bennae Calac, Cultural Resource Director
Soboba Band of Luiseño Indians
P. O. Box 487
San Jacinto, CA 92381

RE: Three Acres in APN 376-043-027
In the Community of Wildomar, Riverside County
CRM TECH Contract #2108

Dear Ms. Calac:

As part of a cultural resources study on the property referenced above, I am writing to request your input on potential Native American cultural resources in or near the project area. Please respond at your earliest convenience if you have any specific knowledge of sacred/religious sites or other sites of Native American traditional cultural value within or near the project area. The lead agency for this project is the County of Riverside for CEQA compliance purposes.

The project area is located along Front Street between Gruwell Street and Central Avenue, in the community of Wildomar, Riverside County. The accompanying map, based on the USGS Wildomar, Calif., 7.5' quadrangle, depicts the location of the project area in a portion of the La Laguna (Stearns) land grant, T6S R4W, SBBM.

Any information, concerns or recommendations regarding cultural resources in the vicinity of the project area may be forwarded to CRM TECH by telephone, e-mail, facsimile or standard mail. Thank you for the time and effort in addressing this important matter.

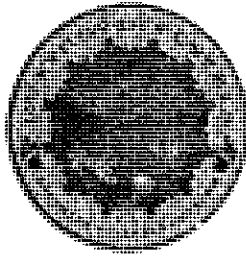
Respectfully,

Melissa Hernandez
CRM TECH

Encl.: Project location map

RAMONA BAND OF CAHUILLA

56310 Highway 371, Suite B
Post Office Box 391670
Anza, California 92539



Tel: (951) 763-4105
Fax: (951) 763-4325
E-mail: admin@ramonatribe.com

July 18, 2007

CRM Tech
Melissa Hernandez
1016 E. Cooley Drive, Suite B
Colton, CA 92324

"A SOVEREIGN NATION"

**Re: Three Acres in APN 376-043-027; Wildomar, Riverside County
CRM Tech #2108**

Dear Ms. Hernandez:

The Ramona Band of Cahuilla Indians is in receipt of a letter dated July 18, 2007 regarding the above proposed project.

The Ramona Band of Cahuilla Indians is concerned about the protection of unique and irreplaceable cultural resources, such as Cahuilla village and burial sites and archaeological items that may be displaced by ground-disturbing work associated with any project within the aboriginal homelands of the Cahuilla people.

The Ramona Band of Cahuilla Indians is also concerned about the proper and lawful treatment of any cultural or ceremonial items, Native American human remains, or sacred items discovered during planning and/or construction of the project.

The Ramona Band of Cahuilla Indians reserves the right to provide information until such time as it has had an opportunity to review the cultural resource report for the proposed project. Please forward a copy of the cultural resources report to the address listed above.

The Ramona Band of Cahuilla Indians appreciates the opportunity to consult regarding the proposed project and looks forward to working with you to protect and preserve the invaluable resources of the Cahuilla people.

You may contact me at (951)941-4943 or (951)763-4105 if you have any questions or wish to discuss this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "John A. Gomez, Jr.".

John A. Gomez, Jr.
Cultural Resources Coordinator
Ramona Band of Cahuilla Indians

RECEIVED AUG 02 2007



PECHANGA CULTURAL RESOURCES
Temecula Band of Luiseno Mission Indians

Post Office, Box 2183 • Temecula, CA 92593
Telephone (951) 308-9295 • Fax (951) 506-9491

Chairperson:
Germaine Arenas

Vice Chairperson:
Mary Bear Magee

Committee Members:
Raymond Basquez, Sr.
Evie Gerber
Darlene Miranda
Bridgett Barcello Maxwell

Director:
Gary DuBois

Coordinator:
Paul Macarro

Cultural Analyst:
Stephanie Gordin

Monitor Supervisor:
Aurelia Marruffo

August 7, 2007

VIA FAX and USPS

**RE: Request for Information for APN 376-043-027, Three Acres in the
Community of Wildomar, CRM Tech Contract # 2108**

Dear Ms. Hernandez:

The Tribe appreciates your request for information regarding the above referenced project. After reviewing the provided maps, we have determined that the project area is not within reservation lands although it is within our ancestral territory. At this time, we are not interested in commenting on this project.

However, the Tribe requests the following:

- 1) Copies of all archaeological reports; and
- 2) In the event that subsurface cultural resources are identified, the Tribe requests consultation with the project proponent and Lead Agency regarding the treatment and disposition of all artifacts.

As a sovereign governmental entity, the Tribe is entitled to appropriate and adequate government-to-government consultation regarding the proposed project. We would like you and your client to know that the Tribe does not consider initial inquiry letters from project consultants to constitute appropriate government-to-government consultation, but rather tools to obtain further information about the project area. Therefore, the Tribe reserves its rights to participate in the formal environmental review process, including government-to-government consultation with the Lead Agency, and requests to be included in all correspondence regarding this project.

If you have any additional questions or comments, please contact me at ahover@pechangansn.gov or 951-308-9252.

Sincerely,

Anna M. Hoover
Cultural Analyst

ADDENDUM



CRM TECH

FAX COVER

SHEET

1016 E. Cooley Drive, Suite B
Colton, CA 92324
909-824-6400 • Tel
909-824-6405 • Fax

To:

Karey James

699-3569

Fax

From:

Andrea Stella

September 5, 2007

Date

2 Pages (including this)

HARDCOPY

 will follow by mail

 √ will not follow unless
 requested

RE: Native American Consultation,
Assessor's Parcel No. 376-043-027
Wildomar, Riverside County
CRM TECH Contract No. 2108

The following is a Native American response letter that should be included with the report the project referenced above. This formal response from the Soboba Band of Luiseño Indians was received after the completion of the report. It should be noted that even though the project area was not located on the Soboba reservation land, the location was recognized as a part of the Soboba Tribe's traditional use area. Additionally, the tribe requested further consultation and copies of all cultural resource documentation.

Sincerely,

Andrea Stella

Encl: Letter from the Soboba Band of Luiseño Indians



Mission:

Educate and communicate the rich heritage of Soboba peoples; Lead and assist individuals, organizations and communities in understanding the needs and concerns of Native American monitoring of traditional sites; Advocate Native American participation in state agencies and boards; Advocate legislation and enforcement of laws affecting Native American peoples and protecting historical and archaeological resources.

August 27, 2007

Attn: Melissa Hernandez
CRM TECH
1016 E. Cooley Drive, Suite B
Colton, CA 92324

Re: Contract # 2108

The Soboba Band of Luiseño Indians appreciates your observance of Tribal Cultural Resources and their preservation in your project. The information provided to us on said project(s) has been assessed through our Cultural Resource Department, where it was concluded that the project area falls within the bounds of our Tribal Traditional Use Area.

Soboba Band of Luiseño Indians is requesting the following:

1. Further consultation with Native American Tribes.
2. Copies of archeological and/or cultural resource documentation.

If you have any questions or concerns please do not hesitate to contact me at the following number 951-487-8268.

[SPECIAL NOTE (for projects other than cell towers): If this project is associated with a city or county specific plan or general plan action it is subject to the provisions of SB18-Traditional Tribal Cultural Places (law became effective January 1, 2005) and will require the city or county to participate in **formal, government-to-government** consultation with the Tribe. If the city or county are your client, you may wish to make them aware of this requirement. By law, they are required to contact the Tribe.]

Sincerely,

A handwritten signature in black ink, appearing to read "Erica Helms", is written over the word "Sincerely,".

Erica Helms
Soboba Cultural Resource Department
Phone 951-487-8268
Cell 951-663-8333
ehelms@soboba-nsn.gov

RECEIVED SEP 05 2007

APPENDIX 6: SOILS INVESTIGATION



John R. Byerly

INCORPORATED

July 1, 2013

Zareh Hookassian
3173 Vera Valley Road
Franklin, Tennessee 37064

Rpt. No.: 1372
File No.: S-10719

Subject: Tentative Tract Map No. 33840, Between Gruwell Street and Central Street, Wildomar, California; Second Update of Geotechnical/Geologic Reports

- References:
- (a) Soils Investigation, 3.16-Acre Residential Development, John R. Byerly, Inc., Rpt. No. 4512, October 28, 2003
 - (b) Update of Geotechnical/Geologic Reports, Tentative Tract Map No. 33840, John R. Byerly, Inc., Rpt. No. 3555-a, April 8, 2008

Dear Mr. Hookassian:

We are pleased to present this second update of the referenced geotechnical investigation reports and the associated engineering geology investigation update reports. We have reviewed the referenced documents and have performed a site reconnaissance. The purpose of our review and site reconnaissance was to verify that the conclusions and recommendations presented in the referenced update reports remain generally valid and to present additional recommendations as needed. The second update of the geologic reports was performed by our geologic consultant, AKW Geotechnical. The second geologic update report is enclosed herewith as Enclosure 4. In addition, a Phase 1 environmental site assessment has been performed by our consulting environmental engineer, Hayden Environmental, Inc. The Phase 1 environmental site assessment generally conforms to the protocol outlined in ASTM E 1527-05. The environmental site assessment is described and the findings of that investigation are presented in the Hayden Environmental, Inc. report, included as Enclosure 5.

PROJECT DESCRIPTION

It is our understanding that the site will be developed to receive four single-family residences. The structures are expected to be single-story buildings of wood-frame construction incorporating concrete slab-on-grade floors. The residences will have plan areas of

2,500 square feet and will exert relatively light foundation loads on the underlying soils. A cul-de-sac will be constructed off Elm Street, which will provide access for two residences. Based on the site topography, it is anticipated that minimal cuts and fills will be required for site development, and major slopes and retaining walls are not proposed. The site configuration is illustrated on Enclosure 1.

REVIEW OF GEOTECHNICAL/GEOLOGIC REPORTS

Previous explorations at the subject property are described in the soils investigation report prepared by this firm (Reference a). The subsurface explorations consisted of three test borings drilled with a truck-mounted flight-auger to a maximum depth of 51.5 feet. Artificial fill consisting of loose silty sands with some clay was encountered in all of our test borings to depths ranging from 2.5 feet to 4.5 feet. The underlying natural soils encountered in our boring locations consisted of medium dense to dense silty sands and medium stiff silty clays. Free ground water was encountered in each test boring at a depth of approximately 18 feet. Bedrock was not encountered in our explorations. The boring logs are reproduced herewith on Enclosure 2. Laboratory testing included maximum density determinations and consolidation testing. The expansion potential of the near-surface soil was classified as very low. Chemical testing was comprised of pH, soluble sulfate, sulfide, redox potential, and resistivity. Recommendations were provided for foundation and seismic design parameters and site preparation. Grading recommendations included the overexcavation and recompaction of the existing artificial fill and loose natural soils until competent natural soil was encountered. At that time, it was also recommended that the overexcavation of the loose natural soils should extend from lot line to lot line as required by the County of Riverside.

The second engineering geology update report was performed by our consulting engineering geologist, AKW Geotechnical (Engineering Geology Update, Tentative Tract Map no. 33840, Between Gruwell Street and Central Street, Wildomar, California, AKW Geotechnical, Project No. M1043-01, June 19, 2013). This second geologic update report included the review of available published geologic reports and maps, a study of black and white aerial photographs of

the site area, and a field reconnaissance. The report notes that: "The site is not located within an Alquist-Priolo Earthquake Fault Zone [AP EFZ]." The report also notes: "Northwest-trending tonal and topographic lineaments in the vicinity of the site may be related to faulting." The report concludes: "No evidence for active faulting was observed on the site on the aerial photographs reviewed associated with this update." The entire second geologic update report is presented herewith as Enclosure 4.

SITE CONDITIONS

The 3.16-acre property is located southeast of the Murrieta Creek, between Gruwell Street and Central Street, in the Wildomar area of Riverside County. An Index Map showing the general vicinity of the site is presented on the following page. The coordinates of the site are latitude 33.6022° N and longitude 117.2772° W utilizing the North American Datum (NAD) from 1983. During our site inspection in May of 2013, we noted that the ground surface throughout the property was generally covered with a light to moderate growth of weeds and trees. A chain-linked fence enclosure is situated in the southeastern portion of the property, and single-family residences occupy the remaining surrounding areas. Murrieta Creek is a concrete-lined channel located approximately 16 feet to the northeast of the most easterly property boundary. The 9-foot-deep channel was constructed with 1H:1V side slopes and extends in a southeast direction. The site topography is relatively flat and slopes downward towards the southeast at an average gradient of less than 1 percent.

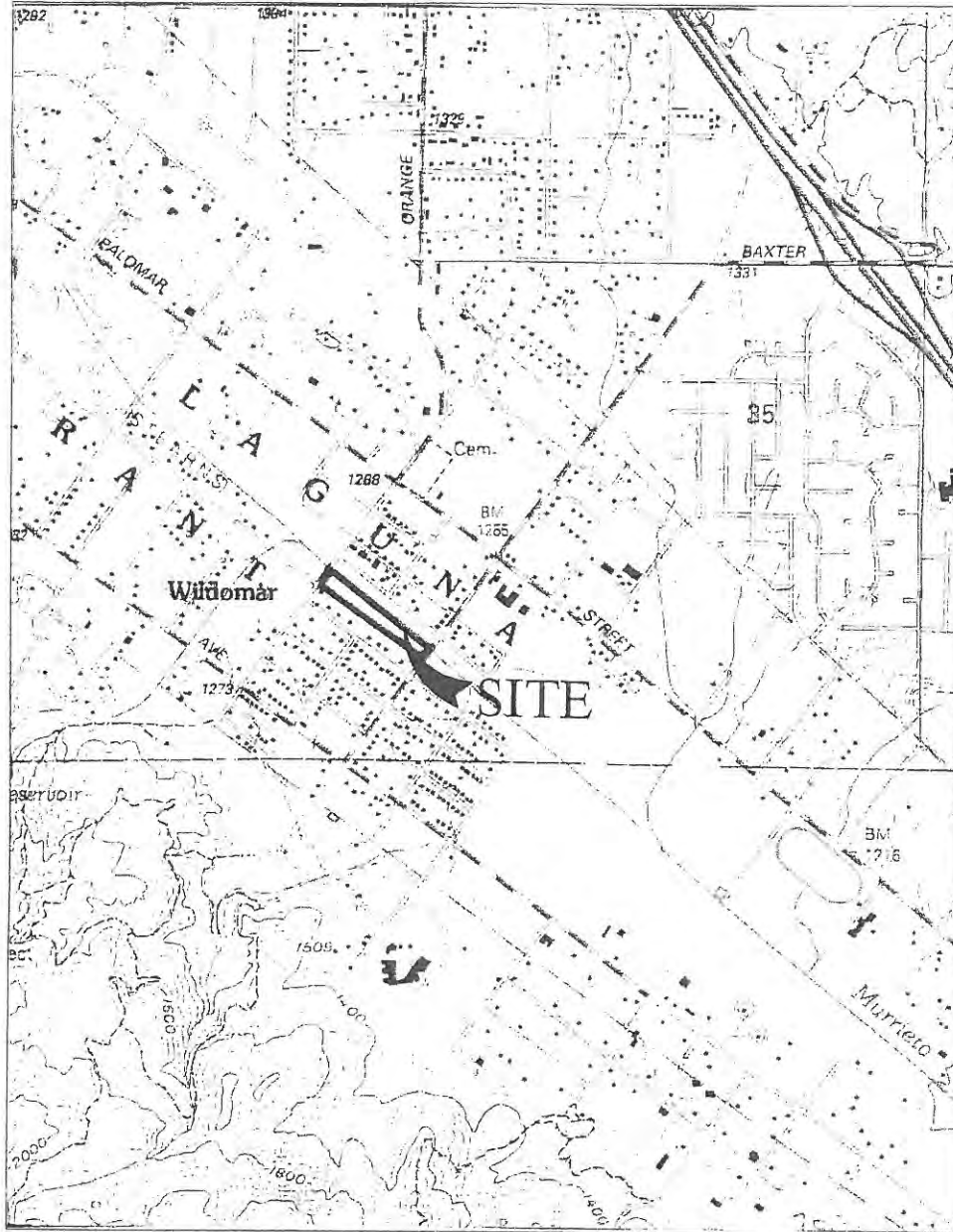
LIQUEFACTION AND DYNAMIC SETTLEMENT

Liquefaction is a phenomenon that occurs when a soil undergoes a transformation from a solid state to a liquefied condition due to the effects of increased pore-water pressure. Loose saturated soils with particle sizes in the medium sand to silt range are particularly susceptible to liquefaction when subjected to seismic groundshaking. Affected soils lose all strength during liquefaction, and foundation failure can occur.



INDEX MAP

SCALE: 1"=2000'



T6S R4W SECTION 34/35
LATITUDE: N33.6022
LONGITUDE: W117.2772

MAP SOURCE: USGS MAP WILDOMAR QUADRANGLE

Free ground water was encountered in each of our earlier test borings at a depth of approximately 18 feet (John R. Byerly, Inc., 2003). Data from the State of California Department of Water Resources indicate that two water wells close to the site (State Well Nos. 6S/4W-34J2 and 6S/4W-34J3) are within one-half mile. At these locations, phreatic ground water was at depths of about 45 feet to 47 feet below the ground surface during March of 1968. The shallow water encountered during our earlier soils investigation (John R. Byerly, Inc., 2003) probably represents a perched water condition with possible recharge from Murrieta Creek. For the purpose of our liquefaction analysis, we have conservatively assumed an historic high ground water level coincident with the ground surface.

It is anticipated that major earthquake groundshaking will occur during the lifetime of the proposed development from the seismically active Wildomar branch of the Elsinore Fault zone located approximately 1,500 feet northeast of the site. This fault would create the most significant earthshaking event. Based on an earthquake magnitude of 7.4 and a review of the California Building Code, a peak horizontal ground acceleration of 0.51g is assigned to the site. To evaluate the potential for liquefaction and seismically induced settlement of the subsoils, the soils were analyzed for relative density. The most effective measurement of relative density of sands with respect to liquefaction potential is standard penetration resistance. Our firm has performed an analysis to evaluate the potential for liquefaction and dynamic settlement based on two borings. Standard penetration testing was performed as Boring 1 was advanced in our earlier soils investigation (John R. Byerly, Inc., 2003). In addition, the California sampler blow count data were evaluated. An equivalent standard penetration test blow count was estimated for Boring 3. To convert the number of blow counts obtained from the California sampler to equivalent standard penetration test blow counts, the California sampler blow counts were multiplied by a factor of 0.7.

The standard penetration data provided input for the LiquefyPro Version 4.3 program for liquefaction potential and seismically induced settlement. As indicated in Special Publication 117A (Revised), "Guidelines for Evaluating and Mitigating Seismic Hazards in California, March 2009," a safety factor of 1.3 was used in this analysis. An analysis of these soils reveals a

potential for liquefaction for the subsoils to a depth of 26 to 31 feet. Our analysis assumed that the existing soil will be subexcavated and recompacted to a depth of 5 feet. The engineered fill was assumed to have an "N" value of 30. Liquefaction of the soils below the recompacted fill will not result in disruption of the foundation soils. The results of this evaluation are shown on Enclosure 3 and reveal a total potential dynamic settlement of 4.25 inches. The total settlement will occur over a large area and will not affect local buried utilities. Within the building area, we would estimate the differential dynamic settlement would be about one-half the total. Based on a minimum building dimension of about 50 feet, a maximum angular distortion of about 1/282 is calculated, which is within tolerable limits. It is our opinion that neither liquefaction nor seismically induced settlement need be a consideration in the design of the proposed single-family residences.

LATERAL SPREAD

The potential for lateral spread was evaluated using the practice recommended by Steven Bartlett and Leslie Youd (ASCE Journal of Geotechnical Engineering, Vol. 121, No. 4, April 1995). Messrs. Bartlett and Youd conclude that lateral spread is not likely when sediments exhibit standard penetration test $(N1)_{60}$ values of 15 or greater. Enclosure 3 shows $(N1)_{60}$ values of 15 to 72 in Boring 1 and 18 to 46 in Boring 3 for soils that are susceptible to liquefaction. Based on the $(N1)_{60}$ values, we conclude that the potential for lateral spread is low.

CONCLUSIONS

Based on our site reconnaissance, it appears that the site conditions have not changed materially from those noted during our earlier soils investigation (John R. Byerly, Inc., 2003). It is our judgment that the conclusions and recommendations presented in the referenced reports remain generally valid. In their present state, the existing artificial fill and portions of the upper natural soils are not considered suitable for structural support due to compressibility considerations. The upper 5 feet of soil should be overexcavated and replaced as engineered fill to provide a

compacted fill mat for foundation support. Subsequent to site preparation, the buildings may be safely founded on conventional continuous and isolated footings. The recommendations presented in this report assume very low expansive soils. Detailed recommendations are presented below.

RECOMMENDATIONS

FOUNDATION DESIGN

The proposed residences may be founded on conventional continuous footings. The building footings should be at least 12 inches wide and should be placed at least 18 inches below the lowest final adjacent grade. These footings should be designed for a maximum safe soil bearing pressure of 2,500 pounds per square foot for dead plus live loads. The bearing capacity value may be increased by one-third for wind and seismic loading.

The continuous footings should be reinforced with at least four No. 4 bars, two placed near the top and two near the bottom of the footings. This recommendation for foundation reinforcement is based on geotechnical considerations. Structural design may require additional foundation reinforcement.

Footings should bear entirely on compacted fill or entirely on dense natural soil. Where final grades would result in footings spanning from cut to fill soil conditions, the undisturbed natural soil should be overexcavated and recompacted to a depth of at least 2 feet below the bottom of the footings.

SEISMIC DESIGN PARAMETERS

To assist the structural engineer in the selection of seismic coefficients to be incorporated into the design of the structures, we have reviewed the 2010 California Building Code. The various coefficients and factors are provided in the following table:

Factor or Coefficient	Value
Latitude	33.6022°
Longitude	-117.2772°
Mapped S_S	1.924g
Mapped S_1	0.715g
F_a	1.0
F_v	1.5
Final S_{MS}	1.924g
Final S_{M1}	1.073g
Final S_{DS}	1.283g
Final S_{D1}	0.715g
PGA (Final S_{DS} /2.5)	0.51g
T_L	8 seconds
Site Class	D

LATERAL LOADING

Resistance to lateral loads will be provided by passive earth pressure and basal friction. For footings bearing against compacted fill, passive earth pressure may be considered to develop at a rate of 350 pounds per square foot per foot of depth. Basal friction may be computed at 0.4 times the normal dead load. Basal friction and passive earth pressure may be combined directly without reduction. The allowable lateral resistance may be increased by one-third for wind and seismic loading.

SLAB-ON-GRADE

Concrete slab-on-grade design recommendations are listed below. The slab-on-grade recommendations assume underlying utility trench backfills and building pad subgrade soils have been densified to a relative compaction of at least 90 percent (ASTM D 1557).

1. It is our opinion that the compacted fill mat should provide adequate support for the concrete slab-on-grade. Due to the high ground water observed in our test borings, the interior slab should be underlain by 4 inches of gravel to provide a capillary break. The final pad surface should be rolled to provide a smooth dense surface upon which to place the concrete.
2. The building slab-on-grade floors should be at least 4 inches thick. The slabs should be reinforced with at least 6"x6"-W1.4/W1.4 welded wire fabric or equivalent throughout. All slab reinforcement should be supported by chairs or precast concrete blocks to ensure positioning of the reinforcement within the middle third of the slab. Lifting of unsupported reinforcement during concrete placement should not be allowed.
3. Slabs to receive moisture-sensitive floor coverings should be underlain with a moisture vapor retardant membrane, such as 10-mil Stego Wrap or equivalent. The surface of the gravel underlayment should be rolled with a smooth drum roller immediately before placement of the membrane. The moisture vapor retardant membrane should conform to ASTM E 1745-97 (Standard Specification for Plastic Vapor Retarders Used in Contact with Earth or Granular Fill under Concrete Slabs). The moisture vapor retardant membrane should be lapped into the footing excavation to provide full coverage of the subgrade soils. Punctures and/or holes cut for plumbing should be taped to minimize moisture emissions through the membrane. The project superintendent and/or a representative of the geotechnical engineer should inspect the placement of the moisture vapor retardant membrane prior to covering. Installation of the moisture vapor retardant membrane should be performed in accordance with ASTM E 1643-94 (Standard Practice of Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill under Concrete Slabs).

4. A 2-inch layer of clean sand ($SE > 30$, no more than 7 percent passing the No. 200 sieve) should be placed over the moisture vapor retardant membrane to promote uniform setting of the concrete. Concrete should be placed on the sand blanket when the sand is damp. Excess moisture should not be allowed to accumulate within the sand blanket prior to concrete placement. At the time of concrete placement, the moisture content of the sand blanket above the moisture vapor retardant membrane should not exceed 2 percent below the optimum moisture content. Prior to placing the membrane, the slab subgrade soils should be moistened to at least the optimum moisture content. Geotechnical verification of the slab moisture conditioning is not warranted for low expansive soils.
5. In lieu of placing the 2-inch sand blanket above the membrane as described above and to further minimize future moisture vapor emissions through the slabs-on-grade, the concrete may be placed directly on the moisture vapor retardant membrane. Placing concrete directly on the moisture vapor retardant membrane will increase shrinkage and curling forces and make finishing more difficult. To accommodate these concerns, the structural engineer should provide appropriate mix design criteria for concrete placed directly on the moisture vapor retardant membrane.
6. We recommend a maximum water/cement ratio of 0.50 for all slab concrete. Architectural or structural considerations may require the utilization of a lower water/cement ratio. Where slab concrete is placed directly on the vapor moisture retardant membrane without the presence of the absorptive sand layer, a lower water-cement ratio may be needed.
7. Preparation of the concrete floor slab should conform to ASTM F 710-98 (Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring) and the manufacturer's recommendations. Moisture vapor emission tests should be performed to verify acceptable moisture emission rates prior to flooring installation.

SITE PREPARATION

We assume that the site will be prepared in accordance with the California Building Code or the current City of Wildomar Grading Ordinance. The recommendations presented below are to establish additional grading criteria. These recommendations should be considered preliminary and are subject to modification or expansion based on a geotechnical review of the project foundation and grading plans.

- All areas to be graded should be stripped of organic matter, man-made obstructions, and other deleterious materials. Buried structures and utilities that are encountered should be removed. Significant root systems from trees to be removed should be thoroughly grubbed from the soil. Suitable organic matter may be stockpiled for use as topsoil in areas to be planted. All cavities created during site clearing should be cleaned of loose and disturbed soil, shaped to provide access for construction equipment, and backfilled with fill placed and compacted as described below.
- All artificial fill should be removed below areas to receive improvements. This includes the building and hardscape areas.
- Overexcavation
 - Building areas – The soils below the building areas and for a horizontal distance beyond the building areas at least equal to the depth of overexcavation below the final ground surface or 5 feet, whichever distance is greater, should be overexcavated to a depth of at least 5 feet below the natural ground surface or to a depth of at least 5 feet below the final ground surface, whichever is deeper. Should competent natural soil be encountered before a depth of 5 feet is reached, the overexcavation can be terminated at that depth as long as there is at least 24 inches of compacted fill below all footings. Competent natural soil is defined as undisturbed material exhibiting a relative compaction of at least 85 percent (ASTM D 1557). A representative of this firm should observe the

bottom of all excavations. Loose undisturbed soil may be present in the bottom of the overexcavated area once the recommended depth is achieved. Additional overexcavation is not required.

- Cut/fill transition conditions – Where grading would result in cut/fill transition conditions under building areas, the undisturbed natural soils should be overexcavated to a depth of at least 2 feet below the footing base grade. The overexcavation should extend beyond the building footing areas a horizontal distance at least equal to the depth of overexcavation below the final ground surface or 5 feet, whichever distance is greater. The subexcavated surfaces should be evaluated by the representative of the geotechnical engineer.
- Pavement and hardscape areas – Subsequent to removal of any existing artificial fill, the soils below asphalt concrete pavement and portland cement concrete areas should be scarified to a depth of 12 inches below existing grade or 12 inches below proposed finished grade, whichever is deeper. Finished grade is defined as the elevation of the top of the subgrade. The scarified soils should be moistened to at least the optimum moisture content and densified to a minimum relative compaction of 90 percent (ASTM D 1557).
- Subexcavated surfaces and all other surfaces to receive fill should be scarified to a minimum depth of 8 inches, moistened to near the optimum moisture content, and densified to a minimum relative compaction of 90 percent (ASTM D 1557).
- The on-site soils should provide adequate quality fill material provided they are free from organic matter and other deleterious materials. Import fill should be inorganic granular non-expansive soil free from rocks or lumps greater than 8 inches in maximum dimension and should exhibit a very low expansion potential (expansion index less than 21), negligible sulfate content (less than 1,000 ppm soluble sulfate by weight), and low corrosion potential. Prior to bringing import fill to the site, the contractor should

obtain certification required by the State of California Department of Toxic Substance Control (DTSC) to verify that the proposed import meets the environmental standards. Proposed import should be sampled at the source and tested by this firm for expansion index, soluble sulfate content, and corrosion potential.

- All fill should be placed in 8-inch or less lifts, moisture conditioned to near the optimum moisture content, and densified to a minimum relative compaction of 90 percent (ASTM D 1557).

The surface of the site should be graded to provide positive drainage away from the structures. Drainage should be directed to established swales and then to appropriate drainage structures to minimize the possibility of erosion. Water should not be allowed to pond adjacent to footings.

SHRINKAGE AND SUBSIDENCE

Volume change in going from cut to fill conditions is anticipated where near-surface grading will occur. Assuming the fill will be compacted to an average relative compaction of 93 percent, an average cut-fill shrinkage of 15 percent is estimated. Further volume loss will occur through subsidence during preparation of the natural ground surface. Although the contractor's methods and equipment utilized in preparing the natural ground will have a significant effect on the amount of natural ground subsidence that will occur, our experience indicates as much as 0.15 foot of subsidence in areas prepared to receive fill should be anticipated. These values are exclusive of losses due to stripping or removal of subsurface obstructions.

PRELIMINARY ASPHALT CONCRETE PAVEMENT DESIGN

Representative samples of upper soils at the site have been tested for relevant subgrade properties. Based on our test data shown in our earlier soils investigation report (John R. Byerly, Inc., 2003), the preliminary pavement sections presented on the following table are recommended.

Location	TI	"R" Value	Thickness (Feet)	
			Asphalt Concrete	Aggregate Base
Short local streets	5.0	70	0.25	0.50
General local streets	5.5	70	0.25	0.50

The above designs are preliminary and for estimating purposes only. The subgrade soil exposed during grading of the street areas should be evaluated by the geotechnical engineer. Additional sampling and testing of the subgrade soil may be needed at that time. Aggregate base should conform to the requirements for Class 2 Aggregate Base in accordance with the Caltrans Standard Specifications.

CHEMICAL TEST RESULTS

The soil tested from our earlier soils investigation (John R. Byerly, Inc., 2003) exhibited negligible soluble sulfate content; therefore, sulfate-resistant concrete will not be required for this portion of the project. In addition, the results of the corrosivity testing indicate that the soils tested are not detrimentally corrosive to ferrous-metal pipes.

FOUNDATION AND GRADING PLAN REVIEW

The project foundation and grading plans should be reviewed by the geotechnical engineer. Additional recommendations may be required at that time.

CONSTRUCTION OBSERVATION

All grading operations, including ground surface preparation, should be observed and compaction tests performed by this firm. No fill should be placed on any prepared surface until that surface has been evaluated by the representative of the geotechnical engineer. Additional testing should be performed relative to sulfate content and corrosion potential. It is essential

that all footing excavations be observed by the representative of the geotechnical engineer prior to placement of forms or reinforcing steel.

The conclusions and recommendations presented in this report are based upon the field and laboratory investigation described herein and represent our best engineering judgment. Should conditions be encountered in the field that appear different from those described in this report, we should be contacted immediately in order that appropriate recommendations might be prepared.

Respectfully submitted,

JOHN R. BYERLY, INC.



John R. Byerly, Geotechnical Engineer
President

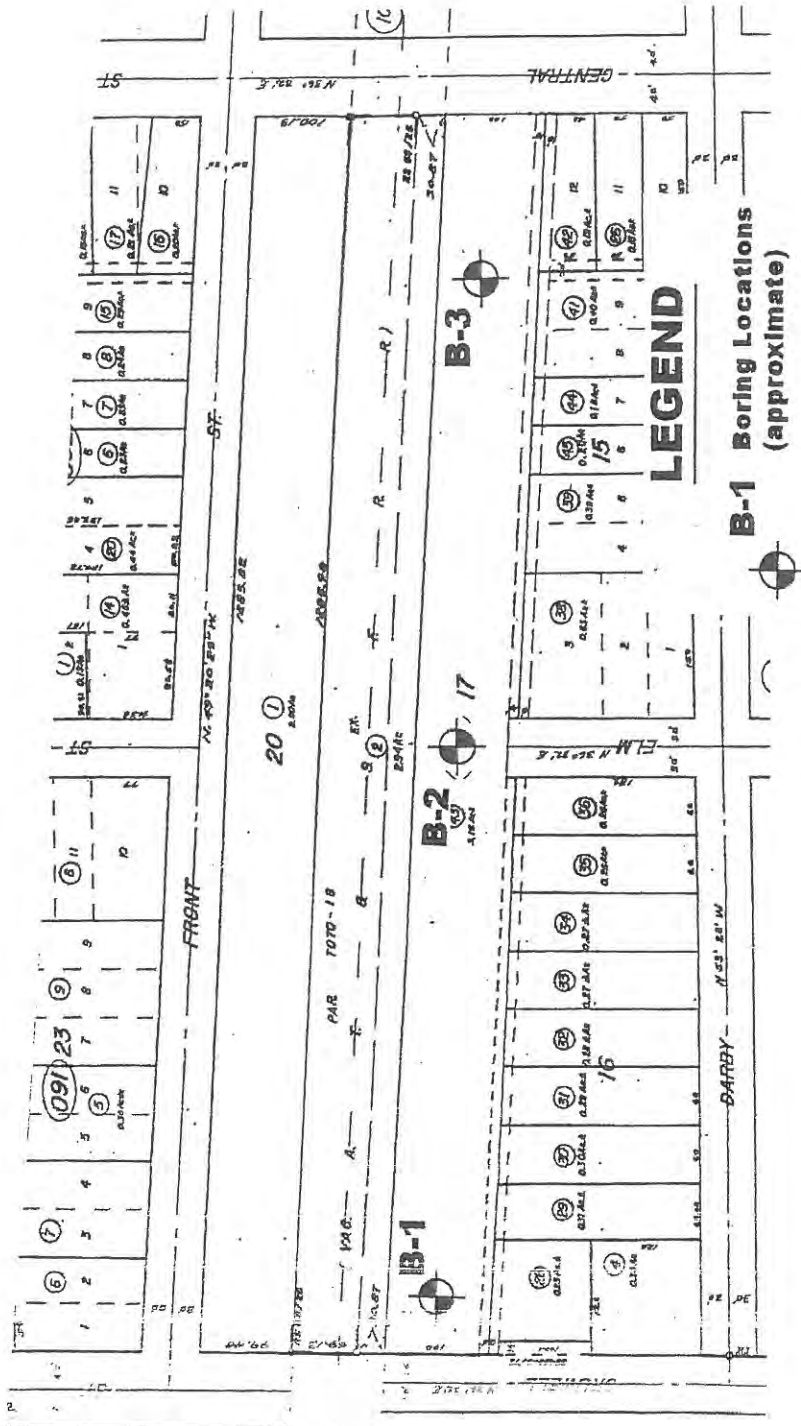
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Enclosures: (1) Plot Plan
(2) Boring Logs
(3) Liquefaction Analysis
(4) Engineering Geology Investigation Update
(5) Hayden Environmental Inc. Report

Copies: (2) Client
(4) Rich Soltysiak, RDS and Associates

PLOT PLAN

3 1 : 1" = 100'



Boring 1

Boring Date: 6/4/03
 Surface Elevation:
 Drilling Method: Flight-Auger

SuperLog V2.6 CivilTech Software, USA www.civiltech.com File: C:\superlog\project\S-10719 (Rpt No. 3555).log Date: 4/8/2008

Depth	SPT Blows Per Foot	Driving Energy (k-ft/ft)	Dry Density (PCF)	Moisture Content (%)	Rel. Compaction (%)	Water Table		
0								
8	6.7	107	10.2	83			SM	Dark brown silty fine sand with some clay, porous, moist and medium dense (FILL)
	6.7	107	7.3	83			SM	Brown silty fine sand with some clay, porous, moist and loose (ORIGINAL GROUND)
	6.7	107	4.8	83				- seams of medium sand
10								
10	8.1	114	2.3	85			SM	Brown to orange-brown silty fine to coarse sand, dry and medium dense
16								
16	6.3	111	14.9	83			SM	Dark brown silty fine to medium sand with a trace of clay, moist and medium dense
								- becoming wet at 15.0 feet
20								
20	4.2	110	12.9	82				- becoming saturated at 18.0 feet
								- seams of fine to coarse sand
19								
19	7.4	114	18.0	85				- becoming wet at 25.0 feet
30								
30	14.8	121	14.1	90			SM	Gray silty fine to coarse sand with a trace of clay, wet and dense
								- becoming more dense at 30.0 feet
90								
40								
45								
50								
60								
70								

END Total Depth at 51.5 Feet
 Groundwater Encountered at 18.0 Feet

LOG OF BORING

Enclosure 2, Page 1
 Rpt. No. 1372
 File No.: S-10719



John R. Byerly, Inc.

Tentative Tract Map No. 33840
 Wildomar, California

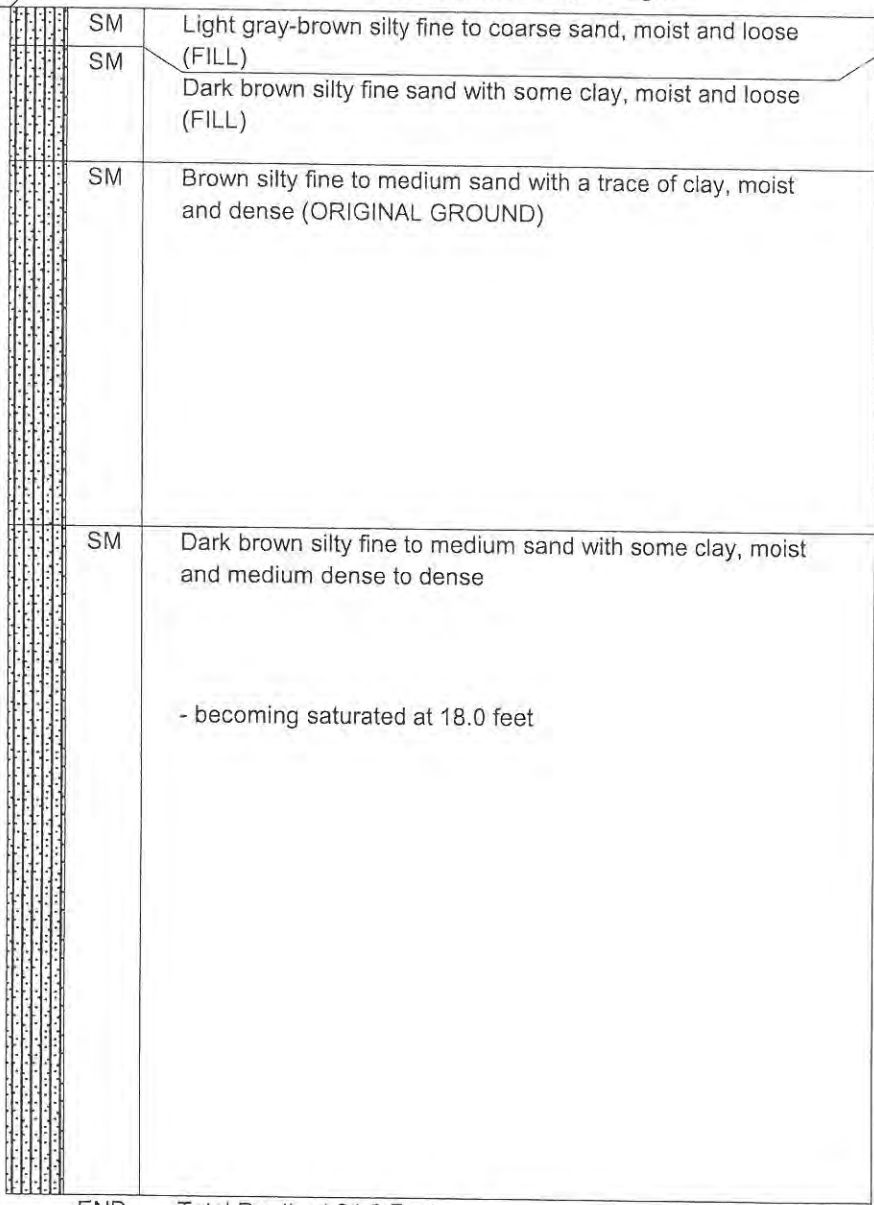
Enclosure 2, Page 1
 Report No.: 3555-a
 File No.: S-10719

Boring 2

Boring Date: 6/4/03
 Surface Elevation:
 Drilling Method: Flight-Auger

SuperLog V2.6 CivilTech Software, USA www.civitech.com File: C:\superlog\project\S-10719 (Rpt No. 3555).log Date: 4/8/2008

Depth	SPT Blows Per Foot	Driving Energy (k-ft/ft)	Dry Density (PCF)	Moisture Content (%)	Rel. Compaction (%)	Water Table	
0							SM
	6.0	113	10.4	84			SM
	5.6	107	9.6	83			
5	16.1	117	8.5	90			SM
	15.1	115	9.8	89			
10	17.6	117	12.1	90			
15	13.7	111	12.7	86			SM
20	19.2	117	13.1	90			
25	19.2	117	12.4	90			
30	8.8	110	20.3	85			
35							



END Total Depth at 31.0 Feet
 Groundwater Encountered at 18.0 Feet

Enclosure 2, Page 2
 Rpt. No. 1372
 File No.: S-10719

LOG OF BORING



Tentative Tract Map No. 33840
 Wildomar, California

Enclosure 2, Page 2
 Report No.: 3555-a
 File No.: S-10719

Boring 3

Boring Date: 6/4/03
 Surface Elevation:
 Drilling Method: Flight-Auger

SuperLog V2.6 CivilTech Software, USA www.civiltech.com File: C:\superlog\project\S-10719 (Rpt No. 3555).log Date: 4/8/2008

Depth	SPT Blows Per Foot	Driving Energy (k-ft/ft)	Dry Density (PCF)	Moisture Content (%)	Rel. Compaction (%)	Water Table		
0								
	5.3	109	14.3	84			SM	Dark brown silty fine sand with some clay, porous, wet and loose (FILL)
	3.2	105	14.3	81				
	4.2	106	10.9	82			SM	Brown silty fine to medium sand with some clay, slightly porous, moist and loose (ORIGINAL GROUND)
	3.9	105	7.1	81				
10	4.9	109	7.4	84				- seams of fine to coarse sand and fine gravel
	8.1	110	10.3	85			SM	Dark brown silty fine to medium sand with some clay, moist and medium dense
20	12.3	110	13.5	85				- becoming saturated at 18.0 feet
								- seams of fine to coarse sand
30								
	18						CL	Gray silty clay with sand, moist and medium stiff
40	28							
	31							
50	40							
60								
70								

END Total Depth at 51.5 Feet
 Groundwater Encountered at 18.0 Feet

LOG OF BORING

Enclosure 2, Page 3
 Rpt. No. 1372
 File No.: S-10719



John R. Byerly, Inc.

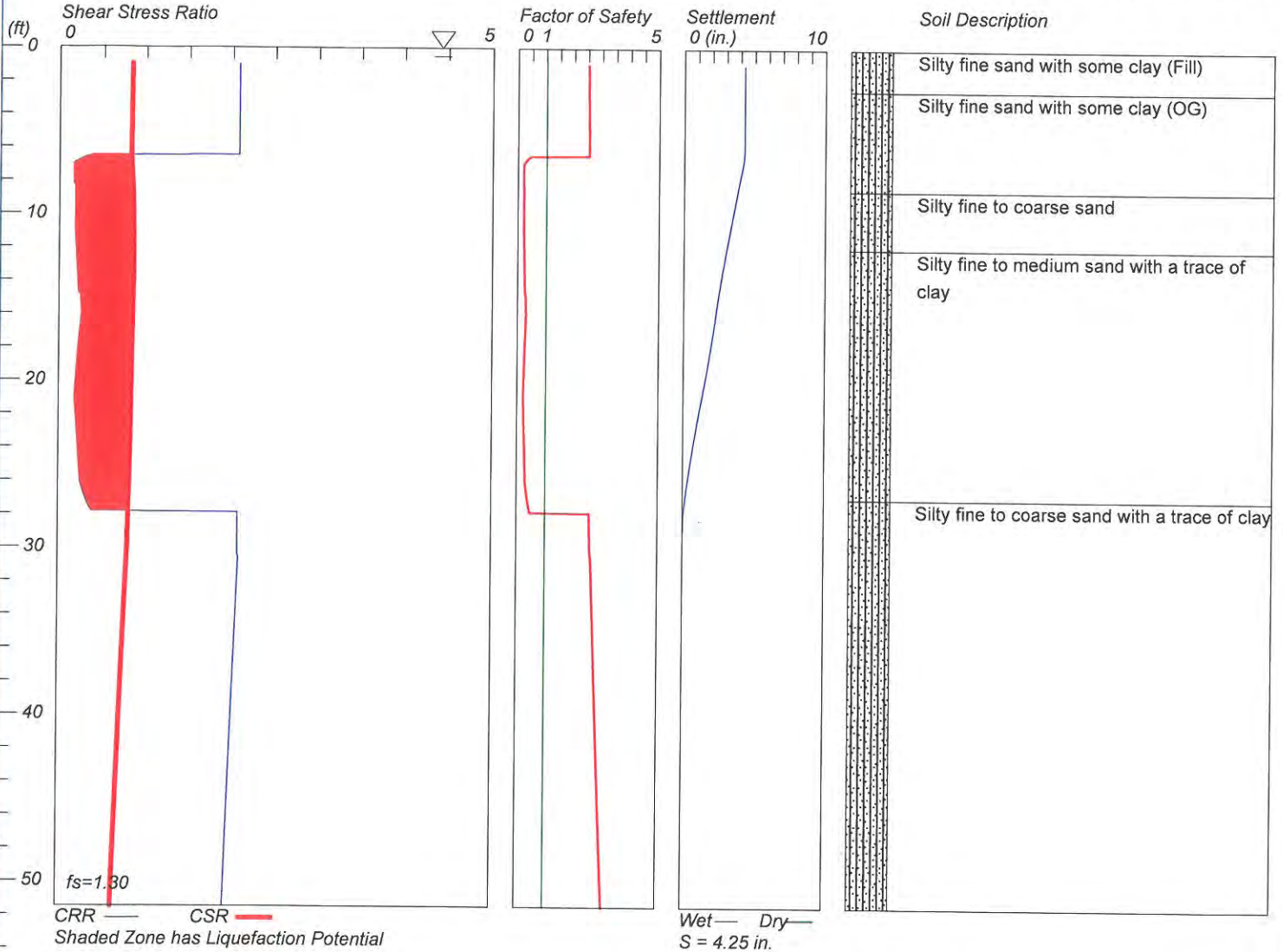
Tentative Tract Map No. 33840
 Wildomar, California

Enclosure 2, Page 3
 Report No.: 3555-a
 File No.: S-10719

LIQUEFACTION ANALYSIS

Tentative Tract Map No. 33840

Hole No.=B-1 Water Depth=0.0 ft Surface Elev.=1256 feet above MSL Magnitude=7.4
Acceleration=0.51g



LIQUEFACTION ANALYSIS CALCULATION SHEET

Version 4.3

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Input File Name: C:\Liquefy4\S-10719.1.liq
 Title: Tentative Tract Map No. 33840
 Subtitle: S-10719

Surface Elev.=1256 feet above MSL
 Hole No.=B-1
 Depth of Hole= 51.5 ft
 Water Table during Earthquake= 0.0 ft
 Water Table during In-Situ Testing= 18.0 ft
 Max. Acceleration= 0.51 g
 Earthquake Magnitude= 7.4
 User defined factor of safety (applied to CSR) User fs=1.3
 fs=user, Plot one CSR (fs=user)

Hammer Energy Ratio, Ce=1
 Borehole Diameter, Cb=1
 Sampling Method, Cs=1
 SPT Fines Correction Method: Idriss/Seed (SPT only)
 Settlement Analysis Method: Tokimatsu / Seed
 Fines Correction for Liquefaction: Idriss/Seed (SPT only)
 Fine Correction for Settlement: During Liq. Correction
 Average Input Data: Smooth*
 * Recommended Options

Input Data:

Depth ft	SPT	Gamma pcf	Fines %
1.0	30.0	130.0	25.0
3.0	30.0	130.0	25.0
6.0	30.0	130.0	25.0
7.0	8.0	112.1	25.0
11.0	10.0	116.6	25.0
16.0	16.0	127.5	30.0
21.0	11.0	124.2	30.0
26.0	19.0	134.5	25.0
30.0	38.0	138.1	25.0
35.0	90.0	138.1	25.0
40.0	45.0	138.1	25.0

Output Results:

Settlement of saturated sands=4.25 in.
 Settlement of dry sands=0.00 in.
 Total settlement of saturated and dry sands=4.25 in.
 Differential Settlement=2.123 to 2.802 in.

Depth ft	CRRm	CSRfs w/fs	F.S.	S_sat. in.	S_dry in.	S_all in.
1.00	2.07	0.83	2.50	4.25	0.00	4.25
6.00	2.07	0.82	2.53	4.25	0.00	4.25
11.00	0.18	0.85	0.21*	3.24	0.00	3.24
16.00	0.25	0.84	0.30*	2.27	0.00	2.27

S-10719.1.sum						
21.00	0.18	0.83	0.21*	1.30	0.00	1.30
26.00	0.24	0.81	0.30*	0.33	0.00	0.33
31.00	2.08	0.78	2.65	0.00	0.00	0.00
36.00	2.04	0.74	2.76	0.00	0.00	0.00
41.00	2.00	0.70	2.86	0.00	0.00	0.00
46.00	1.96	0.66	2.97	0.00	0.00	0.00
51.00	1.93	0.62	3.09	0.00	0.00	0.00

* F.S.<1, Liquefaction Potential Zone
(F.S. is limited to 5, CRR is limited to 2, CSR is limited to 2)

Units Depth = ft, Stress or Pressure = tsf (atm), Unit Weight = pcf, Settlement = in.

CRRm	Cyclic resistance ratio from soils
CSRfs	Cyclic stress ratio induced by a given earthquake (with user request factor of safety)
F.S.	Factor of Safety against liquefaction, F.S.=CRRm/CSRfs
S_sat	Settlement from saturated sands
S_dry	Settlement from dry sands
S_all	Total settlement from saturated and dry sands
NoLiq	No-Liquefy Soils

LIQUEFACTION ANALYSIS CALCULATION SHEET

Version 4.3

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Input File Name: C:\Liquefy4\S-10719.1.liq
 Title: Tentative Tract Map No. 33840
 Subtitle: S-10719

Input Data:

Surface Elev.=1256 feet above MSL
 Hole No.=B-1
 Depth of Hole=51.5 ft
 Water Table during Earthquake= 0.0 ft
 Water Table during In-Situ Testing= 18.0 ft
 Max. Acceleration=0.51 g
 Earthquake Magnitude=7.4
 User defined factor of safty (applied to CSR) User fs=1.3
 fs=user, Plot one CSR (fs=user)

Hammer Energy Ratio, Ce=1
 Borehole Diameter, Cb=1
 Sampeling Method, Cs=1
 SPT Fines Correction Method: Idriss/Seed (SPT only)
 Settlement Analysis Method: Tokimatsu / Seed
 Fines Correction for Liquefaction: Idriss/Seed (SPT only)
 Fine Correction for Settlement: During Liq. Correction
 Average Input Data: Smooth*
 * Recommended Options

Depth ft	SPT	Gamma pcf	Fines %
1.0	30.0	130.0	25.0
3.0	30.0	130.0	25.0
6.0	30.0	130.0	25.0
7.0	8.0	112.1	25.0
11.0	10.0	116.6	25.0
16.0	16.0	127.5	30.0
21.0	11.0	124.2	30.0
26.0	19.0	134.5	25.0
30.0	38.0	138.1	25.0
35.0	90.0	138.1	25.0
40.0	45.0	138.1	25.0

Output Results: (Interval = 5.00 ft)

CSR Calculation:

Depth ft	gamma pcf	sigma tsf	gamma' pcf	sigma' tsf	rd	CSR	fs (user)	CSRfs w/fs
1.00	130.0	0.065	67.6	0.034	1.00	0.64	1.3	0.83
6.00	130.0	0.390	67.6	0.203	0.99	0.63	1.3	0.82
11.00	116.6	0.679	54.2	0.336	0.97	0.65	1.3	0.85
16.00	127.5	0.984	65.1	0.485	0.96	0.65	1.3	0.84
21.00	124.2	1.299	61.8	0.644	0.95	0.64	1.3	0.83

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26.00	134.5	1.622	72.1	0.811	0.94	0.62	1.3	0.81
31.00	138.1	1.964	75.7	0.997	0.92	0.60	1.3	0.78
36.00	138.1	2.309	75.7	1.186	0.88	0.57	1.3	0.74
41.00	138.1	2.654	75.7	1.375	0.84	0.54	1.3	0.70
46.00	138.1	3.000	75.7	1.564	0.80	0.51	1.3	0.66
51.00	138.1	3.345	75.7	1.754	0.76	0.48	1.3	0.62

CSR is based on water table at 0.0 during earthquake

CRR Calculation from SPT or BPT data:

Depth ft	SPT	Cebs	Cr	sigma'	Cn	(N1)60	Fines %	d(N1)60	(N1)60f	CRR7.5
1.00	30.00	1.00	0.75	0.065	1.70	46.94	25.0	8.69	46.94	2.00
6.00	30.00	1.00	0.75	0.390	1.60	44.46	25.0	8.43	44.46	2.00
11.00	10.00	1.00	0.85	0.679	1.21	15.79	25.0	5.47	15.79	0.17
16.00	16.00	1.00	0.95	0.984	1.01	22.39	30.0	7.07	22.39	0.25
21.00	11.00	1.00	0.95	1.205	0.91	15.69	30.0	6.18	15.69	0.17
26.00	19.00	1.00	0.95	1.373	0.85	21.47	25.0	6.06	21.47	0.23
31.00	48.40	1.00	1.00	1.558	0.80	47.52	25.0	8.75	47.52	2.00
36.00	81.00	1.00	1.00	1.748	0.76	72.61	25.0	11.34	72.61	2.00
41.00	45.00	1.00	1.00	1.937	0.72	40.34	25.0	8.01	40.34	2.00
46.00	45.00	1.00	1.00	2.126	0.69	38.70	25.0	7.84	38.70	2.00
51.00	45.00	1.00	1.00	2.315	0.66	37.26	25.0	7.69	37.26	2.00

CRR is based on water table at 18.0 during In-Situ Testing

Factor of Safety, - Earthquake Magnitude= 7.4:

Depth ft	sigC' tsf	CRR7.5 tsf	Ksigma	CRRv	MSF	CRRm	CSRfs w/fs	F.S. CRRm/CSRfs
1.00	0.04	2.00	1.00	2.00	1.03	2.07	0.83	2.50
6.00	0.25	2.00	1.00	2.00	1.03	2.07	0.82	2.53
11.00	0.44	0.17	1.00	0.17	1.03	0.18	0.85	0.21 *
16.00	0.64	0.25	1.00	0.25	1.03	0.25	0.84	0.30 *
21.00	0.78	0.17	1.00	0.17	1.03	0.18	0.83	0.21 *
26.00	0.89	0.23	1.00	0.23	1.03	0.24	0.81	0.30 *
31.00	1.01	2.00	1.00	2.01	1.03	2.08	0.78	2.65
36.00	1.14	2.00	0.98	1.97	1.03	2.04	0.74	2.76
41.00	1.26	2.00	0.97	1.93	1.03	2.00	0.70	2.86
46.00	1.38	2.00	0.95	1.90	1.03	1.96	0.66	2.97
51.00	1.50	2.00	0.93	1.86	1.03	1.93	0.62	3.09

* F.S.<1: Liquefaction Potential Zone. (If above water table: F.S.=5)
(F.S. is limited to 5, CRR is limited to 2, CSR is limited to 2)

CPT convert to SPT for Settlement Analysis:

Fines Correction for Settlement Analysis:

Depth ft	lc	qc/N60	qc1 tsf	(N1)60	Fines %	d(N1)60	(N1)60s
1.00	-	-	-	46.94	25.0	0.00	46.94
6.00	-	-	-	44.46	25.0	0.00	44.46
11.00	-	-	-	15.79	25.0	0.00	15.79
16.00	-	-	-	22.39	30.0	0.00	22.39
21.00	-	-	-	15.69	30.0	0.00	15.69
26.00	-	-	-	21.47	25.0	0.00	21.47
31.00	-	-	-	47.52	25.0	0.00	47.52
36.00	-	-	-	72.61	25.0	0.00	72.61
41.00	-	-	-	40.34	25.0	0.00	40.34
46.00	-	-	-	38.70	25.0	0.00	38.70
51.00	-	-	-	37.26	25.0	0.00	37.26

(N1)60 has been fines corrected in liquefaction analysis

Settlement of Saturated Sands:

Settlement Analysis Method: Tokimatsu / Seed

Depth ft	CSRfs w/fs	F.S.	Fines %	(N1)60s	Dr %	ec %	dsz in.	dsv in.	S in.
51.45	0.62	3.10	25.0	37.14	100.00	0.000	0.000	0.000	0.000
51.00	0.62	3.09	25.0	37.26	100.00	0.000	0.000	0.000	0.000
46.00	0.66	2.97	25.0	38.70	100.00	0.000	0.000	0.000	0.000
41.00	0.70	2.86	25.0	40.34	100.00	0.000	0.000	0.000	0.000
36.00	0.74	2.76	25.0	42.61	100.00	0.000	0.000	0.000	0.000
31.00	0.78	2.65	25.0	47.52	100.00	0.000	0.000	0.000	0.000
26.00	0.81	0.30	25.0	21.47	73.18	1.410	0.008	0.330	0.330
21.00	0.83	0.21	30.0	15.69	62.62	1.863	0.011	0.970	1.300
16.00	0.84	0.30	30.0	22.39	74.86	1.353	0.008	0.965	2.265
11.00	0.85	0.21	25.0	15.79	62.80	1.855	0.011	0.974	3.240
6.00	0.82	2.53	25.0	44.46	100.00	0.000	0.000	1.006	4.246
1.00	0.83	2.50	25.0	46.94	100.00	0.000	0.000	0.000	4.246

Settlement of Saturated Sands=4.246 in.

qc1 and (N1)60 is after fines correction in liquefaction analysis

dsz is per each segment: dz=0.05 ft

dsv is per each print interval: dv=5 ft

S is cumulated settlement at this depth

Settlement of Dry Sands:

dsz	Depth	sigma'	sigC'	(N1)60s	CSRfs	Gmax	g*Ge/Gm	g_eff	ec7.5	Cec	ec
ft	ft	tsf	tsf	w/fs	tsf				%		%
in.	in.	in.									

Settlement of Dry Sands=0.000 in.

dsz is per each segment: dz=0.05 ft

dsv is per each print interval: dv=5 ft

S is cumulated settlement at this depth

Total Settlement of Saturated and Dry Sands=4.246 in.

Differential Settlement=2.123 to 2.802 in.

Units Depth = ft, Stress or Pressure = tsf (atm), Unit Weight = pcf, Settlement = in.

SPT	Field data from Standard Penetration Test (SPT)
BPT	Field data from Becker Penetration Test (BPT)
qc	Field data from Cone Penetration Test (CPT)
fc	Friction from CPT testing
Gamma	Total unit weight of soil
Gamma'	Effective unit weight of soil
Fines	Fines content [%]
D50	Mean grain size
Dr	Relative Density
sigma	Total vertical stress [tsf]
sigma'	Effective vertical stress [tsf]
sigC'	Effective confining pressure [tsf]
rd	Stress reduction coefficient

CSR	Cyclic stress ratio induced by earthquake
fs	User request factor of safety, apply to CSR
w/fs	With user request factor of safety inside
CSRfs	CSR with User request factor of safety
CRR7.5	Cyclic resistance ratio (M=7.5)
Ksigma	Overburden stress correction factor for CRR7.5
CRRv	CRR after overburden stress correction, $CRRv=CRR7.5 * Ksigma$
MSF	Magnitude scaling factor for CRR (M=7.5)
CRRm	After magnitude scaling correction $CRRm=CRRv * MSF$
F.S.	Factor of Safety against liquefaction $F.S.=CRRm/CSRfs$
Cebs	Energy Ratio, Borehole Dia., and Sample Method Corrections
Cr	Rod Length Corrections
Cn	Overburden Pressure Correction
(N1)60	SPT after corrections, $(N1)60=SPT * Cr * Cn * Cebs$
d(N1)60	Fines correction of SPT
(N1)60f	(N1)60 after fines corrections, $(N1)60f=(N1)60 + d(N1)60$
Cq	Overburden stress correction factor
qc1	CPT after Overburden stress correction
dqc1	Fines correction of CPT
qc1f	CPT after Fines and Overburden correction, $qc1f=qc1 + dqc1$
qc1n	CPT after normalization in Robertson's method
Kc	Fine correction factor in Robertson's Method
qc1f	CPT after Fines correction in Robertson's Method
lc	Soil type index in Suzuki's and Robertson's Methods
(N1)60s	(N1)60 after seattlement fines corrections
ec	Volumetric strain for saturated sands
ds	Settlement in each Segment dz
dz	Segment for calculation, $dz=0.050$ ft
Gmax	Shear Modulus at low strain
g_eff	γ_{eff} , Effective shear Strain
g*Ge/Gm	$\gamma_{eff} * G_{eff}/G_{max}$, Strain-modulus ratio
ec7.5	Volumetric Strain for magnitude=7.5
Cec	Magnitude correction factor for any magnitude
ec	Volumetric strain for dry sands, $ec=Cec * ec7.5$
NoLiq	No-Liquefy Soils

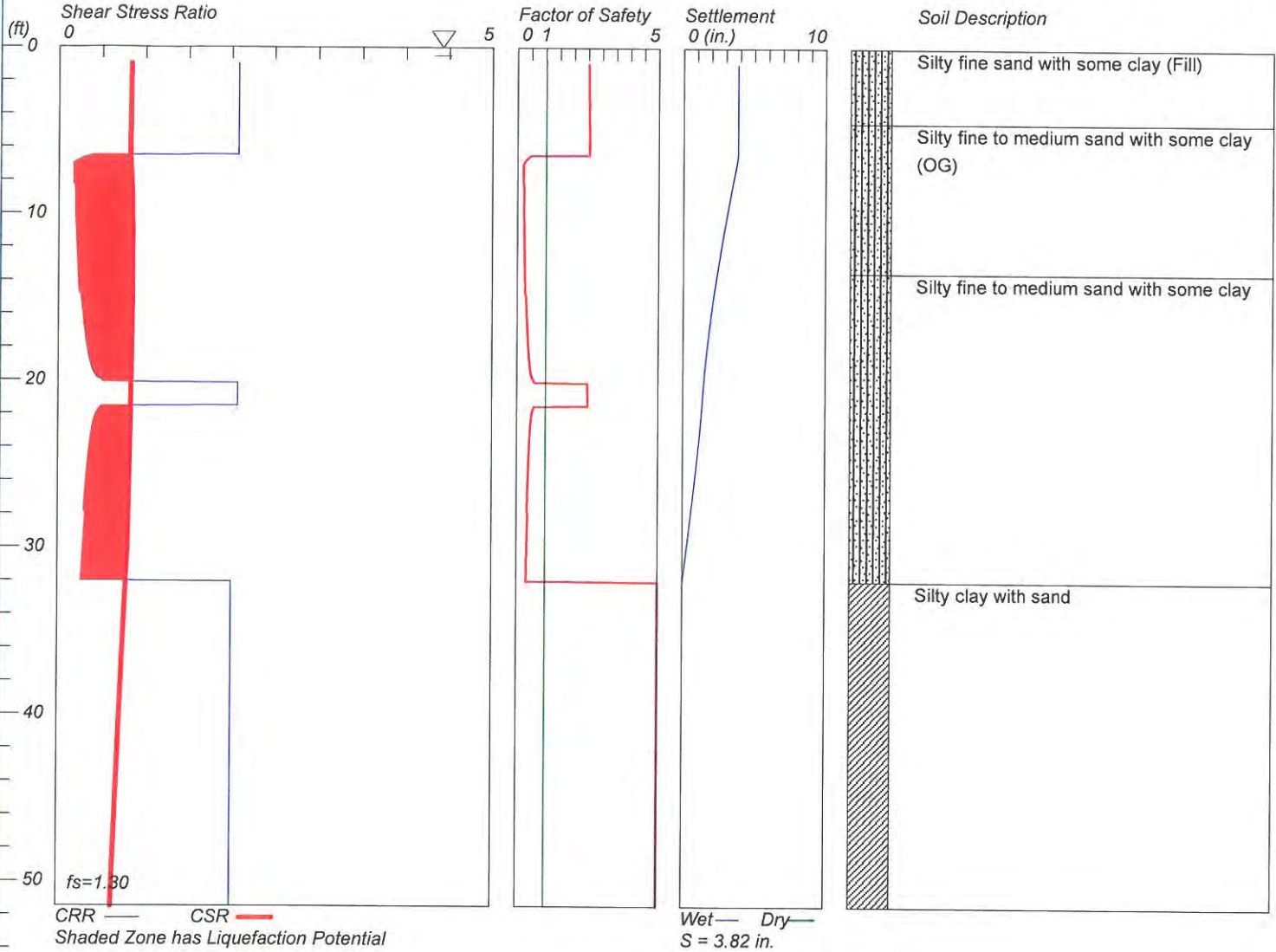
References:

- NCEER Workshop on Evaluation of Liquefaction Resistance of Soils. Youd, T.L., and Idriss, I.M., eds., Technical Report NCEER 97-0022.
- SP117. Southern California Earthquake Center. Recommended Procedures for Implementation of DMG Special Publication 117, Guidelines for Analyzing and Mitigating Liquefaction in California. University of Southern California. March 1999.

LIQUEFACTION ANALYSIS

Tentative Tract Map No. 33840

Hole No.=B-3 Water Depth=0.0 ft Surface Elev.=1251 feet above MSL Magnitude=7.4
Acceleration=0.51g



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Input File Name: C:\Liquefy4\S-10719.3.liq
 Title: Tentative Tract Map No. 33840
 Subtitle: S-10719

Surface Elev.=1251 feet above MSL
 Hole No.=B-3
 Depth of Hole= 51.5 ft
 Water Table during Earthquake= 0.0 ft
 Water Table during In-Situ Testing= 18.0 ft
 Max. Acceleration= 0.51 g
 Earthquake Magnitude= 7.4
 User defined factor of safty (applied to CSR) User fs=1.3
 fs=user, Plot one CSR (fs=user)

Hammer Energy Ratio, Ce=1
 Borehole Diameter, Cb=1
 Sampeling Method, Cs=1
 SPT Fines Correction Method: Idriss/Seed (SPT only)
 Settlement Analysis Method: Tokimatsu / Seed
 Fines Correction for Liquefaction: Idriss/Seed (SPT only)
 Fine Correction for Settlement: During Liq. Correction
 Average Input Data: Smooth*
 * Recommended Options

Input Data:

Depth ft	SPT	Gamma pcf	Fines %
1.0	30.0	130.0	25.0
3.0	30.0	130.0	25.0
6.0	30.0	130.0	25.0
7.0	8.0	112.5	30.0
10.0	10.0	117.1	30.0
15.0	16.0	121.3	30.0
20.0	25.0	124.9	30.0
35.0	18.0	138.1	NoLiq
40.0	28.0	138.1	NoLiq
45.0	31.0	138.1	NoLiq

Output Results:

Settlement of saturated sands=3.82 in.
 Settlement of dry sands=0.00 in.
 Total settlement of saturated and dry sands=3.82 in.
 Differential Settlement=1.910 to 2.521 in.

Depth ft	CRRm	CSRfs w/fs	F.S.	S_sat. in.	S_dry in.	S_all in.
1.00	2.07	0.83	2.50	3.82	0.00	3.82
6.00	2.07	0.82	2.53	3.82	0.00	3.82
11.00	0.20	0.85	0.24*	2.87	0.00	2.87
16.00	0.28	0.84	0.34*	1.98	0.00	1.98
21.00	2.07	0.83	2.49	1.40	0.00	1.40

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26.00	0.32	0.82	0.40*	0.85	0.00	0.85
31.00	0.28	0.79	0.35*	0.16	0.00	0.16
36.00	2.00	0.75	5.00	0.00	0.00	0.00
41.00	2.00	0.71	5.00	0.00	0.00	0.00
46.00	2.00	0.67	5.00	0.00	0.00	0.00
51.00	2.00	0.63	5.00	0.00	0.00	0.00

* F.S.<1, Liquefaction Potential Zone
(F.S. is limited to 5, CRR is limited to 2, CSR is limited to 2)

Units Depth = ft, Stress or Pressure = tsf (atm), Unit Weight = pcf, Settlement = in.

CRRm	Cyclic resistance ratio from soils
CSRfs	Cyclic stress ratio induced by a given earthquake (with user request factor of safety)
F.S.	Factor of Safety against liquefaction, F.S.=CRRm/CSRfs
S_sat	Settlement from saturated sands
S_dry	Settlement from dry sands
S_all	Total settlement from saturated and dry sands
NoLiq	No-Liquefy Soils

LIQUEFACTION ANALYSIS CALCULATION SHEET

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Input File Name: C:\Liquefy4\S-10719.3.liq
 Title: Tentative Tract Map No. 33840
 Subtitle: S-10719

Input Data:

Surface Elev.=1251 feet above MSL
 Hole No.=B-3
 Depth of Hole=51.5 ft
 Water Table during Earthquake= 0.0 ft
 Water Table during In-Situ Testing= 18.0 ft
 Max. Acceleration=0.51 g
 Earthquake Magnitude=7.4
 User defined factor of safty (applied to CSR) User fs=1.3
 fs=user, Plot one CSR (fs=user)

Hammer Energy Ratio, Ce=1
 Borehole Diameter, Cb=1
 Sampeling Method, Cs=1
 SPT Fines Correction Method: Idriss/Seed (SPT only)
 Settlement Analysis Method: Tokimatsu / Seed
 Fines Correction for Liquefaction: Idriss/Seed (SPT only)
 Fine Correction for Settlement: During Liq. Correction
 Average Input Data: Smooth*
 * Recommended Options

Depth ft	SPT	Gamma pcf	Fines %
1.0	30.0	130.0	25.0
3.0	30.0	130.0	25.0
6.0	30.0	130.0	25.0
7.0	8.0	112.5	30.0
10.0	10.0	117.1	30.0
15.0	16.0	121.3	30.0
20.0	25.0	124.9	30.0
35.0	18.0	138.1	NoLiq
40.0	28.0	138.1	NoLiq
45.0	31.0	138.1	NoLiq

Output Results: (Interval = 5.00 ft)

CSR Calculation:								
Depth ft	gamma pcf	sigma tsf	gamma' pcf	sigma' tsf	rd	CSR	fs (user)	CSRfs w/fs
1.00	130.0	0.065	67.6	0.034	1.00	0.64	1.3	0.83
6.00	130.0	0.390	67.6	0.203	0.99	0.63	1.3	0.82
11.00	117.9	0.682	55.5	0.339	0.97	0.65	1.3	0.85
16.00	122.0	0.982	59.6	0.483	0.96	0.65	1.3	0.84
21.00	125.8	1.291	63.4	0.636	0.95	0.64	1.3	0.83
26.00	130.2	1.611	67.8	0.800	0.94	0.63	1.3	0.82

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31.00	134.6	1.942	72.2	0.975	0.92	0.61	1.3	0.79
36.00	138.1	2.284	75.7	1.161	0.88	0.57	1.3	0.75
41.00	138.1	2.629	75.7	1.350	0.84	0.54	1.3	0.71
46.00	138.1	2.974	75.7	1.539	0.80	0.51	1.3	0.67
51.00	138.1	3.320	75.7	1.728	0.76	0.48	1.3	0.63

CSR is based on water table at 0.0 during earthquake

CRR Calculation from SPT or BPT data:

Depth ft	SPT	Cebs	Cr	sigma'	Cn	(N1)60	Fines %	d(N1)60	(N1)60f	CRR7.5
1.00	30.00	1.00	0.75	0.065	1.70	46.94	25.0	8.69	46.94	2.00
6.00	30.00	1.00	0.75	0.390	1.60	44.46	25.0	8.43	44.46	2.00
11.00	11.20	1.00	0.85	0.682	1.21	18.02	30.0	6.49	18.02	0.19
16.00	17.80	1.00	0.95	0.982	1.01	24.41	30.0	7.34	24.41	0.27
21.00	24.53	1.00	0.95	1.198	0.91	30.41	34.7	9.11	30.41	2.00
26.00	22.20	1.00	0.95	1.362	0.86	26.69	58.4	8.61	26.69	0.31
31.00	19.87	1.00	1.00	1.536	0.81	24.23	82.1	8.21	24.23	0.27
36.00	20.00	1.00	1.00	1.722	0.76	23.29	NoLiq	8.05	23.29	0.26
41.00	28.60	1.00	1.00	1.911	0.72	29.82	NoLiq	9.14	29.82	0.43
46.00	31.00	1.00	1.00	2.101	0.69	30.67	NoLiq	9.28	30.67	2.00
51.00	31.00	1.00	1.00	2.290	0.66	29.58	NoLiq	9.10	29.58	0.41

CRR is based on water table at 18.0 during In-Situ Testing

Factor of Safety, - Earthquake Magnitude= 7.4:

Depth ft	sigC' tsf	CRR7.5 tsf	Ksigma	CRRv	MSF	CRRm	CSRfs w/fs	F.S. CRRm/CSRfs
1.00	0.04	2.00	1.00	2.00	1.03	2.07	0.83	2.50
6.00	0.25	2.00	1.00	2.00	1.03	2.07	0.82	2.53
11.00	0.44	0.19	1.00	0.19	1.03	0.20	0.85	0.24 *
16.00	0.64	0.27	1.00	0.27	1.03	0.28	0.84	0.34 *
21.00	0.78	2.00	1.00	2.00	1.03	2.07	0.83	2.49
26.00	0.89	0.31	1.00	0.31	1.03	0.32	0.82	0.40 *
31.00	1.00	0.27	1.00	0.27	1.03	0.28	0.79	0.35 *
36.00	1.12	0.26	0.99	0.25	1.03	2.00	0.75	5.00
41.00	1.24	0.43	0.97	0.42	1.03	2.00	0.71	5.00
46.00	1.37	2.00	0.95	1.90	1.03	2.00	0.67	5.00
51.00	1.49	0.41	0.93	0.38	1.03	2.00	0.63	5.00

* F.S.<1: Liquefaction Potential Zone. (If above water table: F.S.=5)
(F.S. is limited to 5, CRR is limited to 2, CSR is limited to 2)

CPT convert to SPT for Settlement Analysis:

Fines Correction for Settlement Analysis:

Depth ft	lc	qc/N60	qc1 tsf	(N1)60	Fines %	d(N1)60	(N1)60s
1.00	-	-	-	46.94	25.0	0.00	46.94
6.00	-	-	-	44.46	25.0	0.00	44.46
11.00	-	-	-	18.02	30.0	0.00	18.02
16.00	-	-	-	24.41	30.0	0.00	24.41
21.00	-	-	-	30.41	34.7	0.00	30.41
26.00	-	-	-	26.69	58.4	0.00	26.69
31.00	-	-	-	24.23	82.1	0.00	24.23
36.00	-	-	-	23.29	NoLiq	0.00	23.29
41.00	-	-	-	29.82	NoLiq	0.00	29.82
46.00	-	-	-	30.67	NoLiq	0.00	30.67
51.00	-	-	-	29.58	NoLiq	0.00	29.58

(N1)60 has been fines corrected in liquefaction analysis

Settlement of Saturated Sands:

Settlement Analysis Method: Tokimatsu / Seed

Depth ft	CSRfs w/fs	F.S.	Fines %	(N1)60s	Dr %	ec %	dsz in.	dsv in.	S in.
51.45	0.62	5.00	NoLiq	29.49	88.92	0.814	0.000	0.000	0.000
51.00	0.63	5.00	NoLiq	29.58	89.12	0.803	0.000	0.000	0.000
46.00	0.67	5.00	NoLiq	30.67	91.58	0.665	0.000	0.000	0.000
41.00	0.71	5.00	NoLiq	29.82	89.66	0.772	0.000	0.000	0.000
36.00	0.75	5.00	NoLiq	23.29	76.50	1.297	0.000	0.000	0.000
31.00	0.79	0.35	82.1	24.23	78.26	1.238	0.007	0.159	0.159
26.00	0.82	0.40	58.4	26.69	83.02	1.084	0.007	0.692	0.850
21.00	0.83	2.49	34.7	30.41	90.99	0.697	0.004	0.548	1.398
16.00	0.84	0.34	30.0	24.41	78.59	1.227	0.007	0.583	1.980
11.00	0.85	0.24	30.0	18.02	66.95	1.669	0.010	0.890	2.871
6.00	0.82	2.53	25.0	44.46	100.00	0.000	0.000	0.949	3.819
1.00	0.83	2.50	25.0	46.94	100.00	0.000	0.000	0.000	3.819

Settlement of Saturated Sands=3.819 in.

qc1 and (N1)60 is after fines correction in liquefaction analysis

dsz is per each segment: dz=0.05 ft

dsv is per each print interval: dv=5 ft

S is cumulated settlement at this depth

Settlement of Dry Sands:

dsz	Depth	sigma'	sigC'	(N1)60s	CSRfs	Gmax	g*Ge/Gm	g_eff	ec7.5	Cec	ec
ft	ft	tsf	tsf		w/fs	tsf			%		%
in.	in.	in.									

Settlement of Dry Sands=0.000 in.

dsz is per each segment: dz=0.05 ft

dsv is per each print interval: dv=5 ft

S is cumulated settlement at this depth

Total Settlement of Saturated and Dry Sands=3.819 in.

Differential Settlement=1.910 to 2.521 in.

Units Depth = ft, Stress or Pressure = tsf (atm), Unit Weight = pcf, Settlement = in.

SPT	Field data from Standard Penetration Test (SPT)
BPT	Field data from Becker Penetration Test (BPT)
qc	Field data from Cone Penetration Test (CPT)
fc	Friction from CPT testing
Gamma	Total unit weight of soil
Gamma'	Effective unit weight of soil
Fines	Fines content [%]
D50	Mean grain size
Dr	Relative Density
sigma	Total vertical stress [tsf]
sigma'	Effective vertical stress [tsf]
sigC'	Effective confining pressure [tsf]
rd	Stress reduction coefficient
CSR	Cyclic stress ratio induced by earthquake

fs	User request factor of safety, apply to CSR
w/fs	With user request factor of safety inside
CSRfs	CSR with User request factor of safety
CRR7.5	Cyclic resistance ratio (M=7.5)
Ksigma	Overburden stress correction factor for CRR7.5
CRRv	CRR after overburden stress correction, $CRRv = CRR7.5 * Ksigma$
MSF	Magnitude scaling factor for CRR (M=7.5)
CRRm	After magnitude scaling correction $CRRm = CRRv * MSF$
F.S.	Factor of Safety against liquefaction $F.S. = CRRm / CSRfs$
Cebs	Energy Ratio, Borehole Dia., and Sample Method Corrections
Cr	Rod Length Corrections
Cn	Overburden Pressure Correction
(N1)60	SPT after corrections, $(N1)60 = SPT * Cr * Cn * Cebs$
d(N1)60	Fines correction of SPT
(N1)60f	(N1)60 after fines corrections, $(N1)60f = (N1)60 + d(N1)60$
Cq	Overburden stress correction factor
qc1	CPT after Overburden stress correction
dqc1	Fines correction of CPT
qc1f	CPT after Fines and Overburden correction, $qc1f = qc1 + dqc1$
qc1n	CPT after normalization in Robertson's method
Kc	Fine correction factor in Robertson's Method
qc1f	CPT after Fines correction in Robertson's Method
Ic	Soil type index in Suzuki's and Robertson's Methods
(N1)60s	(N1)60 after seattlement fines corrections
ec	Volumetric strain for saturated sands
ds	Settlement in each Segment dz
dz	Segment for calculation, $dz = 0.050$ ft
Gmax	Shear Modulus at low strain
g_eff	γ_{eff} , Effective shear Strain
g*Ge/Gm	$\gamma_{eff} * G_{eff} / G_{max}$, Strain-modulus ratio
ec7.5	Volumetric Strain for magnitude=7.5
Cec	Magnitude correction factor for any magnitude
ec	Volumetric strain for dry sands, $ec = Cec * ec7.5$
NoLiq	No-Liquefy Soils

References:

NCEER Workshop on Evaluation of Liquefaction Resistance of Soils. Youd, T.L., and Idriss, I.M., eds., Technical Report NCEER 97-0022.
 SP117. Southern California Earthquake Center. Recommended Procedures for Implementation of DMG Special Publication 117, Guidelines for Analyzing and Mitigating Liquefaction in California. University of Southern California. March 1999.

AKW GEOTECHNICAL

GEOTECHNICAL CONSULTANTS

Project No. M1043-01
June 19, 2013

Mr. Glenn Fraser
John R. Byerly, Inc.
2257 South Lilac Avenue.
Bloomington, California 92316

Subject: ENGINEERING GEOLOGY UPDATE
TENTATIVE TRACT MAP NO. 33840
BETWEEN GRUWELL STREET AND CENTRAL STREET
WILDOMAR, CALIFORNIA

Dear Mr. Fraser:

In accordance with your authorization, we have performed an update of the referenced engineering geology investigation for the proposed residential development. The 3.16-acre property is located southeast of the Murrieta Creek, between Gruwell Street and Central Street, in the city of Wildomar, California. The accompanying update presents results of our review and includes conclusions and recommendations pertaining to the geologic aspects of placing the structure on the site as presently proposed. John R. Byerly, Inc. will be presenting the primary geotechnical report for the subject site. It is our understanding that this engineering geology update will be included as an appendix in your report.

Should you have questions regarding this report, or if we may be of further service, please contact the undersigned at your convenience.

Very truly yours,

AKW GEOTECHNICAL

Ernest W. Roumelis
CEG 2385



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ENGINEERING GEOLOGY UPDATE

1. PURPOSE AND SCOPE

This report presents review and update of the referenced site reports from a geological perspective. We have evaluated the recent geologic, geomorphic, geophysical, and hydrogeologic data, information, and reports that may have been released or issued subsequent to the original geologic investigations (John R Byerly, 2008; Rasmussen, 2003) and are pertinent to the site.

The primary resource of this update was the previous engineering geology report conducted by John R. Byerly, Inc., dated 2008. To prepare this update we conducted a review of readily available published and unpublished reports, maps and documents pertinent to the proposed site addition issued after the date of the original investigation. A geologic field reconnaissance of the site and the surrounding area was recently performed. Our update included review of digital stereoscopic aerial photography available from Google Earth, Bing 3D, and World Wind of the site and surrounding area.

2. SITE AND PROJECT CONDITIONS

2.1. EXISTING SITE CONDITIONS

The 3.16-acre property is located southeast of the Murrieta Creek, between Gruwell Street and Central Street, in the Wildomar area of Riverside County, California (see *Site Location Map*, Enclosure 1). The coordinates of the site are latitude 33.6022° N and longitude 117.2772° W, utilizing the North American Datum (NAD) from 1983. The site is located in Township T6S, Range R4W, Sections 34 and 35 of the San Bernardino Baseline and Meridian in the Wildomar 7.5 Minute Quadrangle. The current topography of the site is flat to slightly sloping (gradient is less than 1%) towards the southeast (USGS, 2012b; Google Earth 2013). The center of the site lies approximately 1,255 feet above Mean Sea Level (MSL). Based on our review of the referenced geotechnical and geologic reports, the site has had minor earthwork in the past. Approximately 2.5 to 4.5 feet of surficial fill overlying natural alluvium deposits. The alluvium consists of medium dense to dense silty sand and medium stiff silty clay to the maximum depths explored (51.5 feet; Byerly, 2008). We estimate the alluvium corresponds to Site Class D.

2.2. PROPOSED DEVELOPMENT

Although specific plans were not available for our review, we understand the site will be developed with single-family residential structures. The structures are expected to be single-story buildings of wood-frame construction incorporating concrete slab-on-grade floors. The residences will have plan

areas of approximately 2,500 square feet and will exert relatively light foundation loads on the underlying soils. Significant cuts, cut slopes, fills, fill slopes, and/or retaining walls are not proposed with the development of the site based on the existing site topography.

2.3. PREVIOUS INVESTIGATIONS

Our current investigation updates the engineering geology portion of a previous geotechnical report issued by John R. Byerly, Inc. (2008) and an engineering geology issued by Gary S. Rasmussen and Associates (2003). The original geologic reports addressed a gymnasium formerly proposed on the campus. The Byerly report utilized the 2006 ASCE Standard [ASCE/SEI 7-05], including Supplement No. 1 and Errata. The Rasmussen report utilized the 1997 Uniform Building Code (International Conference of Building Officials, 1997). Both reports reviewed the Riverside County General Plan (1976, 1989, 2003). Based on our review of the referenced reports and our knowledge of geotechnical and geologic hazards in the approximate site vicinity, the most significant geological hazard to the site is the potential for ground shaking. To a lesser degree, the potential for surface fault rupture has not been ruled out.

2.4. AERIAL PHOTOGRAPH REVIEW

Stereoscopic aerial photographs of the site and vicinity dated 1938, 1962, 1964, 1974, 1978, 1979, 1980, 1983, 1990, 2000 and 2005 were reviewed for the original investigations. As part of our review process, we have also reviewed these photographs and agree with the observations presented in the referenced reports. In addition, three-dimensional computer-aided photography flown between 1994 and 2012 and presented by Google Earth (Google, 2013) was reviewed for this update.

3. GEOLOGIC HAZARDS

3.1. GEOLOGY

The site is located in a northwest-trending graben referred to collectively as the Elsinore Trough. Mann (1955) provided data that the bedrock is down dropped 3,500 feet (1,100 meters) across the basin bounding faults. The Elsinore Trough is made up of several poorly delineated geomorphic sections, including the Temescal, Elsinore, Wildomar, Murrieta, Temecula, and Wolf Valleys. The site is situated in the Wildomar Valley portion of the Trough. The Elsinore Trough forms a transitional zone between the Santa Ana and Elsinore Mountains on the southwest, and the Perris Block on the northeast. The Elsinore Trough may represent a nascent, failed spreading center of a proto-San Andreas transform fault, similar to the Salton Trough. Or the trough may represent older Miocene-age detachment faulting, possibly related to extensional tectonics similar to detachment faults found under the Los Angeles Basin and San Gabriel Mountains, and along the flanks of the

Santa Rosa Mountains. The current transtensional tectonic regime appears to be considerably younger than the trough geomorphology, and may be taking advantage of the pre-existing weakness in the lithospheric crust.

The site was previously mapped as alluvium of Holocene age by Engel (1959), Rogers (1966), Kennedy (1977), Jennings (1977), Greenwood and Morton (1991), and Morton (1999). Weber (1977) mapped the Holocene age alluvium within the incised drainage of Murrieta Creek along the northeast boundary of the site. Weber (1977) chose to combine the alluvium on the remainder of the site, showing it as Quaternary in age (Rasmussen, 2003). More recent geologic mapping of the area by Morton (1999, 2004) and Morton and Miller (2006) determined the alluvium on and around the site to be Holocene in age. Based on exploratory soil test borings previously placed on the site by our firm, surficial materials on the site include artificial fill 2.5 to 4.5 feet thick. Older alluvium underlies the site at depths of 4.5 to 51.5 feet in the previous soil test borings placed on the site. The alluvial soils consisted of medium dense to dense silty sand and medium stiff silty clay. These materials are expected to be Pleistocene in age based on soil development, density, geomorphology, and previous geologic mapping in the area.

The alluvial materials on the site are considered to be medium dense to dense soils to a depth of at least 100 feet (30 meters). The 2010 CBC Table 1613A.5.2 labeled these materials as a “stiff soil profile” equivalent to Site Class D. However, ground water was encountered at a depth of 18 feet below the ground surface; therefore, at least a portion of the soil column may be considered susceptible to liquefaction and dry settlement from a geologic perspective, and would correspond to Site Class F on Table 1613.5.2 of the 2010 California Building Code (California Building Standards Commission, 2010). The density of the older alluvium on the site does suggest that the potential for liquefaction is low.

3.2. FAULTING

Based on our review of the referenced reports and our knowledge of geotechnical and geologic hazards in the site vicinity, the most significant geological hazard to the site is the potential for faulting and ground shaking. The site is not located within an Alquist-Priolo Earthquake Fault Zone [AP EFZ] (Bryant and Hart, 2007). The closest AP EFZ is located approximately 1,000 feet (324 meters) northeast of the site, associated with the Wildomar branch of the Elsinore fault zone (California Division of Mines and Geology, 1980; Bryant and Hart, 2007).

Rasmussen (2003) provided a good description of the seismic setting and seismic history of the site and vicinity. That report indicated that the closest known important faults to the site are the Wildomar, Willard, and Glen Ivy North branches of the Temecula Segment of the Elsinore fault zone. The Wildomar fault is located approximately 1,500 feet (485 meters) northeast of the site (Weber,

1976, 1977; Kennedy, 1977; Jennings, 1975, 1992, 1994). The Willard fault is located approximately 2,000 feet (650 meters) southwest of the site (Weber, 1976, 1977). A subsurface investigation by Rasmussen encountered active faulting northeast of the Temecula Valley Freeway (I-15) and assigned this faulting to the Glen Ivy North fault. Therefore, the Glen Ivy North fault is located approximately 1 mile (1.5 kilometers) northeast of the site.

John R. Byerly, Inc.'s (2008) review of the aerial photographs and computer-aided digital photography identified several northwest trending tonal and topographic lineaments located in the vicinity of the site. Rasmussen (2003) identified two north-northwest-trending tonal lineaments located approximately 200 to 500 feet southeast of the site. They also spotted a northwest-trending lineament south of the site and west of Murrieta Creek. Several east-trending lineaments project out from the alluvial fans at the toe of the Elsinore Mountains, with the closest of these being located approximately 1,000 feet northwest of the site (Rasmussen, 2003). All of the lineaments reported by Rasmussen were considered to represent faulting, with some considered to represent potentially active faulting. None of the lineaments observed were expected to cross the site (Rasmussen, 2003).

The following recommendations were presented in John R. Byerly, Inc.'s (2008) review. *“Northwest-trending tonal and topographic lineaments in the vicinity of the site may be related to faulting. No evidence for active faulting was observed on the site on the aerial photographs reviewed associated with this update. However, Kennedy (1977) and Greenwood and Morton (1991) indicated that Murrieta Creek formerly traversed portions of the site prior to channelization of the natural creek bed into a flood control channel. Although active faulting is not expected to be a potential hazard to the proposed residences on the site during the lifetime of the structures, modification of the former ground surface by grading of the channel and filling on the site may have obscured surficial evidence of faulting on and around the site. Due to the nearby active Wildomar fault and associated AP EFZ, the presence of nearby older faults and suspicious lineaments, location of the site within a fault graben (the Elsinore Trough), and burial of the former natural ground surface by significant quantities of fill, grading of the site should be evaluated by geologic in-grading inspections to verify that active faults do not cross the site.”* We agree with Byerly's assessment and we also recommend that in-grading inspections are necessary to verify that active faults do not cross the site.

3.3. EARTHQUAKE HISTORY

At least two large earthquakes have occurred within 25 miles of the site during historic time. The epicenter of the 1910 MW 6.0 Temescal Valley earthquake is located approximately 15 miles northwest of the site and the epicenter of the 1918 MW 6.9 San Jacinto earthquake is located approximately 19 miles northeast of the site (Goter 1988, 1992; Goter et al., 1994). Both of these earthquakes are expected to have strongly affected the site. Rasmussen (2003) provided a discussion

of the historic earthquakes with respect to the site. No large earthquakes have occurred on or near the site since the date of the Byerly report (U.S. Geological Survey, 2013).

4. GROUND MOTION

At the request of the engineering design team, a ground motion hazard analysis as prescribed by Section 1614A.1.2 (2b) of the 2010 CBC and described in Section 21.2 of ASCE 7-05 (American Society of Civil Engineers, 2006) was conducted for the site. With the recent publication and adoption of ASCE 7-10 (American Society of Civil Engineers, 2011), and the pending publication 2013 California Build Code (scheduled for release on July 1, 2013, pending adoption date: January 1, 2014) imminent building code changes will affect the proposed development. It is the responsibility of the project structural engineer to decide which building standard will be used. The reviewing agency (City of Wildomar) will decide which building standard will be accepted as part of their review process. We recommend that the design team review the proposed construction schedule and use the appropriate building standard. If ASCE 7-10 and CBC 2013 standards are required for project structural design, please contact our office and we can supply the new design parameters.

The site coordinates input to the USGS program are 33.6022°N and 117.2772°W, NAD 1983. The ground motion hazard analysis utilizes the probabilistic Maximum Considered Earthquake (MCE) 5 percent damped acceleration response spectrum having a 2 percent probability of exceedance within a 50 year time period. Our probabilistic ground motion hazard analysis used the U.S. Geological Survey (2011) "Seismic Design Values for Buildings" website and the program "Seismic Hazard Curves and Uniform Hazard Response Spectra, version 5.1.0," to calculate the probabilistic response spectra for the site. The site coordinates used as input to the program are latitude 33.6022° N and longitude 117.2772° W, utilizing the North American Datum (NAD) from 1983.

The mapped MCE ground motion parameter, S_s , is the 5 percent damped spectral response acceleration at a short (0.2 second) period. The mapped MCE ground motion parameter, S_1 , is the 5 percent damped spectral response acceleration at the 1.0-second period. The probabilistic S_s , determined from Figure 1613.5 (3) of the 2010 CBC and the U.S. Geological Survey website (2011), yielded a value higher than the deterministic S_s , derived from the attenuation relationships of Boore *et al.* (1997), as compiled by Sewell (2001). Therefore, the deterministically derived value of S_s was used to determine S_{MS} , in accordance with Chapter 21.2.3 of ASCE 7-05 (American Society of Civil Engineers, 2006). The deterministic S_s yielded a spectral acceleration of 1.924 g.

The deterministically generated moderately long period acceleration, S_1 , yielded a value greater than the probabilistically determined value for S_1 . Therefore, the final S_1 for the site is the

probabilistically determined 0.715 g from Figure 1613.5 (4) of the 2010 CBC, based on site coordinates of Latitude +33.6022° (north) and Longitude -117.2772° (west) using the U.S. Geological Survey website (2011). Therefore, S_1 is less than 0.75 g.

The parameters used to calculate the deterministic S_s included a distance to the Wildomar branch of the Elsinore fault zone of 0.485 km (1,500 feet), an M_{MAX} earthquake of M_w 7.4, a strike-slip type of movement for the Wildomar fault, and a shear wave velocity, V_s , of 620 meters per second for rock materials. The deterministic MCE spectral accelerations were calculated at 0.2 second and 1.0 second periods for the characteristic M_{MAX} earthquake expected for the Elsinore fault. The Wildomar branch of the Elsinore fault zone would be expected to produce the largest ground shaking at the site due to the proximity of the fault to the site and the M_{MAX} earthquake expected for the fault.

S_1 for the site is 0.715 g. The proposed structures on the site are anticipated to belong to Occupancy Category II, as defined by Table 1604.5 of the 2010 CBC. Since S_1 is less than 0.75 g and the anticipated Occupancy Category would be II for the proposed buildings, the proposed structures on the site would be assigned to Seismic Design Category D, per 2010 CBC Section 1613A.5.6.

The adjusted (site-modified or site-specific) MCE 5 percent damped spectral response acceleration parameter for short periods is S_{MS} and for the 1.0 second period is S_{M1} (American Society of Civil Engineers, 2006). To determine the site-modified MCE spectral response acceleration parameters, the MCE ground motion parameters determined above are multiplied by site coefficients, F_a and F_v , derived from the Site Class. F_a is defined as the short-period site coefficient at a period of 0.2 second and F_v is defined as the site coefficient at a period of 1.0 second (American Society of Civil Engineers, 2006). Based on a preliminary determination of Site Class D for the site, $F_a = 1.0$ and $F_v = 1.5$ from Tables 1613.5.3 (1) and 1613.5.3 (2) of the 2010 CBC, respectively. Using the S_s for the site of 1.924 g, S_{MS} would be $S_s \times F_a$ which equals 1.924 g x 1.0, or 1.924 g. Using the probabilistically determined S_1 for the site of 0.715g, S_{M1} is $S_1 \times F_v$ which equals 0.715 g x 1.5, or 1.073 g.

The Design, 5 percent damped, spectral response acceleration parameter at a short period of 0.2 second is labeled S_{DS} and the Design spectral response parameter at a 1.0 second period is referred to as S_{D1} . S_{DS} is defined as 2/3 of S_{MS} and S_{D1} is defined as 2/3 of S_{M1} (American Society of Civil Engineers, 2006). S_{DS} would equal 2/3 x 1.924 g, or 1.283 g. S_{D1} would equal 2/3 x 1.073 g, or 0.715 g.

The Long-period Transition Period, T_L , for the site is 8 seconds, as shown on Figure 22-15 of ASCE 7-05 (American Society of Civil Engineers, 2006).

The probabilistic Maximum Considered Earthquake (MCE) ground motions are the spectral response accelerations at 5 percent critical damping having a 2 percent probability of exceedance within a 50 year time period, as presented on Figures 1613.5 (1), (2), (3), and (4) of the 2010 California Building Code. The MCE ground motions can also be considered to represent a 10 percent probability of exceedance in 250 years, and are expected to occur on average once every 2,500 years. The MCE and site-modified MCE ground motions replace the former Upper Bound Earthquake (UBE) ground motions presented in previous California Building Codes. The former UBE ground motion represented a 10 percent chance of exceedance in a 100 year time period, which was equivalent to a 1,000-year recurrence interval. The probabilistic Design earthquake spectral response accelerations are calculated as two-thirds of the site-modified MCE ground motions per Section 21.3 of ASCE 7-05. The Design earthquake ground motions are considered to be approximately equivalent to the former Design Basis Earthquake (DBE) ground motions used in previous CBCs (Anne Rosinski, California Geological Survey, Presentation to the California Geotechnical Engineers Association, September, 2007 and written communication, December, 2007; David Baska, Terracon, Presentation to the California Geotechnical Engineers Association, June, 2007). The former DBE ground motion represented a 10 percent chance of exceedance in a 50-year time period, or a recurrence interval of 475 years.

The 2010 CBC and CGS Note 48 (California Geological Survey, 2007a) specify that the peak ground acceleration (pga) for the site should be determined by dividing the Design earthquake short period 5 percent damped spectral response acceleration parameter, S_{DS} , by 2.5 based on the 2003 edition of the NEHRP [National Earthquake Hazards Reduction Program] recommended provisions for seismic regulations (Building Seismic Safety Council, 2003). ASCE 7-05, Chapter 11.8.3, incorporated by reference in Section 1802A.2.7 (2) of the 2010 CBC, permits the peak ground acceleration to be generated by dividing the MCE short period 5 percent damped spectral response acceleration parameter, S_S , by 2.5, in lieu of a site-specific study which accounts for soil amplification effects (American Society of Civil Engineers, 2006). Using both of these formulae, the pga for the site is 0.513 g (derived from S_{DS} and Note 48/2010 CBC) or 0.74 g (derived from S_S and ASCE 7-05). Any liquefaction and dry settlement calculations should use a pga of not less than 0.50 g in accordance with the 2010 CBC.

5. GROUNDWATER

The California Geological Survey has not conducted seismic hazards mapping for the Wildomar 7½ minute quadrangle as of the date of this update and, therefore, no Seismic Hazard Liquefaction Zones are shown by the State on the Wildomar quadrangle. Riverside County (1976, 1989) and Topozada et al. (1993) did not include the site within a potential liquefaction area. However, Riverside County

(2003) did include the site within a Low to Moderate zone of susceptibility for liquefaction due to the presence of shallow ground water.

Ground water measurements for two water wells located within 1/2 mile (3/4 kilometer) of the site (State Well Numbers 6S/4W-34J2 and 34J3) showed the depths to phreatic ground water at those locations as 45 to 47 feet in March 1968 (California Department of Water Resources, 2008). Geotechnical borings excavated by John R. Byerly in (2003) encountered ground water at depths of 18 feet. Rasmussen (2003) commented that the ground water encountered at 18 feet on the site was probably perched. Due to the density of the underlying older alluvium on the site, the potential for liquefaction on the site is considered to be low. Therefore, the soil column on the site would not correspond to Site Class F, even though shallow perched ground water conditions exist on the site. An historic high ground water level coincident with the ground surface on the site should be used if necessary to determine the liquefaction susceptibility of the site.

6. LIQUEFACTION AND LATERAL SPREADING

Lateral spreading occurs when liquefaction affects a confined saturated sand layer at depth beneath a sloping surface. Due to the presence of shallow perched ground water on and near the site, dense natural soils are expected to have a low potential for liquefaction. The northeast boundary of the site is coincident with the southwest edge of Murrieta Creek. Lateral spreading may be a potential hazard to shallow sediments and fill on the site, if these sediments and fill materials are determined to be susceptible to liquefaction. An historic high ground water level coincident with the ground surface on the site should be used if necessary to determine the susceptibility of the site to lateral spread. As a result of changes in the Peak Ground Acceleration values, the liquefaction potential may be affected. The Geotechnical Engineer of Record should confirm whether or not liquefaction settlement potential has changed.

7. LANDSLIDE AND CUT SLOPE STABILITY

The California Geological Survey has not conducted seismic hazards mapping for the Wildomar 7½ minute quadrangle as of the date of this update and, therefore, no Seismic Hazard Earthquake-Induced Landslide Zones are shown by the State on the Wildomar quadrangle. Riverside County (2003) showed the site within an area of slope angles less than 15 percent. The County (2003) did not include the site within an area susceptible to seismically induced landslides or rockfalls. Rasmussen (2003) and John R. Byerly, Inc. (2008) found no evidence for landsliding on or in the immediate vicinity of their site. The current site is relatively flat; therefore, landslides, rockfalls, and rock topples are not considered to be potential hazards to the proposed residences.

8. SUBSIDENCE AND INFLATION

Subsidence refers to the regional topographic lowering of the ground surface. Conversely, inflation refers to the regional topographic rising of the ground surface. Both subsidence and inflation can occur due to tectonic or non-tectonic stress changes. As implied by the name, tectonic subsidence or inflation result from changes in the ground surface due to extension or compression (respectively) associated with tectonic movement of the crust. Non-tectonic subsidence or inflation of the ground surface is commonly associated with the removal or addition (respectively) of fluids from an aquifer (ground water) or a reservoir (oil, gas, steam, etc.). Riverside County (2003) included the site within a Susceptible Area for subsidence and Riverside County (1976, 1989) showed a Subsidence Hazard Management Zone located approximately 6 miles southeast of the site (Rasmussen, 2003).

Subsidence has been a recurring problem in the southwestern U.S. due to the withdrawal of ground water from valley aquifers and the extraction of oil and gas from hydrocarbon reservoirs. Data available from the California Department of Water Resources (1990) and the Western Municipal Water District (2006) suggest that the phreatic ground water level within 0.5 mile of the site has been relatively stable since 1960 (Rasmussen, 2003). However, as municipal growth increases demand for water, ground water levels may decline in the vicinity of the site due to pumping of the ground water for municipal, domestic, industrial, and/or agricultural usage. Future subsidence of the ground surface may be a potential hazard to the proposed residences and to gravity-sensitive infrastructure and utilities during the life of the proposed development.

Tensional and/or differential cracking tends to be concentrated near high-production water wells and along steeply inclined ground water barriers, such as high-angle faults and bedrock contacts. No production water wells are located on or adjacent to the site. Lineaments recognized in the vicinity of the site may represent faults. Although no active faults are known on the site (Rasmussen, 2003), older faults may underlie portions of the site. Therefore, tensional and/or differential cracking of the ground surface may be a potential hazard to the proposed residences if ground water levels decline significantly during the lifetime of the proposed development.

9. FLOODING

The Federal Emergency Management Agency [FEMA] (1996) and Riverside County (2003) indicated that the northeast and southeast portions of the site lie within a 100-year flood plain associated with Murrieta Creek (Rasmussen, 2003). Kennedy (1977) and Greenwood and Morton (1991) mapped a portion of the former drainage of Murrieta Creek crossing portions of the site. The presence of significant quantities of fill found on the site by our soil borings supports this mapping. Channelization of Murrieta Creek is expected to have significantly modified the ground surface and

geomorphology on the site. Rasmussen (2003) recommended that the project engineer evaluate the potential for flooding to affect the site. The site should be evaluated for the potential of flooding by the project engineer.

No water reservoirs were located near or higher than the site at the time of the Rasmussen report (2003). No large water storage tanks were located in the vicinity of the site based on review of Google Earth (Google, 2013), Virtual Earth (2007), and NASA, (2007). The Metropolitan Water District's Diamond Valley Lake (formerly referred to as the Domenigoni or Eastside reservoir) is located approximately 13 miles northeast of, and higher than, the site. Riverside County (2003) identified minimal dam inundation zones below Don Owen, Saddle, and East dams associated with Diamond Valley Lake. The potential dam inundation paths for failure of Don Owen and Saddle dams would follow the existing channel of Salt Creek to Railroad Canyon and Canyon Lake. An evaluation of the potential for seismically induced flooding of the site by failure of Diamond Valley Lake, through Canyon Lake, and into Lake Elsinore falls to the project engineer.

Seasonal flood flows may occasionally emanate from the Sacramento Mountains east of the site during monsoonal events. The incised topography of the piedmont surface in the vicinity of the site suggests that episodic monsoonal flood flows would be intercepted by incised drainages and redirected away from the site. No evidence for flooding was observed on or near the site during the previous field reconnaissance (Byerly, 2010) or on the digital aerial photography reviewed for this investigation. Natural flooding of the site is not expected.

9.1. SEICHES

A seiche is an oscillating body and surface wave that is often generated in open bodies of water, such as lakes and reservoirs, by large earthquakes. Rasmussen (2003) reported that the historic high lake level for Lake Elsinore is located approximately 2 miles northwest of the site. The Metropolitan Water District's Diamond Valley Lake (formerly referred to as the Domenigoni or Eastside reservoir) is located approximately 13 miles northeast of, and higher than, the site. Riverside County (2003) identified minimal dam inundation zones below Don Owen, Saddle, and East dams associated with Diamond Valley Lake. Due to the distances of Lake Elsinore and Diamond Valley Lake from the site, seiche waves that might be generated at either Lake Elsinore or Diamond Valley Lake, as a result of strong ground shaking from a large earthquake, are not expected to affect the site.

9.2. TSUNAMI

A tsunami is a seismically generated ocean wave. Due to the location of the site with respect to the Pacific Ocean, tsunamis are not a hazard to the site.

10. VOLCANIC ACTIVITY

No volcanic rocks are mapped on or near the site. Volcanic activity is not anticipated on or in the vicinity of the site during the lifetime of the proposed residences.

11. CONCLUSIONS AND RECOMMENDATIONS

The 3.16-acre property is located southeast of the Murrieta Creek, between Gruwell Street and Central Street, in the Wildomar area of Riverside County, California. The coordinates of the site are latitude 33.6022° N and longitude 117.2772° W, utilizing the North American Datum (NAD) from 1983. The site is located in Township T6S, Range R4W, Sections 34 and 35 of the San Bernardino Baseline and Meridian in the Wildomar 7.5 Minute Quadrangle.

Approximately 2.5 to 4.5 feet of surficial fill overlying natural alluvium deposits. The alluvium consists of medium dense to dense silty sand and medium stiff silty clay to the maximum depths explored (51.5 feet; Byerly, 2008). We estimate the alluvium corresponds to Site Class D.

The site is not located within an Alquist-Priolo Earthquake Fault Zone [AP EFZ]. The closest AP EFZ is located approximately 1,000 feet (324 meters) northeast of the site, associated with the Wildomar branch of the Elsinore fault zone. The Wildomar fault is located approximately 1,500 feet (485 meters) northeast of the site. The Willard fault is located approximately 2,000 feet (650 meters) southwest of the site. The Glen Ivy North fault is located approximately 1 mile (1.5 kilometers) northeast of the site.

Review of the aerial photographs and computer aided digital photography identified several northwest trending tonal and topographic lineaments located in the vicinity of the site. The previous geologic investigation identified two north-northwest-trending tonal lineaments located approximately 200 to 500 feet southeast of the site, a northwest-trending lineament south of the site and west of Murrieta Creek, and several east-trending lineaments as close as 1,000 feet northwest of the site extending out from the alluvial fans at the toe of the Elsinore Mountains. All of the lineaments reported by Rasmussen were considered to represent faulting, with some considered to represent potentially active faulting. None of the lineaments observed were expected to cross the site (Rasmussen, 2003).

Northwest-trending tonal and topographic lineaments in the vicinity of the site may be related to faulting. No evidence for active faulting was observed on the site on the aerial photographs reviewed

associated with this update. Although active faulting is not expected to be a potential hazard to the proposed residences on the site during the lifetime of the structures, modification of the former ground surface by grading of the channel and filling on the site may have obscured surficial evidence of faulting on and around the site.

Due to the proximity of the site to the active Wildomar and Glen Ivy North branches of the Temecula Segment of the Elsinore fault zone, large and/or damaging earthquakes could occur along these faults during the lifetime of the proposed residences. Cascading rupture of the Temecula Segment of the Elsinore fault zone with adjacent segments (either the Glen Ivy or Julian Segments) may produce an earthquake of M_{MAX} of M_W 7.0 to M_W 7.4.

The mapped MCE ground motion parameter, S_s , is 1.924g. The mapped MCE ground motion parameter, S_1 , is 0.715g. The Site Coefficient, F_a , is 1.0, based on S_s greater than 1.25g and Site Class D. The interpolated Site Coefficient, F_v , is 1.5, based on S_1 greater than 0.50g and Site Class D. The Section 11.4.3 Adjusted MCER spectral response acceleration parameter, S_{MS} , is 1.924g. The Section 11.4.3 Adjusted MCER spectral response acceleration parameter, S_{M1} , is 1.073g. Design spectral response acceleration parameter, S_{DS} , is 1.283g and S_{D1} , is 0.715g. The Long-period Transition Period, T_L , is 8 seconds. The Peak Ground Acceleration (PGA) is 0.513g. The proposed structure on the site is expected to belong to Occupancy Category II.

The California Geological Survey has not conducted seismic hazards mapping for the Wildomar 7½ minute quadrangle as of the date of this update and, therefore, no Seismic Hazard Earthquake-Induced Landslide Zones are shown by the State on the Wildomar quadrangle. Riverside County (2003) showed the site within an area of slope angles less than 15 percent. The County (2003) did not include the site within an area susceptible to seismically induced landslides or rockfalls. The site is relatively flat; therefore, landslides, rockfalls, and rock topples are not considered to be potential hazards to the proposed residences.

Ground water measurements for two water wells located within 1/2 mile (3/4 kilometer) of the site showed the depths to phreatic ground water at those locations as 45 to 47 feet in March 1968. Geotechnical borings excavated by John R. Byerly in (2003) encountered ground water at depths of 18 feet. Previous site reports (Rasmussen, 2003; Byerly, 2003) indicated the ground water on the site to be perched. Due to the density of the underlying older alluvium on the site, the potential for liquefaction on the site is considered to be low. Therefore, the soil column on the site would not correspond to Site Class F, even though shallow perched ground water conditions exist on the site.

The northeast boundary of the site is coincident with the southwest edge of Murrieta Creek. Lateral spreading may be a potential hazard to shallow sediments and fill on the site, if these sediments and fill materials are determined to be susceptible to liquefaction.

Riverside County (2003) included the site within a Susceptible Area for subsidence and Riverside County (1976, 1989) showed a Subsidence Hazard Management Zone located approximately 6 miles southeast of the site.

Data suggest that the phreatic ground water level within 0.5 mile of the site has been relatively stable since 1960. However, as municipal growth increases demand for water, ground water levels may decline in the vicinity of the site due to pumping of the ground water for municipal, domestic, industrial, and/or agricultural usage. Future subsidence of the ground surface may be a potential hazard to the proposed residences and to gravity-sensitive infrastructure and utilities during the life of the proposed development.

Lineaments recognized in the vicinity of the site may represent faults. Although no active faults are known on the site, older faults may underlie portions of the site. Therefore, tensional and/or differential cracking of the ground surface may be a potential hazard to the proposed residences if ground water levels decline significantly during the lifetime of the proposed development.

Due to the density of the underlying natural materials, differential and/or tensional cracking of the ground surface is not expected to be a potential hazard to the proposed structure.

The Federal Emergency Management Agency [FEMA] (2008) Flood Insurance Rate Map did not show the site located within a Special Flood Hazard Area Inundated by 100-Year Flood flows. The site is located at an elevation of 585 feet MSL, approximately 45 feet higher than the flood plain of the Colorado River. The river is located about 1,500 feet (757 meters) east and northeast of the site. The closest 100-year flood plain is located approximately 700 feet (215 meters) northwest of the site (FEMA, 2008). Seasonal flood flows may occasionally emanate from the Sacramento Mountains east of the site during monsoonal events. The incised topography of the piedmont surface in the vicinity of the site suggests that episodic monsoonal flood flows would be intercepted by incised drainages and redirected away from the site. No evidence for flooding was observed on or near the site during the previous field reconnaissance (Byerly, 2010) or on the digital aerial photography reviewed for this investigation. Natural flooding of the site is not expected.

Seiches are not considered to be a potential hazard to the proposed development.

Due to the location of the site with respect to the Pacific Ocean, tsunamis are not a hazard to the site.

Volcanic activity is not anticipated on or in the vicinity of the site during the lifetime of the proposed residences.

The grading plan for the proposed residences should be reviewed and approved by the engineering geologist before initiating grading on the site.

The engineering geologist should be included at the pre-grade meeting at the site.

Grading of the site, particularly the exposure of natural materials prior to placing fills, should be observed by the engineering geologist to verify that the actual subsurface conditions concur with the anticipated conditions.

APPENDIX A
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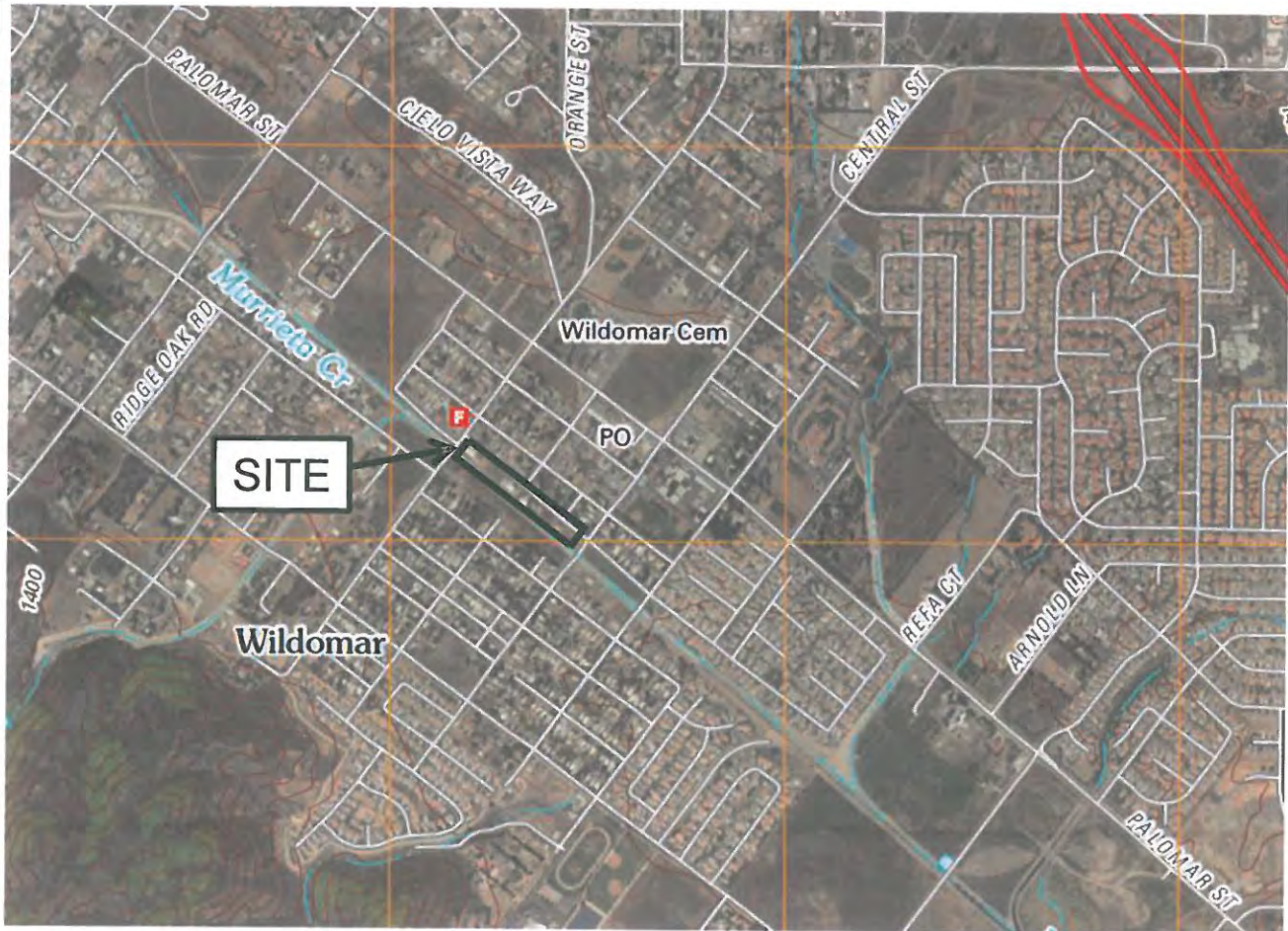
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Working Group on the Probabilities of Future Large Earthquakes in Southern California (1992). "Future Seismic Hazards in Southern California, Phase I: Implications of the 1992 Landers earthquake sequence." Ad Hoc Working Group on the Probabilities of Future Large Earthquakes in Southern California; California Resources Agency, Department of Conservation, Division of Mines and Geology; National Earthquake Prediction Evaluation Council; California Earthquake Prediction Evaluation Council; Southern California Earthquake Center; U.S Department of the Interior, Geological Survey; and California Office of Emergency Services report, 42 pages.

Working Group on California Earthquake Probabilities (1995). "Seismic hazards in southern California: Probable earthquakes, 1994-2024." Bulletin of the Seismological Society of America, Vol. 85(2): 379-439.

Working Group on California Earthquake Probabilities (1999). "Earthquake Probabilities in the San Francisco Bay Region: 2000 to 2030 – A summary of Findings." U.S. Department of the Interior, Geological Survey Open-File Report, OFR 99-517, Webpage: <http://geopubs.wr.usgs.gov/open-file/of99-517/> 36 p.

Working Group on California Earthquake Probabilities (2003). "Earthquake probabilities in the San Francisco Bay Region: 2002-2031." U.S. Department of the Interior, Geological Survey Open-File Report, OFR 2003-214.



N

NO SCALE

SOURCE: 2012 USGS 7.5 MINUTE SERIES
 TOPOGRAPHIC MAP
 WILDOMAR QUADRANGLE
 RIVERSIDE COUNTY, CALIFORNIA

AKW GEOTECHNICAL

P.O. BOX 891173, TEMECULA, CA 92589
 PHONE (951) 265-9849

SITE LOCATION MAP

TENTATIVE TRACT
 MAP NO. 33840
 WILDOMAR, CALIFORNIA

EWR

DATE 6-19-2013

PROJECT NO. M1043-01

ENCLOSURE 1



Corporation

c 714.875.1362
o 949.645.5326
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1805 Peninsula Pl.
Costa Mesa, CA 92627

www.heicorporation.com

May 15, 2013

Mr. Michael L. Lozano
Project Engineer
John R. Byerly Incorporated
2257 South Lilac Avenue
Bloomington, CA 92316

Re: Phase 1 Environmental Site Assessment
3.16 Acre Parcel of Land
Northwest of Central Street and Southeast of Gruwell Street
Wildomar, California

Dear Mr. Lozano:

Enclosed is the Environmental Site Assessment report on the 3.16 acre parcel of land to the northwest of Central Street and to the southeast of Gruwell Street in the unincorporated area Wildomar in Riverside County, California. All of the agencies responded to our requests for information, with the exception of the Riverside County Department of Environmental Health. Information obtained in the process of completing this assessment does not indicate the presence of recognized environmental conditions.

HEI Corporation appreciates this opportunity to be of service to you and to John R. Byerly Incorporated. If you have any questions regarding this report, don't hesitate to contact me at chayden@heicorporation.com or at 949-645-5326.

Sincerely,

Christopher M. Hayden, EP
President



**PHASE 1
ENVIRONMENTAL SITE
ASSESSMENT**

**3.16 Acre Parcel of Land
Northwest of Central Street and Southeast of Gruwell Street
Wildomar, California**

Prepared for

Mr. Michael L. Lozano
John R. Byerly Incorporated

May 2013

Prepared by

HEI Corporation
1805 Peninsula Place
Costa Mesa, CA 92627
949-645-5326

Project 13-3751

Enclosure 5, Page 2
Rpt. No. 1372
File No.: S-10719

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APPENDIX E	STATEMENT OF QUALIFICATIONS FOR HEI CORPORATION

PROFESSIONAL CERTIFICATION

This Phase 1 Environmental Site Assessment (ESA) was conducted consistent with generally accepted environmental consulting practices within the limitations included as Appendix A. The site visits and records reviews were performed by Chris Hayden, EP, consistent with the proposal submitted to John R. Byerly Incorporated (Client). The information contained in this ESA was obtained from personal inspection, from sources deemed to be reliable, and from various government agencies.

PHASE 1 ENVIRONMENTAL SITE ASSESSMENT

3.16 Acre Parcel of Land Northwest of Central Street and Southeast of Gruwell Street Wildomar, California

Project 13-3751

I declare that, to the best of my professional knowledge and belief, I meet the definition of **Environmental Professional** as defined in Section 40 C.F.R. § 312.10(b).

I have the specific qualifications based on education, training and experience to assess a property of the nature, history, and setting of the Subject Property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 C.F.R. § 312.



Christopher M. Hayden
Environmental Professional

1 SUMMARY

This ESA was performed on the 3.16 acre parcel of land on the northwest of Central Street and southeast of Gruwell Street in the unincorporated area of Wildomar, California (hereinafter referred to as the "Subject Property").

After inspecting the Subject Property; reviewing its past uses; observing surrounding properties; searching through the Federal Environmental Protection Agency, State of California, Riverside County records, and from interviews with parties having knowledge of the operations on the Subject Property, it can be concluded that there is no evidence of "recognized environmental conditions", as defined by the ASTM, in connection with the Subject Property. No further action is required at this time.

2 INTRODUCTION

2.1 Purpose

The purpose of this ESA is to identify “recognized environmental conditions” in connection with the Subject Property. The ASTM Standard Practice for Environmental Site Assessments E 1527-05 defines “recognized environmental condition” as “the presence or likely presence of any hazardous substance or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of an hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water on the property.”

2.2 Scope of Work

As agreed to between HEI Corporation and John R. Byerly Incorporated, the scope of work for this ESA included the following:

- Site Inspection
- Surrounding Property Observation
- Interviews With Individuals Having Knowledge of the Operations on the Subject Property
- Inspect and Photocopy City or County Building Permits
- Inspect and Photocopy County Health Care Agency Files
- State and Federal Regulatory Agency Database Search For Posted Properties Within ASTM Designated Radii of the Subject Property
- Inspect and Photocopy City or County Fire Department Records
- Search for Records of Permits for Underground or Aboveground Storage Tanks
- Inspection of Owner/Operator’s Books and Records
- Inspection of Historical Aerial Photographs

- Preparation and Presentation of One Report and One pdf Report

2.3 Limitations and Exceptions of Assessments

This ESA is based upon the information available from a variety of sources and on the inspection of the Subject Property. The ESA was performed in accordance with industry standards and using appropriate methods. It is intended to allow a party to make an informed decision regarding the Subject Property.

HEI Corporation is not responsible or liable for the accuracy of the information provided by others. This ESA is not a guaranty that there is no subsurface contamination, nor can it be warranted that those areas of environmental concern herein noted are the only areas of potential contamination at the Subject Property.

There was no sampling or testing for the possible presence or absence of, nor is any statement made in this ESA regarding the possible presence or absence of any of the following:

- 1) Asbestos Containing Materials
- 2) Radon
- 3) Lead Based Paints
- 4) Lead in the Drinking Water
- 5) Vapor Encroachment/Intrusion

2.4 Limiting Conditions

There were no limiting conditions with regard to the ability of HEI Corporation to conduct the property inspection portion of this ESA. Access was made available to all parts of the Subject Property.

2.5 Previous Environmental Site Assessments/Investigations

Neither the Client nor HEI Corporation are aware of any previously conducted Phase 1 Environmental Site Assessments or Environmental Investigations. A geotechnical/geologic report, dated April 8, 2008, was prepared by John R. Byerly Incorporated for Prestige Developers, Inc. This 2008 report stated that a soils investigation report, dated October 28, 2003, was prepared by John R. Byerly Incorporated.

2.6 Data Gaps

Data gaps occur in three areas in this report. In the past uses of the Subject Property section, there are gaps of more than 10 years in the aerial photographs obtained. In the records search section, the file from the County of Riverside Department of Environmental Health has not yet been reviewed. In the interview section, the current owner of the Subject Property was not questioned. These data gaps have not hindered the ability of HEI Corporation to form an opinion or to reach a conclusion as to the environmental condition of the Subject Property.

3 SUBJECT PROPERTY DESCRIPTION AND USE HISTORY

3.1 Site and Improvement Description

The Subject Property consists of a more or less rectangularly shaped, approximately 137,650 square foot (3.16 acre), parcel of land. It has frontage on the northwest side of Central Street and southeast of Gruwell Street. It is located to the northeast of Darby Street and to the southwest of Front Street. Illinois Street is to the northeast. Palomar Street is to the northeast and Grand Avenue is to the southwest. Interstate 15 (the Temecula Valley Freeway) is to the northeast. The Subject Property has not been assigned an address or addresses. The assessor's parcel number is 376-043-027.

The topography for the Subject Property is relatively flat, as is this portion of the Temecula Valley. The elevation range is approximately 1,080 to 1,060 feet above sea level. A small, unnamed creek is shown on the Wildomar USGS Map to cross the Subject Property. The Wildomar Creek is adjoining to the southwest and the Santa Gertrudis Creek is to the southeast. The soil beneath the Subject Property consists of alluvium, comprised of clay, silt, sand and gravel. Information regarding groundwater was obtained from the GeoTracker database maintained by the California State Water Resources Control Board. Information was found on a leaking underground storage tank (LUST) site more than a 0.50 miles to the southeast at 22640 North Bear Creek Drive. In a Case Closure Summary, dated March 29, 1994 and prepared by the Riverside County Department of Environmental Health, groundwater was said to be 6 to 8 feet below ground surface. The direction of groundwater flow was said to be to the southwest. A Geotechnical Report, dated April 8, 2008 and prepared by John R. Byerly Incorporated for Prestige Developers, Inc., stated that free groundwater was encountered at approximately 18 feet below ground surface in three (3) borings drilled on the Subject Property.

Structure There are no structures on the Subject Property.

Parking and Landscaping There is no parking surface on the Subject Property. The vegetation on the Subject Property consists of trees, weedy shrubs and weedy groundcover. The plants are in good condition, and no signs of stressed vegetation were observed. No stained soil was observed on the site.

Utilities The utility service to the properties in the area of the Subject Property is provided by a variety of vendors. Gas is provided by Southern California Gas Corp.; electricity by Southern California Edison; water and sewage treatment by the Eastern Municipal Water District; and trash removal by private vendors.

3.2 Subject Property Use History

The Subject Property is an undeveloped parcel of land.

3.2.1 Past Site Uses

Past uses for the Subject Property were determined by examining aerial photographs dating back to 1938 as obtained from NETR Online and from information obtained with the assistance of the County of Riverside Building & Safety Department.

The aerial photographs from 1938 to 2005 showed the Subject Property to be undeveloped with no evidence of activity observed on the site.

The County of Riverside Transportation and Land Management Agency website is the repository for information pertaining to properties in unincorporated areas of the county. A search of the Subject Property's parcel number indicated that no permits have been issued for the Subject Property. A summary of activities attached to the Subject Property's Assessor's Parcel Number included a geologic review, a habitat assessment and subdivision inquiries.

3.3 Adjoining Properties - Use History

A number of properties adjoin the Subject Property. The current uses are as follows:

Northeast To the northeast is the Murietta Creek Flood Control Channel. To the northeast of the channel, are four (4) single family residences at 21431 to 21462 Front Street.

Southeast To the southeast, across Central Street at 32700 Central Street, is a mobile home which appears to be serving as a family residence.

Southwest To the southwest, at 32713 Central Street, is a mobile home which appears to be serving as a family residence. Also to the southwest, along the northeast side of Darby Street, are mostly residential properties from 31530 to 31350 Darby Street. One parcel was being used for what appeared to be storage of scaffolding. On another parcel, it appeared that motor repair work was being done and a drum of what appeared to be waste oil was observed.

Northwest To the northwest, across Gruwell Street, is an undeveloped parcel of land.

Nothing was observed on the adjoining properties that appeared to be of environmental concern to the Subject Property.

3.3.1 Adjoining Properties - Past Uses

Prior uses for the properties discussed above were determined by examining aerial photographs dating back to 1938 as obtained from NETR Online; and from the Wildomar, California USGS Topographic Map. The photos and map are discussed in Section 3.4 below.

3.4 Historic Aerial Photograph and USGS Map Analysis

Historic aerial photographs are examined in order to determine what may have existed on a site prior to the construction of the existing buildings. The photographs for the Subject Property dating back to 1938 were obtained from NETR Online. The photos are described below.

- A photo taken in **1938** showed the Subject Property and most of the adjoining properties to be undeveloped. Evidence of what may have been agricultural activity was observed in the northwestern portion of the Subject Property. What appeared to be an unused railroad right-of-way was observed to be adjoining along the northeastern side of the site. One of the parcels to the southwest on Darby Street appeared to be developed with a small structure. In the area, few structures were observed, and those were small and appeared to be residences. Most of the land was undeveloped, with some agricultural activity observed to the southeast and southwest. A copy of the photo can be seen as Figure C-1 in Appendix C.
- A photo taken in **1967** showed the Subject Property and the adjoining properties to the northeast, southeast and northwest to be undeveloped, with no evidence of activity observed. Several smaller structures were observed in the adjoining area to the southwest, along the northeast side of Darby Street, that appeared to be residential in use. In the area, few structures were observed, and those were small and appeared to be residences. Most of the land was undeveloped, with some agricultural activity observed to the southeast. A copy of the photo can be seen as Figure C-2 in Appendix C.
- A photograph taken in **1982** showed the Subject Property and the adjoining properties to the northeast, southeast and northwest to be undeveloped, with no evidence of activity observed. Several smaller structures were observed in the adjoining area to the southwest, along the northeast side of Darby Street, that appeared to be residential in use. In the area, structures observed were small and appeared to be residences. A copy of the photo can be seen as Figure C-3 in Appendix C.
- A photograph taken in **2005** showed the Subject Property and the adjoining property to the northwest to be undeveloped, and no evidence of recent activity was observed. A flood control channel was observed along the northeastern side of the Subject Property, with four larger residential properties observed to the north of the channel. The adjoining property to the southeast was shown to be developed with what appeared to be a residence. Several smaller structures were observed in the adjoining area to the southwest, along the northeast side of Darby Street, that appeared to be residential in use. In the area, most of the land was

observed was observed to be developed with small structures that appeared to be residential in use. A copy of the photo can be seen as Figure C-4 in Appendix C.

USGS Map Analysis The 7.5 Minute United States Geological Service Topographic Map for the immediate area of the Subject Property is named the Wildomar, California map. The map, which was originally laid out in 1997, showed no structures on the Subject Property or on the adjoining properties to the northeast, southeast or northwest. A small creek or a flood control channel was shown to cross along the northeastern side of the Subject Property. Small structures were shown in the adjoining area to the southwest. In the area, structures observed were smaller, indicating residences. The map was photorevised (updated based on a review of aerial photographs) in 2000. The revised map showed no newer structures on the Subject Property, on the adjoining properties or in the area (newer structures are shown in a purple tint on the revised map). No newer industrial buildings were shown in the area. A portion of the Wildomar USGS Map is reproduced as Figure B-1 in Appendix B.

4 RECORDS SEARCH

4.1 Regulatory Agencies Database Search

The following Federal, State of California, Tribal and local government agency databases and sources were searched for postings within designated radii of the Subject Property:

FEDERAL SOURCES

- National Priority List (NPL) Within 1.0 Mile
- Proposed National Priority List (PNPL) Within 1.0 Mile
- Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) Within 0.5 Miles
- Federal Facility (Fed Fac) Within 0.5 Miles
- CERCLIS No Further Remedial Action Planned (NFRAP) Within 0.5 Miles
- RCRA Corrective Action (CORRACTS) Within 1.0 Mile
- RCRA Treatment Storage and Disposal Facilities (RCRA-TSDF) Within 0.5 Miles
- RCRA Hazardous Waste Generator (RCRA-LQG; RCRA-SQG; RCRA-CESQG) Within 0.25 Miles
- Federal EPA Engineering Controls/ Institutional Controls (Fed SC/IC) Within 0.5 Miles
- Emergency Response Notification System for Spills (ERNS), Target Property Only
- US Brownfields Within 0.5 Miles

STATE OF CALIFORNIA AND LOCAL GOVERNMENT SOURCES

- Response Within 1.0 Mile
- Envirostor Within 1.0 Mile

- California/Tribal Landfills and/or Solid Waste (SWF/LF) Within 0.5 Miles
- California/Tribal Spills, Leaks, Investigations and Cleanups (SLIC) Within 0.5 Miles
- California/Tribal Leaking Underground Storage Tanks (LUST) Within 0.5 Miles
- California/Tribal Hazardous Substance Storage Containers (UST/AST) Within 0.25 Miles
- California/Tribal EPA Voluntary Cleanup Program (VCP) Within 0.5 Miles
- Local Landfill and Solid Waste Disposal Sites (Debris Region 9, ODI, WMUDS/SWAT, SWRCY) Within 0.5 Miles
- Local Hazardous Waste and Contaminated Sites (US CDL, Historic Cal-Sites, SCH, Toxic Pts, CDL, US Historic CDL) Within Various Radii
- Local Underground Storage Tanks (CA FID UST, Historic UST, SWEEPS UST) Within 0.25 Miles
- Environmental Liens (LIENS) for Subject Property Only
- Deed Restricted Sites (DEED) Within 0.5 Mile
- Emergency Release Reports (HMIRS, CHMIRS, LDS, MCS) for Subject Property Only

A compilation of the databases is included in Appendix D.

SUBJECT PROPERTY The Subject Property is not posted onto any of the databases.

ADJOINING PROPERTIES None of the adjoining properties are posted onto databases.

NEARBY PROPERTIES No sites within 1/8 of a mile are posted onto databases.

OTHER PROPERTIES Given the fact that the Subject Property is located in a residential area, it is to be expected that few sites will be posted onto databases. In this case, no sites are posted onto databases. There is no known regional groundwater impact in the area.

4.1.2 State of California Department of Oil, Gas and Geothermal Resources (DOGGR)

The State of California Department of Oil, Gas and Geothermal Resources (DOGGR) is the agency that tracks the location and status of all oil wells in the state. The information from the DOGGR has been obtained by Munger Map Book and published. The 1999 edition of the Munger Map Book was examined to determine if any oil wells had been located on the Subject

Property. The area of the Subject Property is not included in the Munger Map Book, indicating that no oil wells have been located in the area.

4.1.3 State of California Department of Toxic Substance Control (DTSC)

The State of California Department of Toxic Substance Control (DTSC) is the agency that tracks sites on which there have been placed deed restrictions and land use restrictions. The DTSC web site for deed restricted sites and for land use restriction sites was searched. The Subject Property address was not included on these lists.

4.2 Regional Source

4.2.1 Regional Water Quality Control Board

The Regional Water Quality Control Board, San Diego Region (SDRWQCB), maintains a list of sites with leaking underground storage tanks (LUST) and sites on which there has been spills, leaks, investigations and cleanup (SLIC). The SDRWQCB's GeoTracker database was searched, and the Subject Property was not found on the LUST list or the SLIC list.

4.3 County Sources

4.3.1 Riverside County Department of Environmental Health (RCDEH)

The Riverside County Department of Environmental Health (RCDEH) is the agency responsible for supervising the remediation of sites impacted by hazardous materials or hazardous wastes; for permitting and inspecting USTs; and for inspecting facilities that use and store hazardous materials and generate hazardous waste. A request was submitted to review any files that may exist for the Subject Property. As of the date of this report, RCDEH has not yet responded. When the RCDEH responds, any file that may exist will be reviewed and information of environmental significance will be communicated to the Client. In that the Subject Property address is not posted onto any of the databases included in Section 4.1 above, it is not likely that this agency would have information of environmental significance.

4.3.2 Riverside County Waste Resources Management District

The Waste Resources Management District (WRMD) deals with solid waste management in the County of Riverside. WRMD compiled a map a inactive landfills in the county. The map does not show any of the inactive landfills to be within one mile of the Subject Property.

4.3.3 Riverside County Transportation & Land Management Agency

The Riverside County Transportation and Land Management Agency website is the repository for information pertaining to properties in unincorporated areas of the county. A search of the Subject Property's parcel number indicated that no permits have been issued for the Subject Property. A

summary of activities attached to the Subject Property's APN included a geologic review, a habitat assessment and subdivision inquiries.

5 SUBJECT PROPERTY INSPECTION

The Subject Property was inspected on May 8, 2013 by Chris Hayden, EP. The purpose of the site visits were to seek out and to report on visible environmental concerns, or to note use and storage of hazardous materials which could affect the environment condition of the Subject Property.

5.1 Use and Storage of Hazardous Materials at the Subject Property

The Subject Property consists of an 3.16 acre parcel of land. On the day of the inspection, no use or storage of hazardous materials were observed. Piles of debris were observed on the southwestern portion of the Subject Property at the northeastern terminus of Elm Street, as can be seen in Photograph 3 in Appendix C. No containers of any type were observed on the day of the inspection. No stained soil was observed.

5.2 Indications of PCBs

There is no indication that polychlorinated biphenyls (PCBs) were used or stored at the Subject Property. No transformers were observed on the site. Transformers in the area would be the property of Southern California Edison.

5.3 Indications of Solid Waste Disposal

Solid wastes are not currently generated on the Subject Property. Solid wastes generated in the area are placed into dumpsters which are provided and serviced by private vendors such as CR&R.

5.4 Indications of Hazardous Waste Disposal

Hazardous wastes are not currently generated on the Subject Property. No documentation was found to indicate that hazardous wastes have been generated on the site in the past.

5.5 Indications of Asbestos Containing Materials

As can be seen in Photographs 1 - 4 in Appendix C, there are no structures on the Subject Property.

6 INTERVIEW

An important part of any Phase 1 is interviews with individuals having knowledge of the facilities and the operations at the property being assessed. For this ESA, there are no facilities and there is no operation on the Subject Property.

7 FINDINGS, OPINIONS AND CONCLUSIONS

Prior to arriving at these conclusions, the following tasks were completed:

- The Subject Property was inspected.
- The surrounding properties were observed.
- Historic aerial photographs were examined.
- Information was requested from various governmental and regulatory agencies for environmental information pertaining to the Subject Property.
- The databases from state and federal regulatory agencies were examined.

Findings included the following:

- The Subject Property was shown to be undeveloped in the aerial photos from 1938
- The Subject Property is not posted onto any of the environmental databases searched in Section 4.1.
- No use or storage of hazardous materials were observed on the site on the day of the inspection.

The Environmental Site Assessment on the 3.16 acre parcel of land located at northwest of Central Street and southeast of Gruwell Street in the unincorporated area of Wildomar in Riverside County, was performed in conformance with the scope and limitations of ASTM Standard Practice. In the opinion of HEI Corporation, this assessment has revealed no evidence of "recognized environmental conditions", as defined by the ASTM, in connection with the Subject Property. Therefore, it can be concluded that no further action is required.

APPENDIX A
LIMITATIONS

LIMITATIONS

The services described in this report were performed consistent with generally accepted consulting principles and practices. No other warranty, expressed or implied, is made. These services were performed consistent with our agreement with the Client. This report is solely for the use and information of the Client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

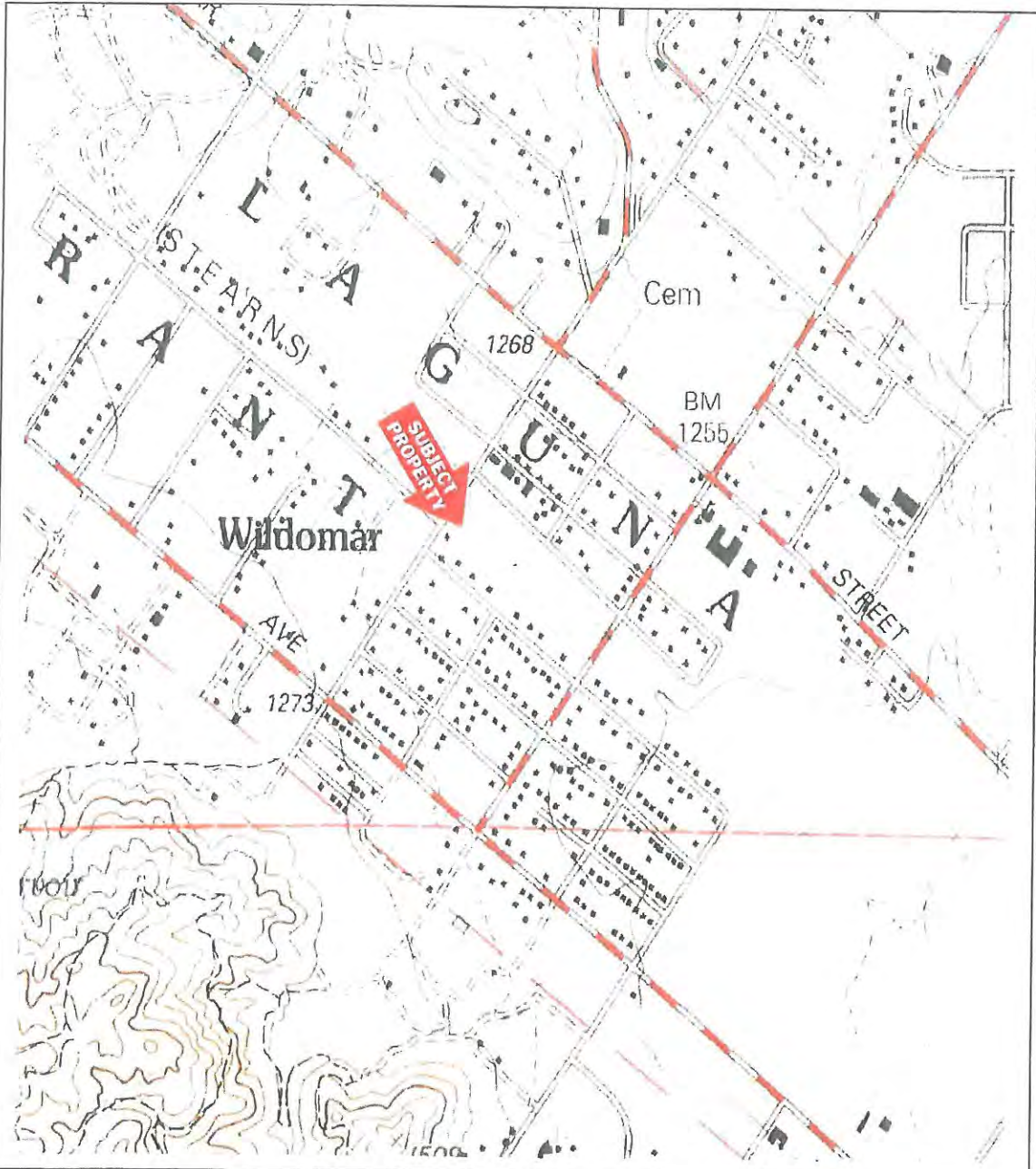
Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the Client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to the performance of services. We do not warrant the accuracy of information supplied by others.



The purpose of an environmental assessment is to reasonable evaluate the potential for or actual impact of past and current practices on the Subject Property. In performing an environmental assessment, it is understood that a balance must be struck between a reasonable inquiry into the environmental issues and an exhaustive analysis of each conceivable issue of potential concern. The following paragraph discuss the assumptions and parameters under which such an opinion is rendered.

No investigation is thorough enough to exclude the presence of hazardous materials at a given site. If hazardous conditions have not been identified during the assessment, such a finding should not therefore be construed as a guarantee of the absence of such materials on the site, but rather as the services performed within the scope, limitations, and cost of the work performed. Environmental conditions may exist on the Subject Property that cannot be identified by visual observation.

APPENDIX B

USGS MAP / ASSESSOR'S PARCEL MAP



 Hayden Environmental	USGS 7.5 Minute Topographic Map Subject Property: Wildomar, California	 NORTH
JOB NUMBER: 13-3751	Date: 5/16/13	FIGURE: B-1

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCEL MAY NOT CORRELATE WITH LOCAL LOT-SPRIT OR BUILDING SITE ORDINANCES.

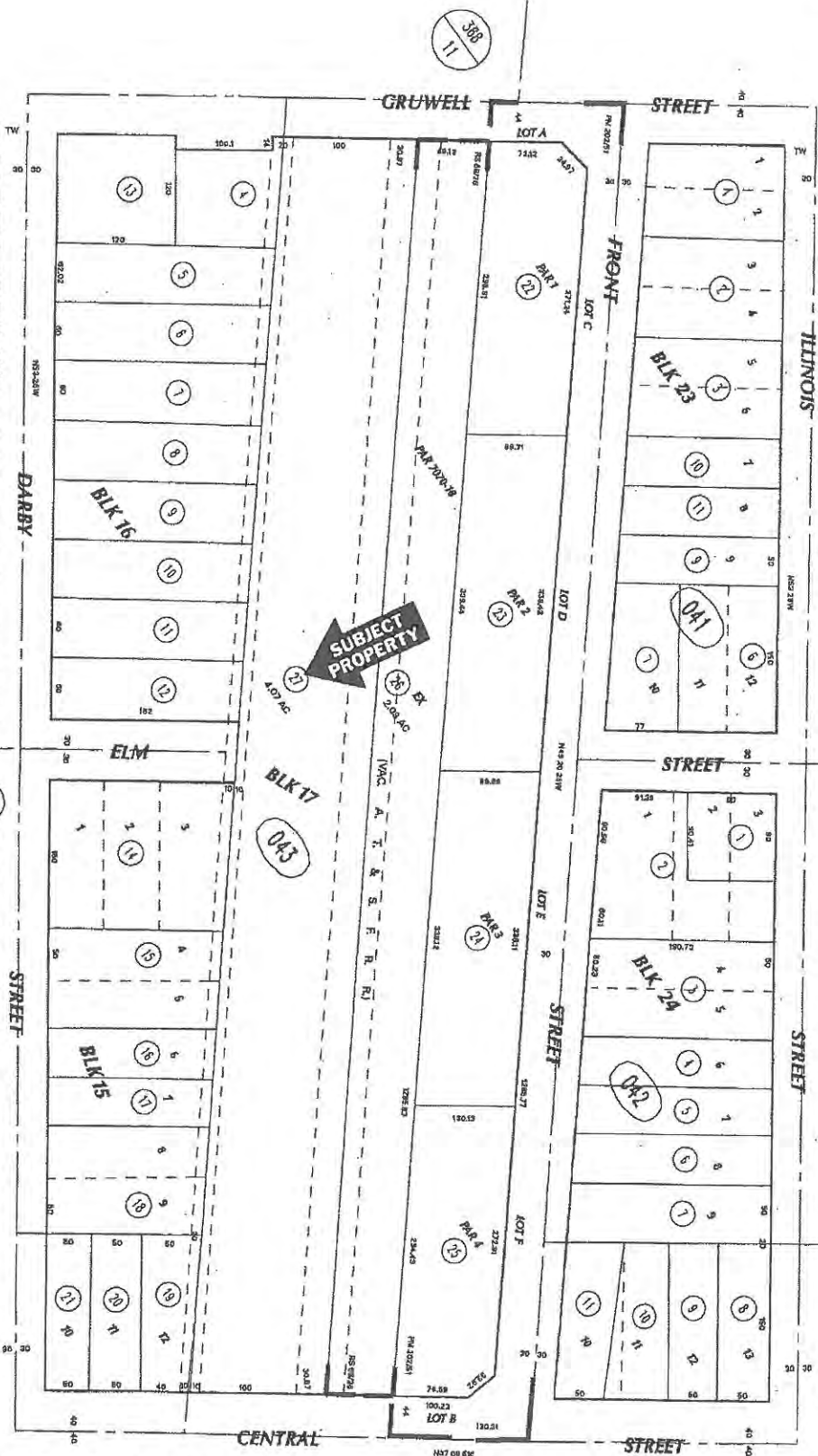
5 2005

SEC. 34-35 T. 6S. R. 4W

T.R.A. 055-137

376-04
368-09

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Rpt. No. 1372
File No.: S-10719



ASSESSOR'S MAP BK676 PG.04
Riverside County, Calif.

6/20

PA 2012/51-52 PARCEL MAP NO. 29830
RS 68/26-31
MB 6/29/4 SD TOWN OF WILLOWDALE

Nov 2005

DEC 01 2005

DATE	BY	REVISION
11/13	04-1	NEW PROJECT
11/13	04-1	22-23
11/13	04-1	21
11/13	04-1	20
11/13	04-1	19-21



APPENDIX C

**SUBJECT PROPERTY PHOTOGRAPHS
1938, 1967, 1982 AND 2005 AERIAL PHOTOGRAPHS**

PHOTOGRAPHS



1. View of the Subject Property Looking Northwest From Central Street



2. View of the Southeastern Portion of the Subject Property Looking Toward Central Street Showing the Flood Control Channel and Piles of Debris




3. View of the Northwestern Portion of the Subject Property From the Terminus of Elm Street Showing Piles of Debris



4. View of the Subject Property Looking Southeast From Gruwell Street Showing Landscape Debris




	<p>1938 AERIAL PHOTOGRAPH</p> <p>Subject Property: 3.19 Acres on Central Street; Wildomar, California</p>	<p>↑ NORTH</p>
<p>JOB NUMBER: 13-3751</p>	<p>Date: 5/16/13</p>	<p>FIGURE: C-1</p>




HEI Hayden Environmental	1967 AERIAL PHOTOGRAPH Subject Property: 3.19 Acres on Central Street; Wildomar, California	↑ NORTH
JOB NUMBER: 13-3751	Date: 5/16/13	FIGURE: C-2



	<p align="center">1982 AERIAL PHOTOGRAPH</p> <p>Subject Property: 3.19 Acres on Central Street; Wildomar, California</p>	<p align="center">↑ NORTH</p>
<p>JOB NUMBER: 13-3751</p>	<p>Date: 5/16/13</p>	<p>FIGURE: C-3</p>



 Hayden Environmental	2005 AERIAL PHOTOGRAPH Subject Property: 3.19 Acres on Central Street; Wildomar, California	↑ NORTH
JOB NUMBER: 13-3751	Date: 5/16/13	FIGURE: C-4

APPENDIX D
REGULATORY AGENCIES DATABASE LISTS

Central Street and Front Street
Central Street and Front Street
Wildomar, CA 92595

Inquiry Number: 03605719.1r
May 14, 2013

FirstSearch Report



440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrmet.com

Enclosure 5, Page 34
Rpt. No. 1372
File No.: ~~03605719~~

Search Summary Report

**TARGET SITE CENTRAL STREET AND FRONT STREET
WILDOMAR, CA 92595**

Category	Sel	Site	1/8	1/4	1/2	> 1/2	ZIP	TOTALS
NPL	Y	0	0	0	0	0	0	0
NPL Delisted	Y	0	0	0	0	0	0	0
CERCLIS	Y	0	0	0	0	-	0	0
NFRAP	Y	0	0	0	0	-	0	0
RCRA COR ACT	Y	0	0	0	0	0	0	0
RCRA TSD	Y	0	0	0	0	-	0	0
RCRA GEN	Y	0	0	0	-	-	1	1
Federal IC / EC	Y	0	0	0	0	-	0	0
ERNS	Y	0	-	-	-	-	1	1
State/Tribal NPL	Y	0	0	0	0	0	0	0
State/Tribal CERCLIS	Y	0	0	0	0	0	0	0
State/Tribal SWL	Y	0	0	0	0	-	0	0
State/Tribal LTANKS	Y	0	0	0	0	-	0	0
State/Tribal Tanks	Y	0	-	-	-	-	0	0
State/Tribal VCP	Y	0	0	0	0	-	0	0
US Brownfields	Y	0	0	0	0	-	0	0
Other SWF	Y	0	0	0	0	-	0	0
Other Haz Sites	Y	0	-	-	-	-	0	0
Other Tanks	Y	0	0	0	-	-	0	0
Local Land Records	Y	0	-	-	-	-	0	0
Spills	Y	0	-	-	-	-	0	0
Other	Y	0	0	0	-	-	3	3
EDR Exclusive	Y	0	0	0	0	0	0	0
- Totals -		0	0	0	0	0	5	5

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Search Summary Report

**TARGET SITE: CENTRAL STREET AND FRONT STREET
WILDOMAR, CA 92595**

Category	Database	Update	Radius	Site	1/8	1/4	1/2	> 1/2	ZIP	TOTALS
<i>NPL</i>	NPL	02/01/2013	1.000	0	0	0	0	0	0	0
	Proposed NPL	02/01/2013	1.000	0	0	0	0	0	0	0
	NPL LIENS	10/15/1991	TP	0	-	-	-	-	0	0
<i>NPL Delisted</i>	Delisted NPL	02/01/2013	1.000	0	0	0	0	0	0	0
<i>CERCLIS</i>	CERCLIS	02/04/2013	0.500	0	0	0	0	-	0	0
	FEDERAL FACILITY	07/31/2012	0.500	0	0	0	0	-	0	0
<i>NFRAP</i>	CERC-NFRAP	02/05/2013	0.500	0	0	0	0	-	0	0
<i>RCRA COR ACT</i>	CORRACTS	02/12/2013	1.000	0	0	0	0	0	0	0
<i>RCRA TSD</i>	RCRA-TSDF	02/12/2013	0.500	0	0	0	0	-	0	0
<i>RCRA GEN</i>	RCRA-LQG	02/12/2013	0.250	0	0	0	-	-	1	1
	RCRA-SQG	02/12/2013	0.250	0	0	0	-	-	0	0
	RCRA-CESQG	02/12/2013	0.250	0	0	0	-	-	0	0
<i>Federal IC / EC</i>	US ENG CONTROLS	03/14/2013	0.500	0	0	0	0	-	0	0
	US INST CONTROL	03/14/2013	0.500	0	0	0	0	-	0	0
	LUCIS	12/09/2005	0.500	0	0	0	0	-	0	0
<i>ERNS</i>	ERNS	12/31/2012	TP	0	-	-	-	-	1	1
<i>State/Tribal NPL</i>	RESPONSE	03/13/2013	1.000	0	0	0	0	0	0	0
<i>State/Tribal CERCLIS</i>	ENVIROSTOR	03/13/2013	1.000	0	0	0	0	0	0	0
<i>State/Tribal SWL</i>	SWF/LF	02/18/2013	0.500	0	0	0	0	-	0	0
<i>State/Tribal LTANKS</i>	LUST	03/18/2013	0.500	0	0	0	0	-	0	0
	SLIC	03/18/2013	0.500	0	0	0	0	-	0	0
	INDIAN LUST	09/28/2012	0.500	0	0	0	0	-	0	0
<i>State/Tribal Tanks</i>	UST	03/18/2013	TP	0	-	-	-	-	0	0
	AST	08/01/2009	TP	0	-	-	-	-	0	0
	INDIAN UST	09/28/2012	0.250	0	0	0	-	-	0	0
	FEMA UST	01/01/2010	TP	0	-	-	-	-	0	0
<i>State/Tribal VCP</i>	VCP	03/13/2013	0.500	0	0	0	0	-	0	0

Search Summary Report

**TARGET SITE: CENTRAL STREET AND FRONT STREET
WILDOMAR, CA 92595**

Category	Database	Update	Radius	Site	1/8	1/4	1/2	> 1/2	ZIP	TOTALS
	INDIAN VCP	09/28/2012	0.500	0	0	0	0	-	0	0
US Brownfields	US BROWNFIELDS	12/10/2012	0.500	0	0	0	0	-	0	0
Other SWF	ODI	06/30/1985	0.500	0	0	0	0	-	0	0
	DEBRIS REGION 9	01/12/2009	0.500	0	0	0	0	-	0	0
	WMUDS/SWAT	04/01/2000	0.500	0	0	0	0	-	0	0
	SWRCY	03/18/2013	0.500	0	0	0	0	-	0	0
	HAULERS	03/13/2013	TP	0	-	-	-	-	0	0
	INDIAN ODI	12/31/1998	0.500	0	0	0	0	-	0	0
Other Haz Sites	US CDL	03/04/2013	TP	0	-	-	-	-	0	0
	HIST Cal-Sites	08/08/2005	0.125	0	0	-	-	-	0	0
	SCH	03/13/2013	0.250	0	0	0	-	-	0	0
	Toxic Pits	07/01/1995	0.250	0	0	0	-	-	0	0
	CDL	12/31/2012	TP	0	-	-	-	-	0	0
	US HIST CDL	09/01/2007	TP	0	-	-	-	-	0	0
Other Tanks	CA FID UST	10/31/1994	0.250	0	0	0	-	-	0	0
	HIST UST	10/15/1990	0.125	0	0	-	-	-	0	0
	SWEEPS UST	06/01/1994	0.250	0	0	0	-	-	0	0
Local Land Records	LIENS 2	02/06/2013	TP	0	-	-	-	-	0	0
	LIENS	03/15/2013	TP	0	-	-	-	-	0	0
	DEED	03/11/2013	0.500	0	0	0	0	-	0	0
Spills	HMIRS	12/31/2012	TP	0	-	-	-	-	0	0
	CHMIRS	12/06/2012	TP	0	-	-	-	-	0	0
	LDS	03/18/2013	TP	0	-	-	-	-	0	0
	MCS	03/18/2013	TP	0	-	-	-	-	0	0
Other	RCRA NonGen / NLR	02/12/2013	0.250	0	0	0	-	-	0	0
	DOT OPS	07/31/2012	TP	0	-	-	-	-	0	0
	DOD	12/31/2005	1.000	0	0	0	0	0	0	0
	FUDS	12/31/2011	1.000	0	0	0	0	0	0	0
	CONSENT	12/31/2011	1.000	0	0	0	0	0	0	0
	ROD	12/18/2012	1.000	0	0	0	0	0	0	0
	UMTRA	09/14/2010	0.500	0	0	0	0	-	0	0
	US MINES	02/05/2013	0.250	0	0	0	-	-	0	0
	TRIS	12/31/2009	TP	0	-	-	-	-	0	0
	TSCA	12/31/2006	TP	0	-	-	-	-	0	0
	FTTS	04/09/2009	TP	0	-	-	-	-	0	0
	HIST FTTS	10/19/2006	TP	0	-	-	-	-	0	0

Search Summary Report

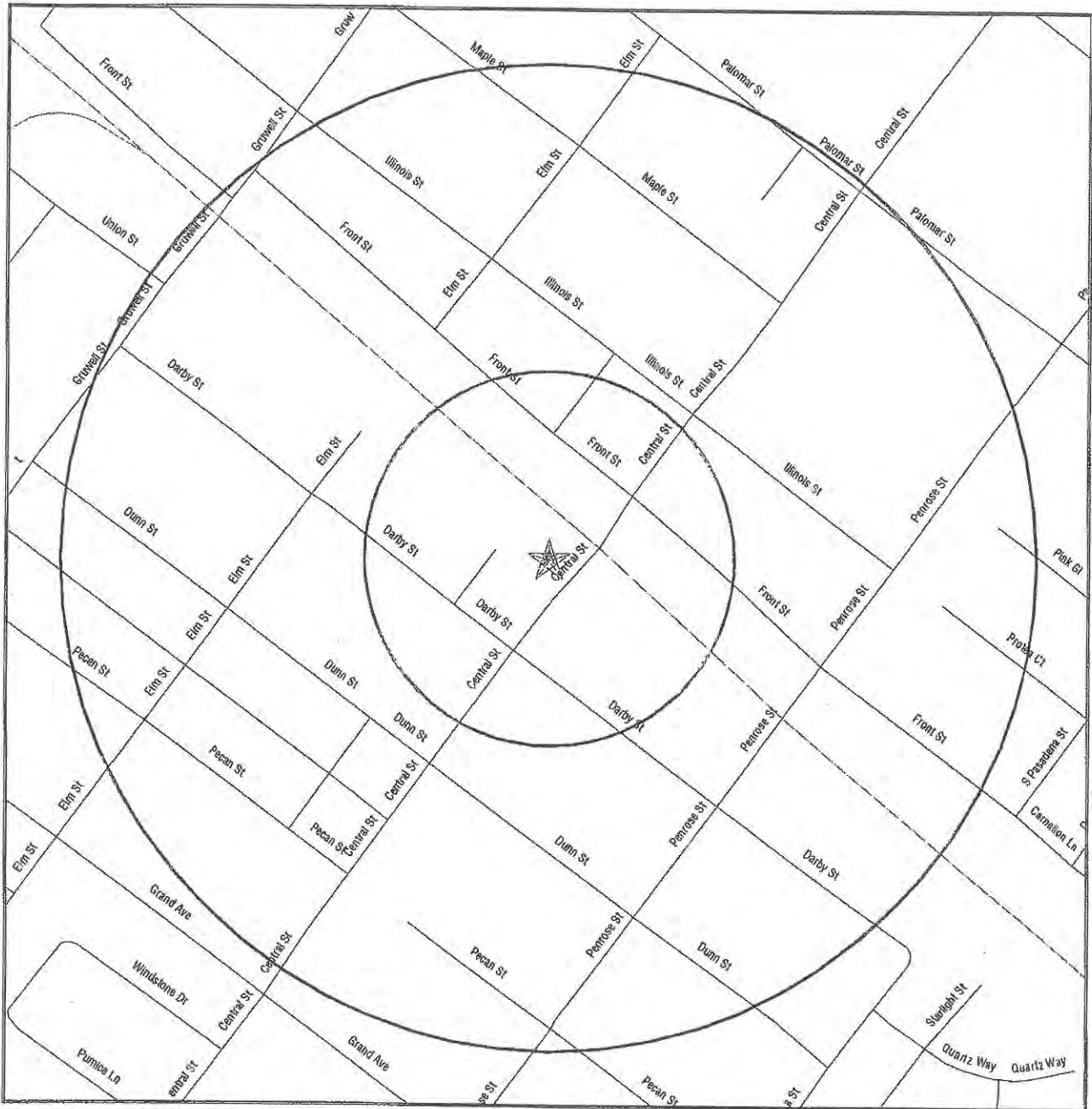
**TARGET SITE: CENTRAL STREET AND FRONT STREET
WILDOMAR, CA 92595**

Category	Database	Update	Radius	Site	1/8	1/4	1/2	> 1/2	ZIP	TOTALS
	SSTS	12/31/2009	TP	0	-	-	-	-	0	0
	ICIS	07/20/2011	TP	0	-	-	-	-	0	0
	PADS	11/01/2012	TP	0	-	-	-	-	0	0
	MLTS	06/21/2011	TP	0	-	-	-	-	0	0
	RADINFO	04/09/2013	TP	0	-	-	-	-	0	0
	FINDS	10/23/2011	TP	0	-	-	-	-	0	0
	RAATS	04/17/1995	TP	0	-	-	-	-	0	0
	RMP	05/08/2012	TP	0	-	-	-	-	0	0
	CA BOND EXP. PLAN	01/01/1989	1.000	0	0	0	0	0	0	0
	UIC	03/05/2013	TP	0	-	-	-	-	0	0
	NPDES	02/18/2013	TP	0	-	-	-	-	3	3
	CUPA Listings		0.125	0	0	-	-	-	0	0
	Notify 65	10/21/1993	0.125	0	0	-	-	-	0	0
	DRYCLEANERS	12/11/2012	TP	0	-	-	-	-	0	0
	WIP	07/03/2009	0.250	0	0	0	-	-	0	0
	ENF	01/08/2013	TP	0	-	-	-	-	0	0
	HAZNET	12/31/2011	TP	0	-	-	-	-	0	0
	EMI	12/31/2008	TP	0	-	-	-	-	0	0
	INDIAN RESERV	12/31/2005	1.000	0	0	0	0	0	0	0
	SCRD DRYCLEANERS	03/07/2011	TP	0	-	-	-	-	0	0
	COAL ASH DOE	12/31/2005	TP	0	-	-	-	-	0	0
	COAL ASH EPA	08/17/2010	0.500	0	0	0	0	-	0	0
	HWT	01/15/2013	0.250	0	0	0	-	-	0	0
	HWP	02/25/2013	1.000	0	0	0	0	0	0	0
	Financial Assurance	03/01/2007	TP	0	-	-	-	-	0	0
	LEAD SMELTERS	01/29/2013	TP	0	-	-	-	-	0	0
	2020 COR ACTION	11/11/2011	0.250	0	0	0	-	-	0	0
	US AIRS	01/23/2013	TP	0	-	-	-	-	0	0
	PRP	12/02/2012	TP	0	-	-	-	-	0	0
	WDS	06/19/2007	TP	0	-	-	-	-	0	0
	EPA WATCH LIST	12/31/2012	TP	0	-	-	-	-	0	0
	US FIN ASSUR	03/04/2013	TP	0	-	-	-	-	0	0
	PCB TRANSFORMER	02/01/2011	TP	0	-	-	-	-	0	0
	PROC	03/18/2013	TP	0	-	-	-	-	0	0
	MWMP	03/06/2013	0.250	0	0	0	-	-	0	0
EDR Exclusive	EDR MGP	08/28/2009	1.000	0	0	0	0	0	0	0
	- Totals --			0	0	0	0	0	5	5

Environmental FirstSearch
 0.25 Mile Radius
 ASTM MAP: RC-RAGEN, ERNS, UST, FED IC/EC, METH LABS



CENTRAL STREET AND FRONT STREET WILDOMAR, CA 92595



Black Rings Represent Qtr. Mile Radius; Red Ring Represents 500 ft. Radius

- ★ Target Property (Latitude: 33.601 Longitude: 117.2756)
- ▲ Identified Sites
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Areas of Concern

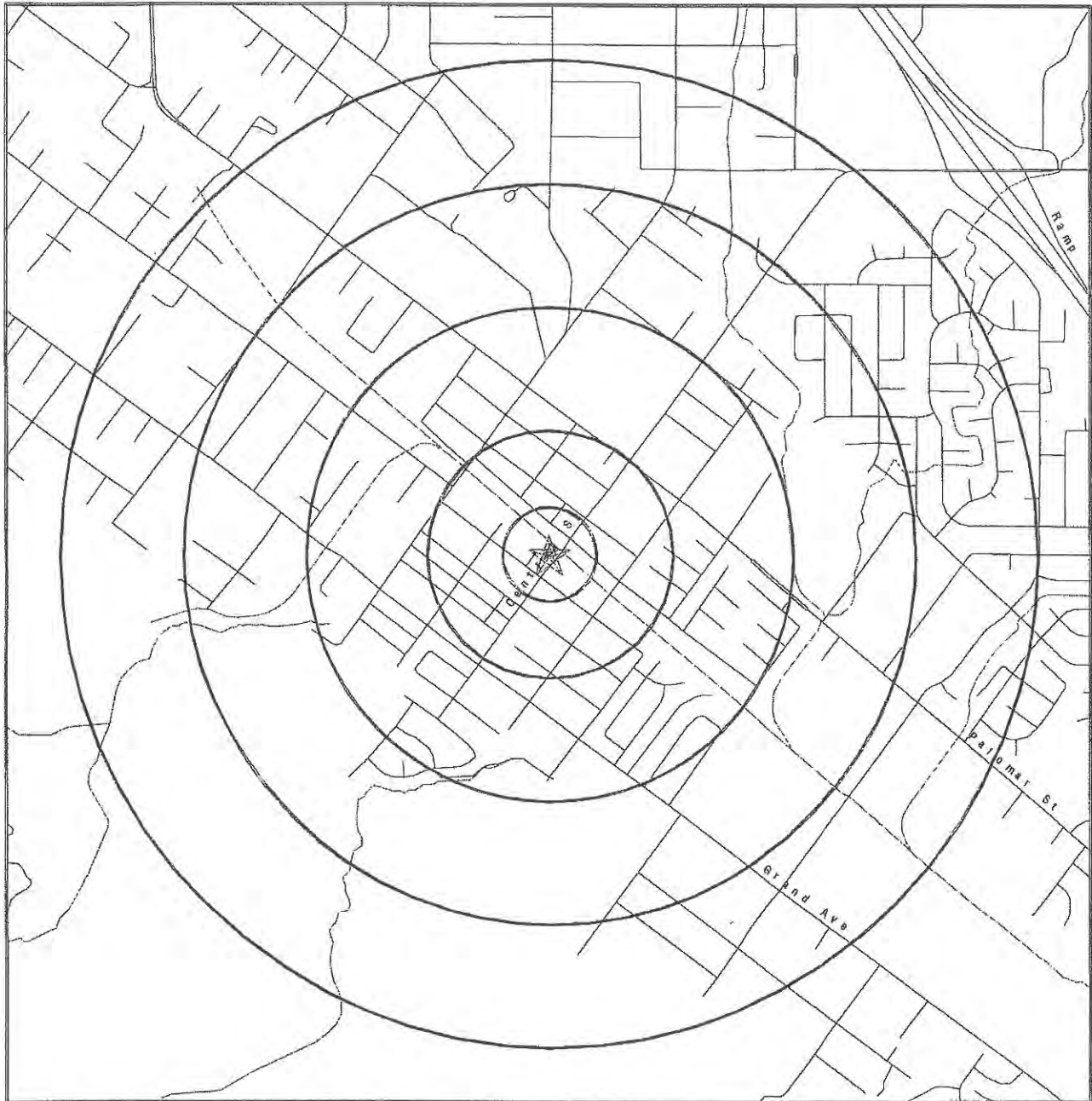
Environmental FirstSearch

1,000 Mile Radius

ASTM MAP: NPL, RCRACOR, STATES Sites



CENTRAL STREET AND FRONT STREET WILDOMAR, CA 92595



Black Rings Represent Qtr. Mile Radius; Red Ring Represents 500 ft. Radius

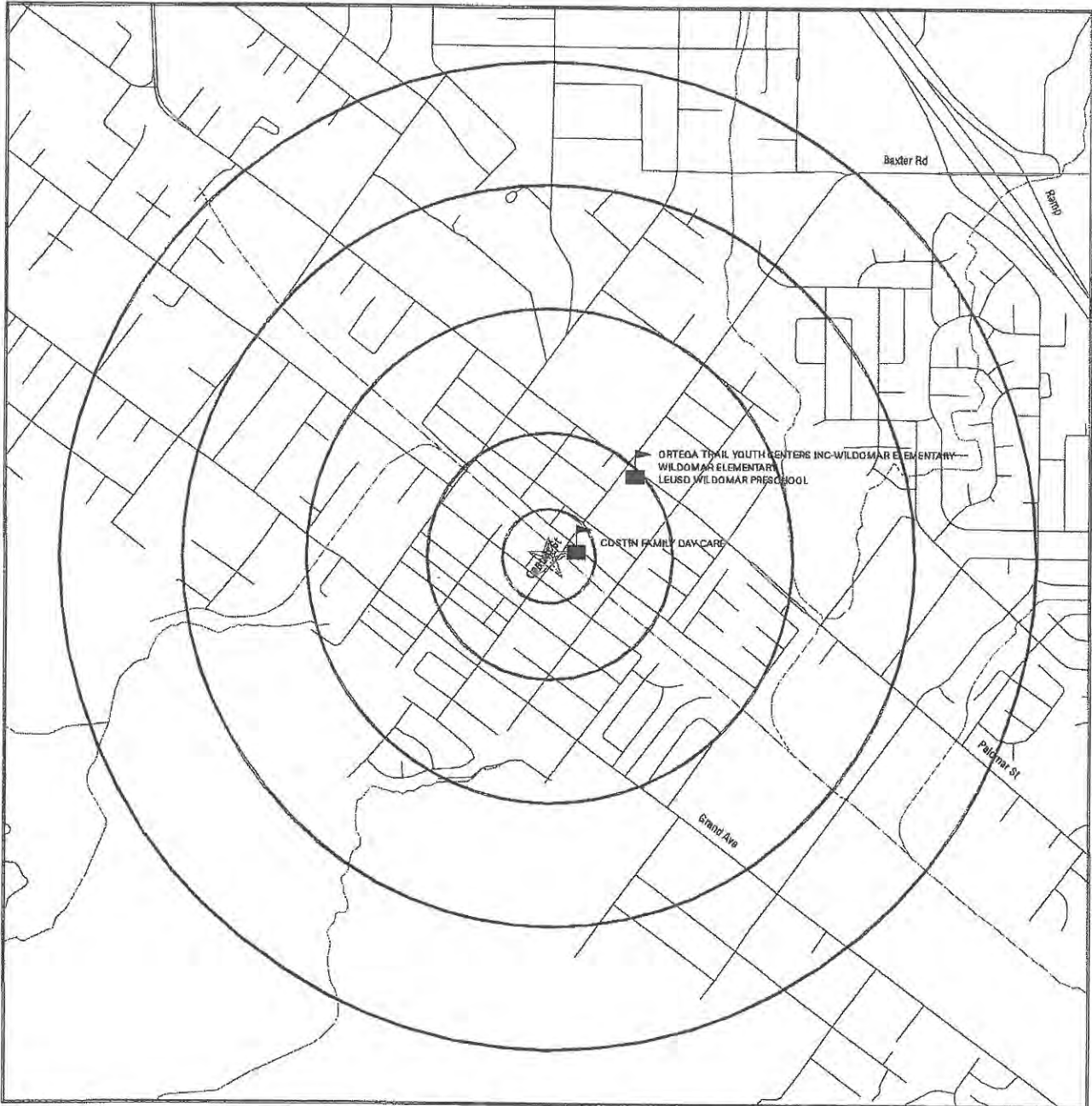
- * Target Property (Latitude: 33.601 Longitude: 117.2756)
- ▲ Identified Sites
- Indian Reservations BIA
- Areas of Concern
- National Priority List Sites
- Dept. Defense Sites

Environmental FirstSearch

1.000 Mile Radius
Non ASTM Map, Spills, FINDS



CENTRAL STREET AND FRONT STREET WILDOMAR, CA 92595



Black Rings Represent Qtr. Mile Radius; Red Ring Represents 500 ft. Radius

- ★ Target Property (Latitude: 33.601 Longitude: 117.2756)
- ▲ Identified Sites
- ⚡ Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- ▨ Indian Reservations BIA
- ▩ Areas of Concern



CENTRAL STREET AND FRONT STREET WILDOMAR, CA 92595



Black Rings Represent Qtr. Mile Radius; Red Ring Represents 500 ft. Radius

- ★ Target Property (Latitude: 33.601 Longitude: 117.2756)
- ▲ Identified Sites
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Areas of Concern

Site Information Report

Request Date: MAY 14, 2013
Request Name: CHRIS HAYDEN

Search Type: COORD
Job Number: NA

Target Site: CENTRAL STREET AND FRONT STREET
 WILDOMAR, CA 92595

Site Location

	<u>Degrees (Decimal)</u>	<u>Degrees (Min/Sec)</u>	<u>UTMs</u>
Longitude:	117.275600	117.2756000 - 117° 16' 32.16"	Easting: 474429.9
Latitude:	33.601000	33.6010000 - 33° 36' 3.60"	Northing: 3717758.0
Elevation:	1249 ft. above sea level		Zone: Zone 11

Demographics

Sites: 0	Non-Geocoded: 5	Population: N/A
RADON:		
Federal EPA Radon Zone for RIVERSIDE County: 2		
Note: Zone 1 indoor average level > 4 pCi/L. : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L. : Zone 3 indoor average level < 2 pCi/L.		

Federal Area Radon Information for RIVERSIDE COUNTY, CA		
Number of sites tested: 12		
<u>Area</u>	<u>Average Activity</u>	<u>% <4 pCi/L</u>
Living Area - 1st Floor	0.117 pCi/L	100%
Living Area - 2nd Floor	0.450 pCi/L	100%
Basement	1.700 pCi/L	100%
		<u>% 4-20 pCi/L</u>
		0%
		0%
		0%
		<u>% >20 pCi/L</u>
		0%
		0%
		0%

Site Information Report

RADON

State Database: CA Radon

Radon Test Results

<u>Zipcode</u>	<u>Num Tests</u>	<u>> 4 pCi/L</u>
92595	5	0

Target Site Summary Report

Target Property: CENTRAL STREET AND FRONT STREET
WILDOMAR, CA 92595

JOB: NA

TOTAL: 5

GEOCODED: 0

NON GEOCODED: 5

Map ID	DB Type --ID/Status	Site Name	Address	Dist/Dir	ElevDiff	Page No.
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No sites found for target address

Sites Summary Report

Target Property: CENTRAL STREET AND FRONT STREET
WILDOMAR, CA 92595

JOB: NA

TOTAL: 5 GEOCODED: 0 NON GEOCODED: 5

Map ID	DB Type --ID/Status	Site Name	Address	Dist/Dir	ElevDiff	Page No.
	NPDES --Terminated	WINCHESTER RD SR 79 STREET IMP	BENTON RD CLINTON KEITH R MURRIETA, CA 92562	NON GC	N/A	N/A
	NPDES --Active	GUAVA STREET IMPROVEMENTS CIP	GUAVA STREET BETWEEN JEFF MURRIETA, CA 92562	NON GC	N/A	N/A
	NPDES --Terminated	FIG STREET CROSSING	NWC JEFFERSON AVE & FIG S MURRIETA, CA 92562	NON GC	N/A	N/A
	ERNS		EAST SIDE OF FILLMORE STR RIVERSIDE COUNTY, CA	NON GC	N/A	N/A
	RCRA-LQG --CAC002612067	RANCHO CALIFORNIA WATER DISTRI	31955 HIGHWAY 79 TEMECULA, CA 92562	NON GC	N/A	N/A

NO SITES FOUND

Database Descriptions

NPL: NPL National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices. NPL - National Priority List Proposed NPL - Proposed National Priority List Sites. NPL LIENS - Federal Superfund Liens.

NPL Delisted: DELISTED NPL The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate. DELISTED NPL - National Priority List Deletions

CERCLIS: CERCLIS CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL. CERCLIS - Comprehensive Environmental Response, Compensation, and Liability Information System FEDERAL FACILITY - Federal Facility Site Information Listing.

NFRAP: CERCLIS-NFRAP Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site. CERCLIS-NFRAP - CERCLIS No Further Remedial Action Planned

RCRA COR ACT: CORRACTS CORRACTS identifies hazardous waste handlers with RCRA corrective action activity. CORRACTS - Corrective Action Report

RCRA TSD: RCRA-TSDF RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste. RCRA-TSDF - RCRA - Treatment, Storage and Disposal

RCRA GEN: RCRA-LQG RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. RCRA-LQG - RCRA - Large Quantity Generators RCRA-SQG - RCRA - Small Quantity Generators. RCRA-CESQG - RCRA - Conditionally Exempt Small Quantity Generators.

Federal IC / EC: US ENG CONTROLS A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or affect human health. US ENG CONTROLS - Engineering Controls Sites List US INST CONTROL - Sites with Institutional Controls. LUCIS - Land Use Control Information System.

ERNS: ERNS Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances. ERNS - Emergency Response Notification System

Database Descriptions

State/Tribal NPL: RESPONSE Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk. RESPONSE - State Response Sites

State/Tribal CERCLIS: ENVIROSTOR The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites. ENVIROSTOR - EnviroStor Database

State/Tribal SWL: SWF/LF (SWIS) Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites. SWF/LF (SWIS) - Solid Waste Information System

State/Tribal LTANKS: LUST REG 8 ORANGE CO. LUST - List of Underground Storage Tank Cleanups. LUST REG 1 - Active Toxic Site Investigation. RIVERSIDE CO. LUST - Listing of Underground Tank Cleanup Sites. LUST - Geotracker's Leaking Underground Fuel Tank Report. LUST REG 7 - Leaking Underground Storage Tank Case Listing. LUST REG 3 - Leaking Underground Storage Tank Database. LUST REG 5 - Leaking Underground Storage Tank Database. SONOMA CO. LUST - Leaking Underground Storage Tank Sites. LUST REG 6V - Leaking Underground Storage Tank Case Listing. LUST REG 4 - Underground Storage Tank Leak List. LUST REG 9 - Leaking Underground Storage Tank Report. LUST REG 2 - Fuel Leak List. VENTURA CO. LUST - Listing of Underground Tank Cleanup Sites. LUST REG 6L - Leaking Underground Storage Tank Case Listing. SAN MATEO CO. LUST - Fuel Leak List. LUST SANTA CLARA - LOP Listing. SAN FRANCISCO CO. LUST - Local Oversight Facilities. SOLANO CO. LUST - Leaking Underground Storage Tanks. NAPA CO. LUST - Sites With Reported Contamination. Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties. NAPA CO. LUST - Leaking Underground Storage Tank Database SLIC - Statewide SLIC Cases. SLIC REG 1 - Active Toxic Site Investigations. SLIC REG 2 - Spills, Leaks, Investigation & Cleanup Cost Recovery Listing. SLIC REG 3 - Spills, Leaks, Investigation & Cleanup Cost Recovery Listing. SLIC REG 4 - Spills, Leaks, Investigation & Cleanup Cost Recovery Listing. SLIC REG 5 - Spills, Leaks, Investigation & Cleanup Cost Recovery Listing. SLIC REG 6V - Spills, Leaks, Investigation & Cleanup Cost Recovery Listing. SLIC REG 6L - SLIC Sites. SLIC REG 7 - SLIC List. SLIC REG 8 - Spills, Leaks, Investigation & Cleanup Cost Recovery Listing. Alameda County CS - Contaminated Sites. Sacramento Co. CS - Toxic Site Clean-Up List. SLIC REG 9 - Spills, Leaks, Investigation & Cleanup Cost Recovery Listing. HIST LUST SANTA CLARA - HIST LUST - Fuel Leak Site Activity Report. SAN DIEGO CO. SAM - Environmental Case Listing. INDIAN LUST R8 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R7 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R6 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R1 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R10 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R9 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R4 - Leaking Underground Storage Tanks on Indian Land.

State/Tribal Tanks: UST Active UST facilities gathered from the local regulatory agencies UST - Active UST Facilities AST - Aboveground Petroleum Storage Tank Facilities. INDIAN UST R8 - Underground Storage Tanks on Indian Land. INDIAN UST R6 - Underground Storage Tanks on Indian Land. INDIAN UST R5 - Underground Storage Tanks on Indian Land. INDIAN UST R4 - Underground Storage Tanks on Indian Land. INDIAN UST R9 - Underground Storage Tanks on Indian Land. INDIAN UST R7 - Underground Storage Tanks on Indian Land. INDIAN UST R10 - Underground Storage Tanks on Indian Land. INDIAN UST R1 - Underground Storage Tanks on Indian Land. FEMA UST - Underground Storage Tank Listing.

State/Tribal VCP: INDIAN VCP R1 INDIAN VCP R7 - Voluntary Cleanup Priority Listing. VCP - Voluntary Cleanup Program Properties. Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs. VCP - Voluntary Cleanup Program Properties

Database Descriptions

US Brownfields: US BROWNFIELDS Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups In My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs. US BROWNFIELDS - A Listing of Brownfields Sites

Other SWF: DEBRIS REGION 9 ODI - Open Dump Inventory. An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria. ODI - Open Dump Inventory VENTURA CO. LF - Inventory of Illegal Abandoned and Inactive Sites. SAN DIEGO CO. LF - Solid Waste Facilities. CA LA LF - City of Los Angeles Landfills. LOS ANGELES CO. LF - List of Solid Waste Facilities. WMUDS/SWAT - Waste Management Unit Database. SWRCY - Recycler Database. HAULERS - Registered Waste Tire Haulers Listing. INDIAN ODI - Report on the Status of Open Dumps on Indian Lands.

Other Haz Sites: US CDL A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments. US CDL - Clandestine Drug Labs HIST CAL-SITES - Calsites Database. SCH - School Property Evaluation Program. TOXIC PITS - Toxic Pits Cleanup Act Sites. AOCONCERN - San Gabriel Valley Areas of Concern. CDL - Clandestine Drug Labs. SAN DIEGO CO. HMMD - Hazardous Materials Management Division Database. US HIST CDL - National Clandestine Laboratory Register.

Other Tanks: CA FID UST The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data. CA FID UST - Facility Inventory Database ALAMEDA CO. UST - Underground Tanks. KERN CO. UST - Underground Storage Tank Sites & Tank Listing. MARIN CO. UST - Underground Storage Tank Sites. NAPA CO. UST - Closed and Operating Underground Storage Tank Sites. ORANGE CO. UST - List of Underground Storage Tank Facilities. RIVERSIDE CO. UST - Underground Storage Tank Tank List. SAN FRANCISCO CO. UST - Underground Storage Tank Information. SOLANO CO. UST - Underground Storage Tanks. SUTTER CO. UST - Underground Storage Tanks. VENTURA CO. UST - Underground Tank Closed Sites List. YOLO CO. UST - Underground Storage Tank Comprehensive Facility Report. EL SEGUNDO UST - City of El Segundo Underground Storage Tank. LONG BEACH UST - City of Long Beach Underground Storage Tank. UST SAN JOAQUIN - San Joaquin Co. UST. UST MENDOCINO - Mendocino County UST Database. TORRANCE UST - City of Torrance Underground Storage Tank. HIST UST - Hazardous Substance Storage Container Database. SWEEPS UST - SWEEPS UST Listing.

Local Land Records: LIENS 2 A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties. LIENS 2 - CERCLA Lien Information LIENS - Environmental Liens Listing. DEED - Deed Restriction Listing.

Spills: HMIRS Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT. HMIRS - Hazardous Materials Information Reporting System CHMIRS - California Hazardous Material Incident Report System. LDS - Land Disposal Sites Listing. MCS - Military Cleanup Sites Listing. Orange Co. Industrial Site - List of Industrial Site Cleanups.

Database Descriptions

Other: RCRA NonGen / NLR RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste. RCRA NonGen / NLR - RCRA - Non Generators DOT OPS - Incident and Accident Data. DOD - Department of Defense Sites. FUDS - Formerly Used Defense Sites. CONSENT - Superfund (CERCLA) Consent Decrees. ROD - Records Of Decision. UMTRA - Uranium Mill Tailings Sites. US MINES - Mines Master Index File. TRIS - Toxic Chemical Release Inventory System. TSCA - Toxic Substances Control Act. FTTS - FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act). FTTS INSP - FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act). HIST FTTS - FIFRA/TSCA Tracking System Administrative Case Listing. HIST FTTS INSP - FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing. SSTS - Section 7 Tracking Systems. ICIS - Integrated Compliance Information System. PADS - PCB Activity Database System. MLTS - Material Licensing Tracking System. RADINFO - Radiation Information Database. FINDS - Facility Index System/Facility Registry System. RAATS - RCRA Administrative Action Tracking System. RMP - Risk Management Plans. BRS - Biennial Reporting System. CA BOND EXP. PLAN - Bond Expenditure Plan. UIC - UIC Listing. NPDES - NPDES Permits Listing. CUPA - CUPA Resources List. CUPA IMPERIAL - CUPA Facility List. CUPA MONO - CUPA Facility List. SAN JOSE HAZMAT - Hazardous Material Facilities. CONTRA COSTA CO. SITE LIST - Site List. CUPA SANTA BARBARA - CUPA Facility Listing. CUPA MONTEREY - CUPA Facility Listing. CUPA SANTA CRUZ - CUPA Facility List. CUPA MERCED - CUPA Facility List. CUPA SAN LUIS OBISPO - CUPA Facility List. CUPA SHASTA - CUPA Facility List. CUPA HUMBOLDT - CUPA Facility List. CUPA INYO - CUPA Facility List. CUPA FRESNO - CUPA Resources List. PLACER CO. MS - Master List of Facilities. CUPA DEL NORTE - CUPA Facility List. CUPA SONOMA - CUPA Facility List. CUPA TUOLUMNE - CUPA Facility List. CUPA LAKE - CUPA Facility List. CUPA SANTA CLARA - CUPA Facility List. CUPA CALVERAS - CUPA Facility Listing. CUPA AMADOR - CUPA Facility List. CUPA KINGS - CUPA Facility List. CUPA MADERA - CUPA Facility List. CUPA NEVADA - CUPA Facility List. CUPA BUTTE - CUPA Facility Listing. CUPA COLUSA - CUPA Facility List. CUPA YUBA - CUPA Facility List. CUPA EL DORADO - CUPA Facility List. NOTIFY 65 - Proposition 65 Records. LA Co. Site Mitigation - Site Mitigation List. DRYCLEANERS - Cleaner Facilities. VENTURA CO. BWT - Business Plan, Hazardous Waste Producers, and Operating Underground Tanks. WIP - Well Investigation Program Case List. LOS ANGELES CO. HMS - HMS: Street Number List. ENF - Enforcement Action Listing. San Mateo Co. BI - Business Inventory. Sacramento Co. ML - Master Hazardous Materials Facility List. San Bern. Co. Permit - Hazardous Material Permits. HAZNET - Facility and Manifest Data. EMI - Emissions Inventory Data. INDIAN RESERV - Indian Reservations. SCR DRYCLEANERS - State Coalition for Remediation of Drycleaners Listing. FEDLAND - Federal and Indian Lands. WDS - Waste Discharge System. LEAD SMELTER 2 - Lead Smelter Sites. US AIRS (AFS) - Aerometric Information Retrieval System Facility Subsystem (AFS). US AIRS MINOR - Air Facility System Data. US FIN ASSUR - Financial Assurance Information. EPA WATCH LIST - EPA WATCH LIST. PRP - Potentially Responsible Parties. 2020 COR ACTION - 2020 Corrective Action Program List. MWMP - Medical Waste Management Program Listing. COAL ASH DOE - Steam-Electric Plan Operation Data. Financial Assurance 1 - Financial Assurance Information Listing. Financial Assurance 2 - Financial Assurance Information Listing. LEAD SMELTER 1 - Lead Smelter Sites. MED WASTE VENTURA - Medical Waste Program List. COAL ASH EPA - Coal Combustion Residues Surface Impoundments List. HWP - EnviroStor Permitted Facilities Listing. HWT - Registered Hazardous Waste Transporter Database. PROC - Certified Processors Database. PCB TRANSFORMER - PCB Transformer Registration Database.

EDR Exclusive: EDR MGP The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination. EDR MGP - EDR Proprietary Manufactured Gas Plants

Database Sources

NPL: EPA

Updated Quarterly

NPL Delisted: EPA

Updated Quarterly

CERCLIS: EPA

Updated Quarterly

NFRAP: EPA

Updated Quarterly

RCRA COR ACT: EPA

Updated Quarterly

RCRA TSD: Environmental Protection Agency

Updated Quarterly

RCRA GEN: Environmental Protection Agency

Updated Quarterly

Federal IC / EC: Environmental Protection Agency

Varies

ERNS: National Response Center, United States Coast Guard

Updated Annually

State/Tribal NPL: Department of Toxic Substances Control

Updated Quarterly

State/Tribal CERCLIS: Department of Toxic Substances Control

Updated Quarterly

State/Tribal SWL: Department of Resources Recycling and Recovery

Updated Quarterly

State/Tribal LTANKS: California Regional Water Quality Control Board Victorville Branch Office (6)

No Update Planned

Database Sources

State/Tribal Tanks: SWRCB

Updated Semi-Annually

State/Tribal VCP: Department of Toxic Substances Control

Updated Quarterly

US Brownfields: Environmental Protection Agency

Updated Semi-Annually

Other SWF: EPA, Region 9

No Update Planned

Other Haz Sites: Drug Enforcement Administration

Updated Quarterly

Other Tanks: California Environmental Protection Agency

No Update Planned

Local Land Records: Environmental Protection Agency

Varies

Spills: U.S. Department of Transportation

Updated Annually

Other: Environmental Protection Agency

Varies

EDR Exclusive: EDR, Inc.

No Update Planned

Street Name Report for Streets near the Target Property

Target Property: CENTRAL STREET AND FRONT STREET
WILDOMAR, CA 92595

JOB: NA

Street Name	Dist/Dir	Street Name	Dist/Dir
Alley	0.06 North		
Central St	0.02 SE		
Darby St	0.05 SW		
Driveway	0.21 NNE		
Dunn St	0.12 SW		
Elm St	0.12 WNW		
Front St	0.05 NE		
Gruwell St	0.24 NW		
Illinois St	0.10 NE		
Maple St	0.18 NE		
Palomar St	0.25 NE		
Pecan St	0.19 SW		
Penrose St	0.14 SE		
Pink Ginger Ct	0.23 East		
Protea Ct	0.20 East		
Union St	0.24 NW		

APPENDIX E
STATEMENT OF QUALIFICATIONS
FOR HEI CORPORATION

HEI CORPORATION

HEI Corporation or Hayden Environmental was established in 1992 to respond to a need that exists in the environmental industry. There were many outstanding "full service" environmental firms in Southern California. Very few, however, specialized in performing Phase I Environmental Site Assessments (ESA's). For many firms, the ESA was and is approached as a way of positioning themselves to get any additional work recommended therein. This had led many to recognize the inherent conflict of interest that this represents. Hayden Environmental eliminates this potential conflict in that no other environmental services are offered.

Hayden Environmental recognizes the importance of an ESA. The company was formed with the expressed purpose of providing the best, most complete, most thoroughly researched report available. At Hayden Environmental, our fees are always competitive. Also, because we are not in the business of conducting Site Investigations (phase II's) there is no undue incentive to recommend them.

Our assessments are grounded in a solid understanding of the primary function of an ESA. Liability for environmental contamination can be expensive and time consuming in the extreme. While there is no guarantee that it will, an ESA is designed to allow a party coming into possession of real property, either as a tenant, buyer or lender forced to foreclose, to avail themselves of the "innocent landowner" defense. ESA's can also be a very valuable tool for an owner or tenant to establish a baseline condition of a property proper to the commencement of a lease.

Hayden Environmental has researched the law and has a complete understanding of the appropriate inquiry needed to utilize this defense. Additionally, Hayden Environmental adheres to the standards for environmental assessments promulgated by the ASTM Designation E 1527-05.

All Hayden Environmental Phase I assessments will include these five basic components:

- Subject property inspection and surrounding property observation
- Federal and state environmental database review
- County and /or local government record review
- Historical use (aerial photograph, Sanborn maps, archive cross directories) review
- Interviews with the current and former owners and occupants of the subject property

Hayden Environmental is fully insured, with policy coverage of \$2,000,000 for Professional Liability and \$1,000,000 for General Liability.

CHRISTOPHER M. HAYDEN

Chris Hayden, REA, has been in the environmental field since 1991. He began with a large multinational firm as the regional sales and marketing representative for Western U.S. He dealt primarily with firms in the energy, mining and real estate development fields. Seeking to broaden his "hands on" experience, he began working with a local firm in 1992. While there, he had the opportunity to work on a variety of projects, including environmental site assessments and site investigations. Seeing the need for a firm that specialized in conducting reliable, thorough and reasonably priced environmental site assessments while avoiding potential conflicts of interest, he formed Hayden Environmental in 1992. Hayden, through his years of experience, has earned the designation of Environmental Professional (EP) as defined in Section 40 C.F.R. § 312.10(b).

Mr. Hayden also serves on the ASTM E50 Committee which reviews, revises and enforces the standards for environmental assessments currently promulgated by the ASTM Designation E 1527-05.

Prior to 1991 Hayden had been in the real estate industry for twelve years. He last worked as an industrial real estate broker with Grubb & Ellis in Newport Beach, CA.

Hayden has a Bachelors of Arts in Biology from Humboldt State University in Arcata, California. He has taken several classes in the Environmental Site Investigation and Remediation Certificated program at the University of California at Irvine.

ENVIRONMENTAL COURSES/SEMINARS COMPLETED

40 Hour HazMat Health and Safety Training

ASTM Standards Technology Training in Phase I Site Assessments for Environmental Professionals

Principles of Hazardous Materials Management

Regulatory Framework of Hazardous and Toxic Substances

Groundwater Hydrology: Monitoring, Protection and Clean-up

The Site Investigation and Remedial Feasibility Process

The Site Remediation Process for Hazardous Substance Impacts

Environmental Aspects of Soils Engineering and Geology

Innovative Soils Gas Monitoring and Remediation Applications

A Partial List of Clients Includes:

CLIENT	CLIENT
Commerce National Bank	First California Bank
Bank of America	Comerica Bank
Bank of Internet/Apartmentbank	U. S. Trust Co.
Orange County Business Bank	FDIC as Receiver for 1st Centennial Bank
First Security Bank	Bank of Orange County
Pacific Enterprise Bank	PFF Bank & Trust
Community Bank	Southland EDC
American Security Bank	Wells Fargo
California Bank & Trust	Investment Building Group (IBG)
Farmers & Merchants Trust	Messenger Investment Company
Spectrum Commercial Lending	The Koll Company
City National Bank	Steadfast Companies
Palm Desert National Bank	Shaw Properties
1st Capital Bank	Rexco Real Estate Development
California Statewide CDC	Cardinal Development Company
First American Bank	Lord Constructors
Hamni Bank	Caribou Industries
First Foundation Bank	Western National Realty Advisors
Sun Country Bank	Sares-Regis Group
Union Bank of California	Gilmore Associates
Bank of China	Aardex Corporation
Foothill Independent Bank	Arlen Capital
Dynex Financial, Inc.	Martin Building Company
Silvergate Bank	NPL Construction Co.
Finova Corporation	Carmenita Investment Properties
ARCS Commercial Mortgage	The Davidson Group
GE Financial Corporation	National Golf Properties
Sanwa Bank	Nextel Communications
BBVA Compass	Coca Cola Enterprises
First Union Small Business Capital	General Telephone Company
California Republic Bank	Intuit
Bank One	Rockwell International
Sun Life of America	Pacific Sales
Kansas City Life Insurance	University of Southern California
City of Los Angeles CRA	Pepperdine University

REFERENCES

Lender

Ms. Nancy Russell
Vice President
Commerce National Bank
4040 MacArthur Blvd., Suite 100
Newport beach, CA 92660
T.: 949/474-1020
E.: nrussell@commercenatbank.com

Mr. Glenn P. Cheshire
Vice President
Orange County Business Bank
17901 Von Karman Avenue, Suite 100
Irvine, CA 92614
T.: 949/221-0001
E.: gcheshire@ocbusinessbank.com

Real Estate Developer

Mr. Robert Murray
President
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18100 Von Karman Avenue, Suite 500
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E.: bmurray@steadfastcompanies.com

Real Estate Brokers

Mr. Tim Hawke
President
Strata Realty
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Corona, CA 92880
T.: 951/280-1733
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Mr. Michael Halliday
Del Mar Commercial Real Estate Services
10300 Fourth St., Suite 100
Rancho Cucamonga, CA 91730
T.: 909/945-4596
W.: www.mikehal@delmar1.com

APPENDIX 7: PRELIMINARY HYDROLOGY STUDY

**PRELIMINARY
HYDROLOGY STUDY
FOR
TR 33840
CITY OF WILDOMAR**



PREPARED BY

RDS And Associates

Civil Engineering
Project Management
Construction Management

RICH SOLTYSIAK

RCE No. 37233

MAY 7, 2013

I. BACKGROUND

TR 33840 proposes to subdivide 4.07 acres into 15 residential lots under R-1 Zoning requirements. The project site is located in the City of Wildomar and bordered by Wildomar Channel to the northeast, Gruwell Street to the northwest, Central Street to the southeast, and existing homes to the southwest. The site is presently zoned rural residential, vacant, and unimproved.

Existing Drainage

The project site is currently vacant, unimproved, and covered with natural vegetation. The site drains by overland flow generally from the northeast border of Gruwell Street to the southwest to Central Street. Central Street in turn drains directly into Wildomar Channel. For information purposes, the existing drainage flows discharged off site for the undeveloped condition was calculated to be 3.5 cfs and 6.1 cfs for the 10-year and 100-year storms respectively.

Proposed Drainage

The storm run off from the developed residential site will be directed to the proposed internal private street, "A" Street. "A" Street will convey flows via rolled curb and gutter southwesterly to the cul-de-sac adjacent to Central Street. Flows within the cul-de-sac will be directed to a low point fronting lot 15 adjacent to the property line with lot 14. The low point within Street "A" will be conveyed thorough a vegetated swale BMP within lot 15. The filtered flows from the vegetated swale will then outlet to Wildomar Channel via a grated inlet and 24" RCP. The existing drainage flows discharged into Wildomar Channel for the developed condition was calculated to be 5.3 cfs and 8.7 cfs for the 10-year and 100-year storms respectively.

Private Street "A", the vegetated swale, and the outlet to Wildomar Channel will be owned and maintained by the projects Home Owner Association.

Drainage from the Project will be discharged directly to a publicly-owned, operated and maintained MS4; the discharge will be in full compliance with Riverside County Flood Control requirements for connections and discharges to the MS4; the discharge will not significantly impact stream habitat in proximate; and the discharge will be authorized by

the Flood Control District via encroachment permit. Therefore detention of the developed flows versus existing flows will not be required by the Riverside County Flood Control District as part of this project.

II. PURPOSE OF STUDY

This hydrology report is intended to support the approval of TR 33840 from a drainage perspective.

III. METHODOLOGY

The hydrology report incorporates a CivilCADD/Civil Design Computer Program based on the Riverside County Flood Control and Water Conservation Rational Method Hydrology. This computer program requires input data for rainfall, soil type, type of development, and topographic data for the study area.

The Riverside County Flood Control District Hydrology Manual establishes drainage criteria as follows and as depicted in the attached exhibit:

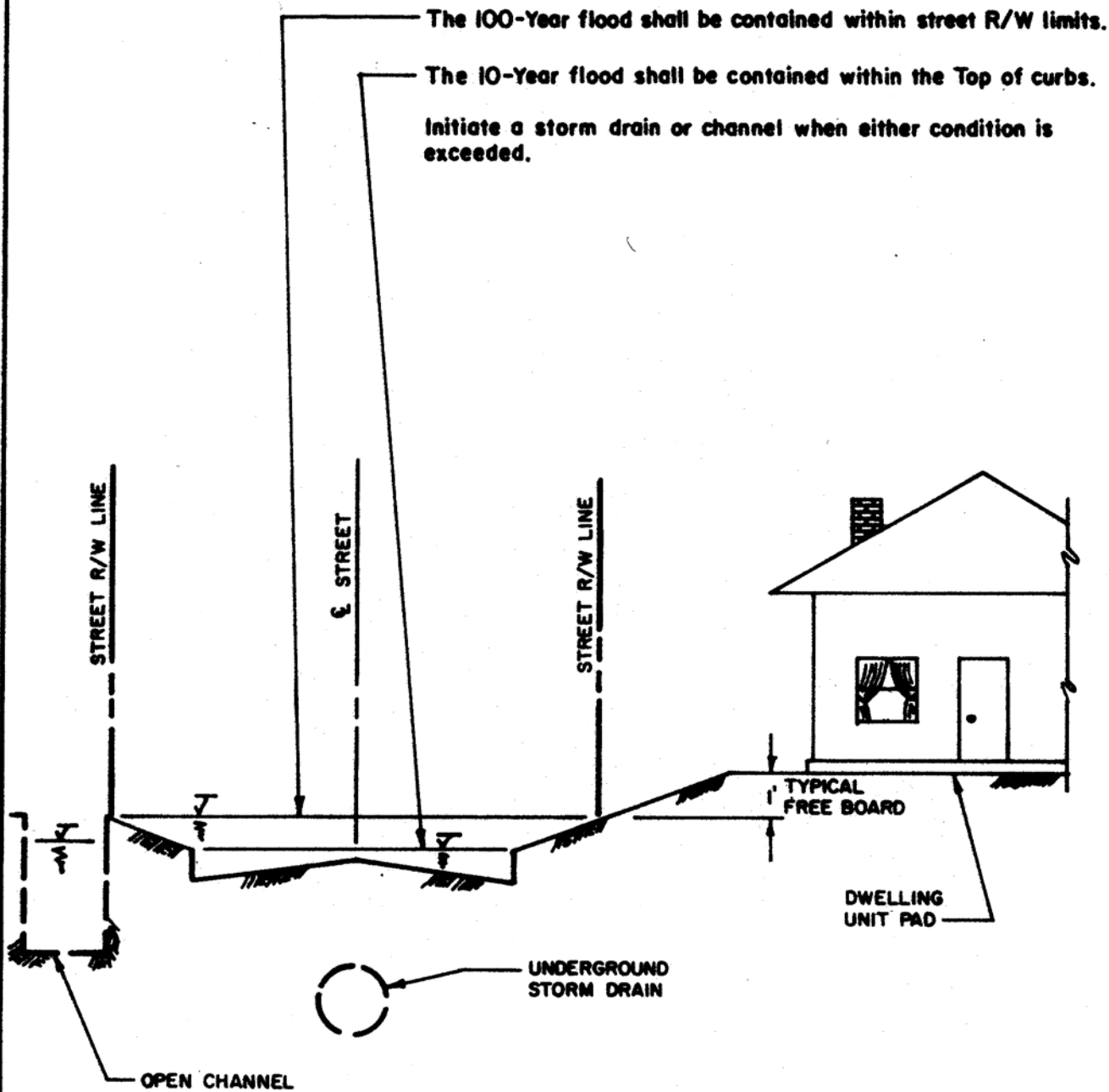
- 10-yr storm to be contained in curb and gutter.
- 100-yr storm to be contained within road right-of way

Rainfall Data: Standard intensity-duration curve data generated from Plate D-4.1 of the Riverside County Flood Control and Water Conservation Rational Hydrology Manual for the Lake Elsinore-Wildomar area was used.

Soil Type Data: The soil type was obtained from the Hydrologic Soils Group Map within the Riverside County Flood Control and Water Conservation Rational Hydrology Manual. A copy of this map (Plate 1.51) is included within this report. The soil type obtained from the Hydrologic Soils Group Map was determined to be type B.

Type of Development: The project site is planned for R-1 residential development. Therefore the hydrology report incorporates factors that generate discharges representing single family residential type development.

Topographic Data: The Hydrology Map, Exhibit defines the subareas and contains information used as the basis of generating the project hydrology study.

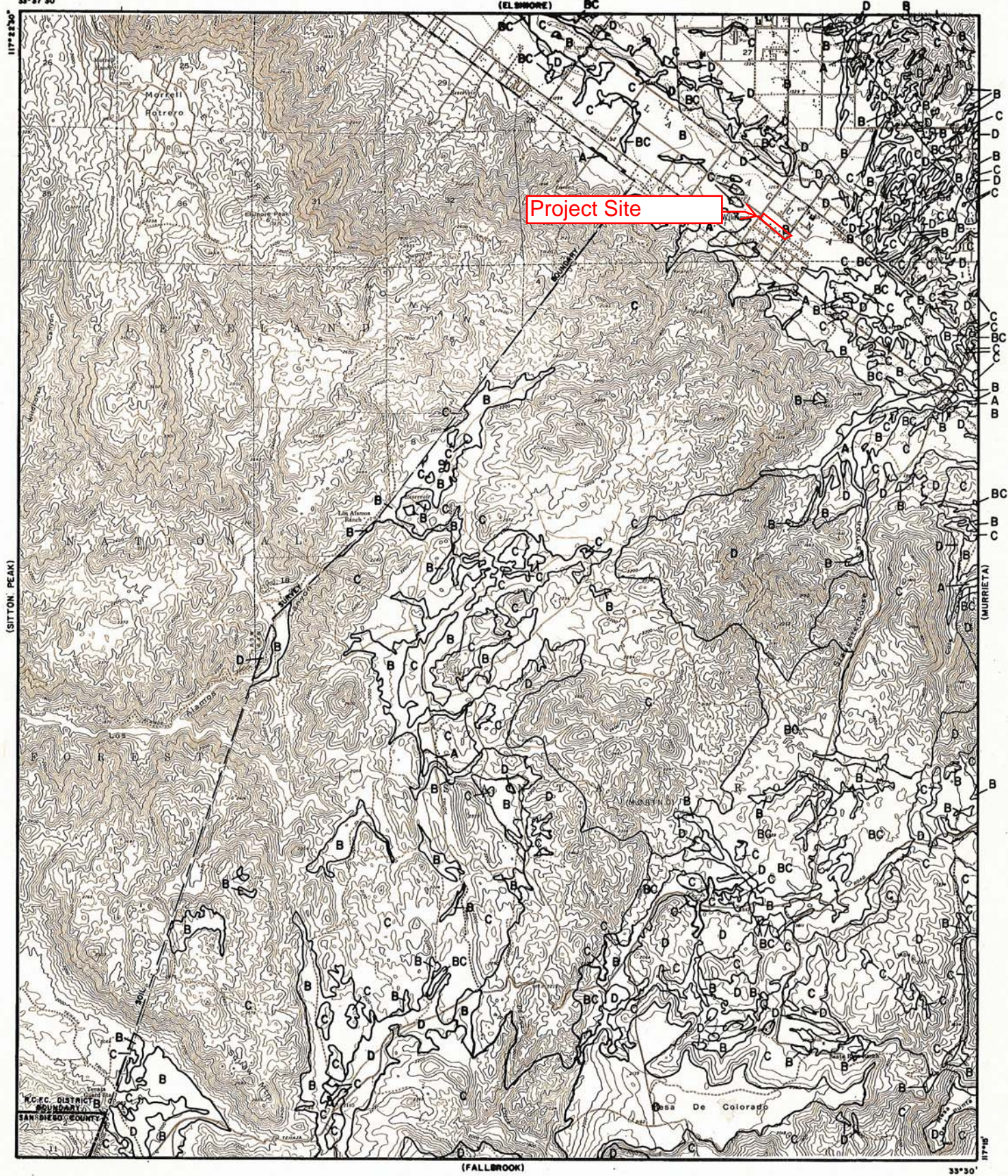


NOTES:

Protection criteria shown are the Districts typical minimum requirements. Special conditions, or other authorities may require stricter controls; ie; for reasons of traffic or pedestrian safety, maintenance problems behind curbs, etc., lower maximum depths of flow in streets may be required. Also see Riv. Co. Ord. No. 460.

RCFC & WCD
HYDROLOGY MANUAL

**FLOOD PROTECTION
CRITERIA**



LEGEND

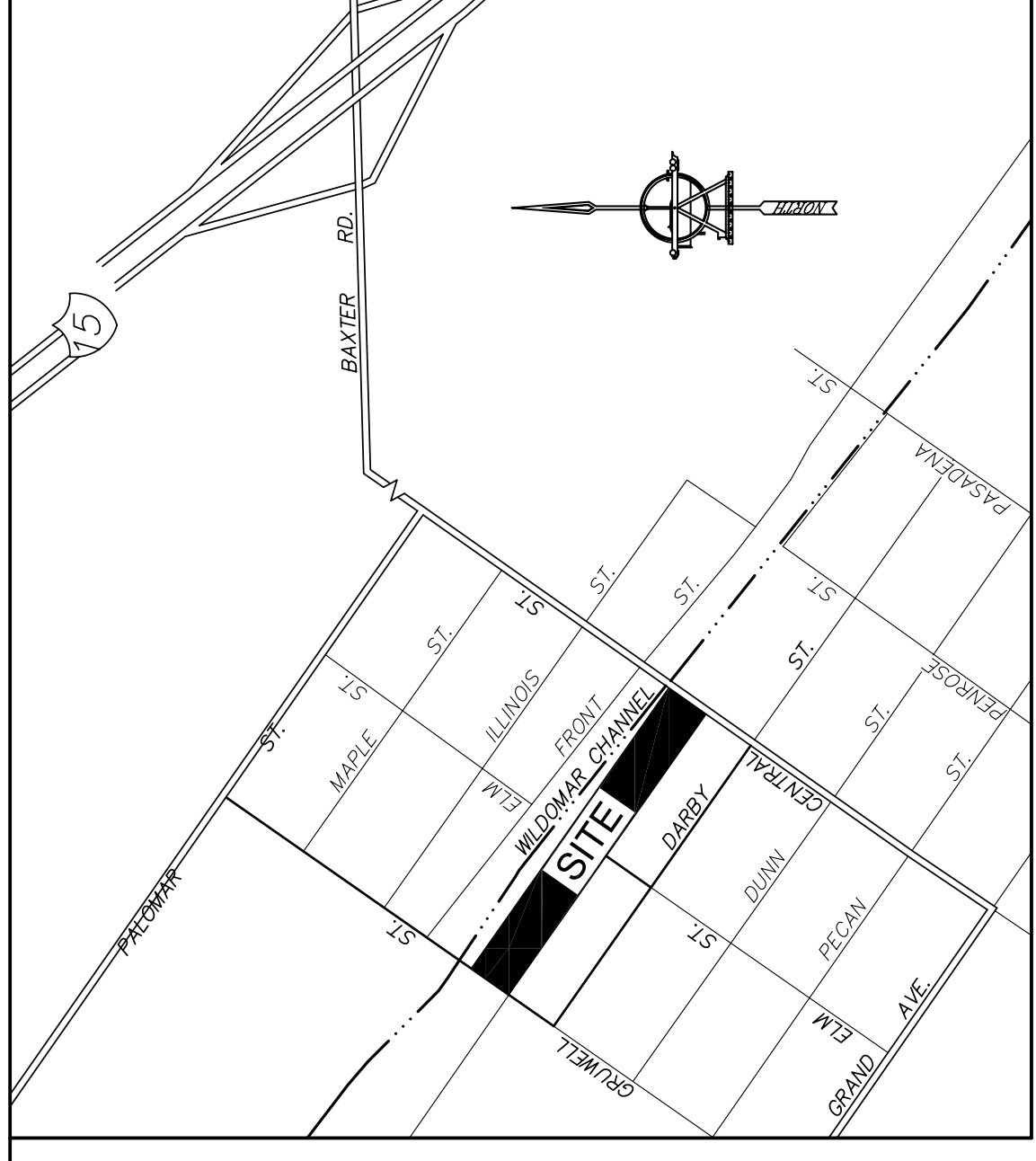
— SOILS GROUP BOUNDARY
 A SOILS GROUP DESIGNATION

RCFC & WCD
 HYDROLOGY MANUAL

0 FEET 5000

**HYDROLOGIC SOILS GROUP MAP
 FOR
 WILDOMAR**

TENTATIVE TRACT MAP NO. 33840 HYDROLOGY MAP



VICINITY MAP:

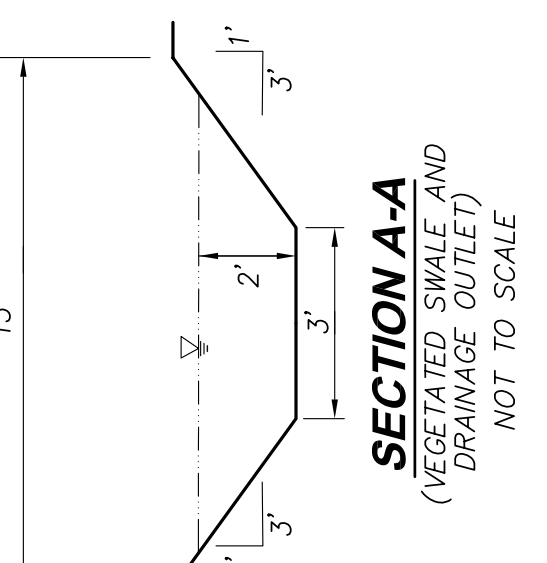
NO SCALE
RIVERSIDE & ORANGE COUNTY
THOMAS GUIDE 2006 PAGE 897, B-7

APPLICANT/OWNERS:
ZAREH HOKASIAN
7245 WILDOMAR ROAD
FRANKLIN, TN 37064
TEL: (615) 838-4820
FAX: (909) 768-4401

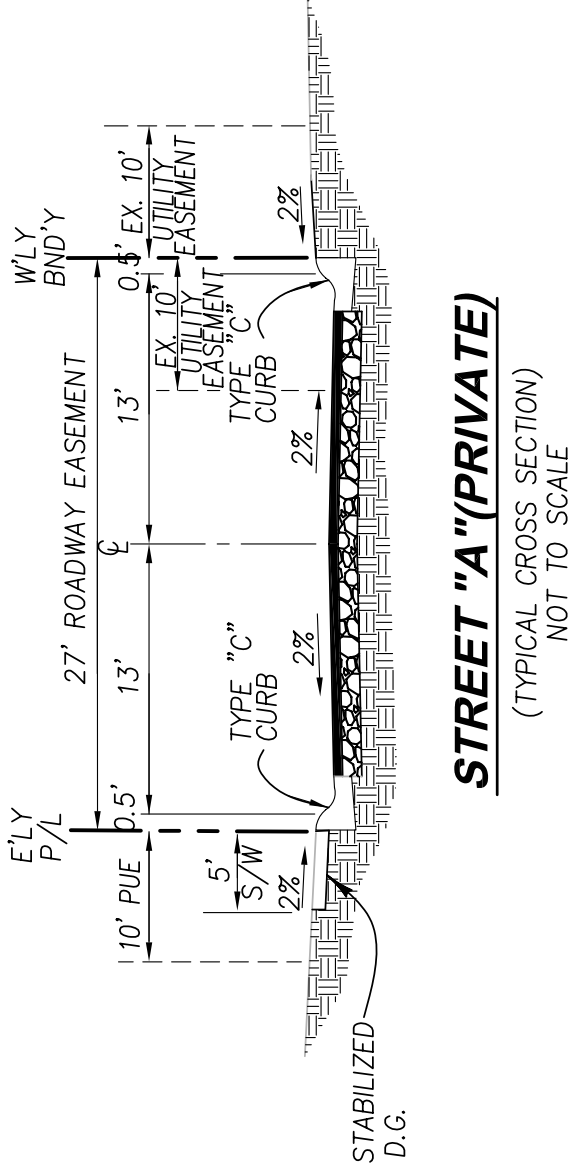
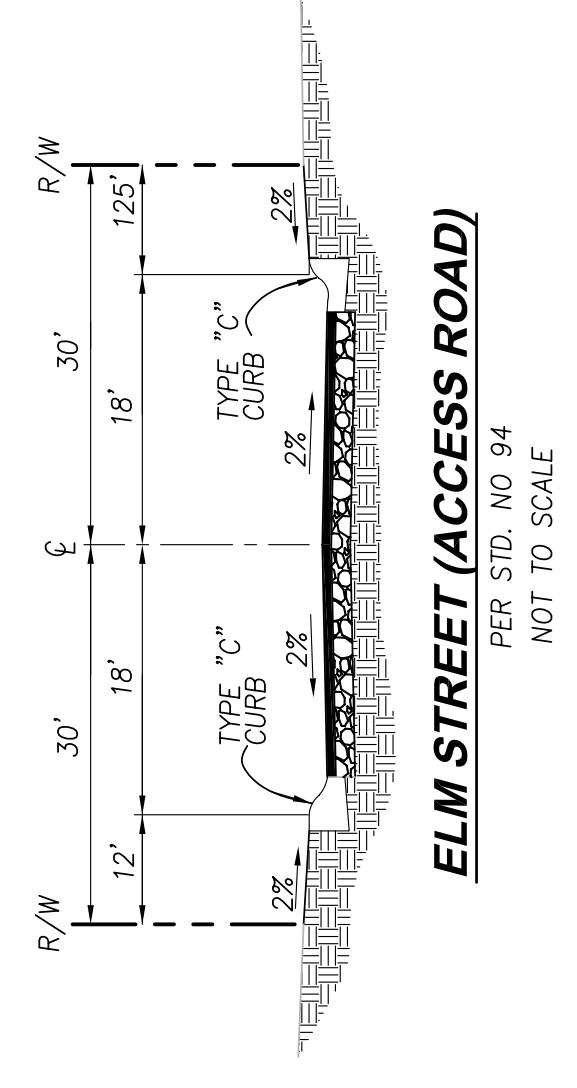
ENGINEER:
RDS AND ASSOCIATES
30519 WALLEA CL
TEMECULA, CA 92592
PH: (951) 891-7706

SITE ADDRESS:
ELM ST
WILDOMAR CA

A.P.N.:
376-043-027



TO WILDOMAR CHANNEL
Q10 = 5.3 CFS
Q100 = 19.7 CFS
Q1000 = 6.7 CFS



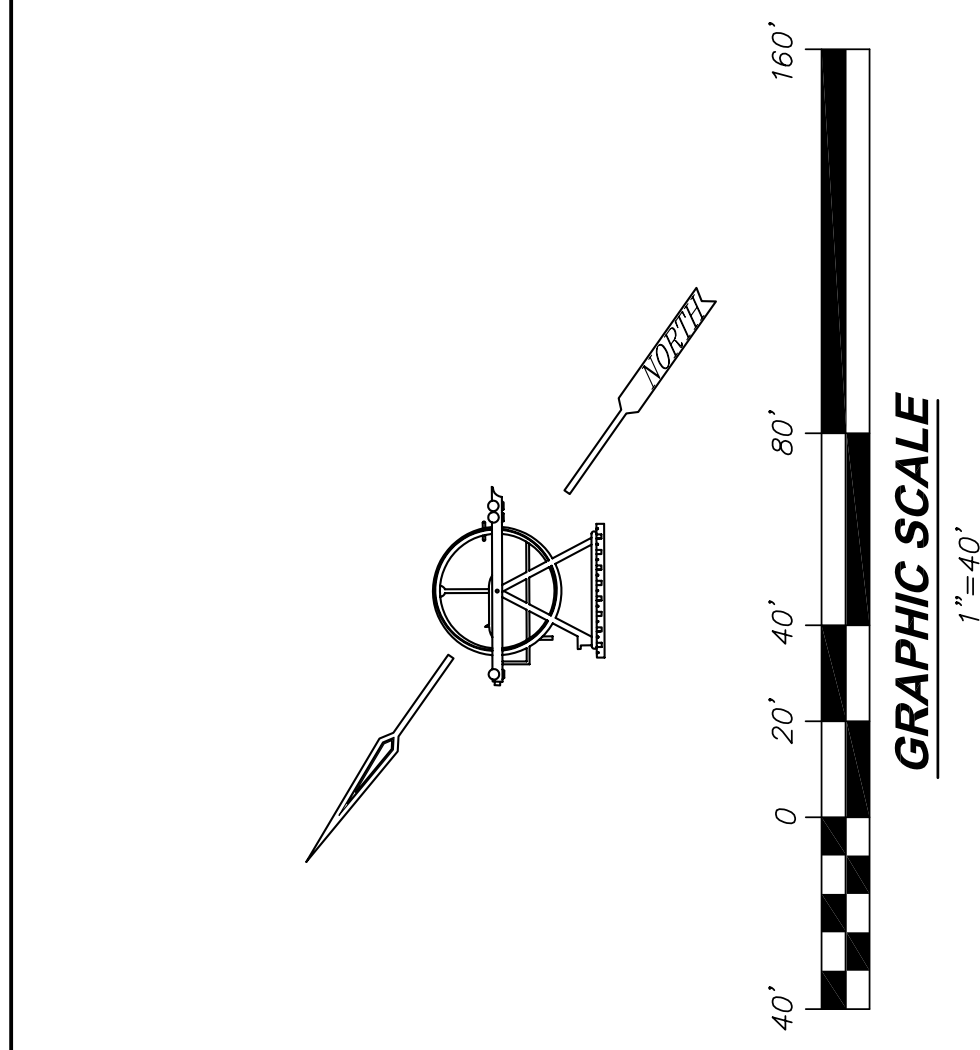
- LEGEND:**
- SUBAREA DESIGNATION
 - SUBAREA ACREAGE
 - NODE NUMBER DESIGNATION
 - SUBAREA BOUNDARY
 - FLOWPATH DIRECTION
 - FLOWPATH LENGTH THROUGH SUBAREA

DATE	REVISIONS

RDS & ASSOCIATES
30519 WALLEA CL
TEMECULA, CA 92592
PH: 951.891.7706

CITY OF WILDOMAR
HYDROLOGY MAP
TENTATIVE TRACT MAP 33840
APN# 376-043-027

SERV. AREA
#2: 1019-01
C.O.
COORD.
SHT. 1 of 1
MAY 2013



10 YEAR STORM
ULTIMATE CONDITIONS

Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2001 Version 6.4
Rational Hydrology Study Date: 05/02/13 File:hookdevc10.out

Wildomar Tr 33840
Preliminary Hydrology
10-yr Rational Method
Developed Condition

***** Hydrology Study Control Information *****

English (in-lb) Units used in input data file

RDS Associates, Temecula, CA - S/N 936

Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) = 10.00 Antecedent Moisture Condition = 2

Standard intensity-duration curves data (Plate D-4.1)
For the [Elsinore-Wildomar] area used.
10 year storm 10 minute intensity = 2.320(In/Hr)
10 year storm 60 minute intensity = 0.980(In/Hr)
100 year storm 10 minute intensity = 3.540(In/Hr)
100 year storm 60 minute intensity = 1.500(In/Hr)

Storm event year = 10.0
Calculated rainfall intensity data:
1 hour intensity = 0.980(In/Hr)
Slope of intensity duration curve = 0.4800

+++++
Process from Point/Station 100.000 to Point/Station 101.000
**** INITIAL AREA EVALUATION ****

Initial area flow distance = 638.000(Ft.)
Top (of initial area) elevation = 49.100(Ft.)
Bottom (of initial area) elevation = 44.100(Ft.)
Difference in elevation = 5.000(Ft.)
Slope = 0.00784 s(percent)= 0.78
TC = $k(0.390)*[(length^3)/(elevation\ change)]^{0.2}$
Initial area time of concentration = 13.620 min.
Rainfall intensity = 1.997(In/Hr) for a 10.0 year storm
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.745
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000

Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2) = 56.00
Pervious area fraction = 0.500; Impervious fraction = 0.500
Initial subarea runoff = 1.964(CFS)
Total initial stream area = 1.320(Ac.)
Pervious area fraction = 0.500

++++
Process from Point/Station 101.000 to Point/Station 102.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****

Top of street segment elevation = 44.100(Ft.)
End of street segment elevation = 40.960(Ft.)
Length of street segment = 582.000(Ft.)
Height of curb above gutter flowline = 4.0(In.)
Width of half street (curb to crown) = 13.000(Ft.)
Distance from crown to crossfall grade break = 11.250(Ft.)
Slope from gutter to grade break (v/hz) = 0.150
Slope from grade break to crown (v/hz) = 0.020
Street flow is on [2] side(s) of the street
Distance from curb to property line = 10.000(Ft.)
Slope from curb to property line (v/hz) = 0.020
Gutter width = 1.750(Ft.)
Gutter hike from flowline = 1.000(In.)
Manning's N in gutter = 0.0150
Manning's N from gutter to grade break = 0.0150
Manning's N from grade break to crown = 0.0150
Estimated mean flow rate at midpoint of street = 3.021(CFS)
Depth of flow = 0.241(Ft.), Average velocity = 1.551(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width = 9.651(Ft.)
Flow velocity = 1.55(Ft/s)
Travel time = 6.25 min. TC = 19.87 min.
Adding area flow to street
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.726
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2) = 56.00
Pervious area fraction = 0.500; Impervious fraction = 0.500
Rainfall intensity = 1.666(In/Hr) for a 10.0 year storm
Subarea runoff = 1.718(CFS) for 1.420(Ac.)
Total runoff = 3.682(CFS) Total area = 2.740(Ac.)
Street flow at end of street = 3.682(CFS)
Half street flow at end of street = 1.841(CFS)
Depth of flow = 0.257(Ft.), Average velocity = 1.627(Ft/s)
Flow width (from curb towards crown)= 10.435(Ft.)

+++++
Process from Point/Station 200.000 to Point/Station 102.000
**** SUBAREA FLOW ADDITION ****

SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.726
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2) = 56.00
Pervious area fraction = 0.500; Impervious fraction = 0.500
Time of concentration = 19.87 min.
Rainfall intensity = 1.666(In/Hr) for a 10.0 year storm
Subarea runoff = 1.609(CFS) for 1.330(Ac.)
Total runoff = 5.291(CFS) Total area = 4.070(Ac.)
End of computations, total study area = 4.07 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(A_p) = 0.500
Area averaged RI index number = 56.0

10 YEAR STORM
EXISTING CONDITIONS

Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2001 Version 6.4
Rational Hydrology Study Date: 04/26/13 File:hook10undeveloped.out

Wildomar Tr 33840
Preliminary Hydrology
10-yr Rational Method
Undeveloped Condition

***** Hydrology Study Control Information *****

English (in-lb) Units used in input data file

RDS Associates, Temecula, CA - S/N 936

Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) = 10.00 Antecedent Moisture Condition = 2

Standard intensity-duration curves data (Plate D-4.1)
For the [Elsinore-Wildomar] area used.
10 year storm 10 minute intensity = 2.320(In/Hr)
10 year storm 60 minute intensity = 0.980(In/Hr)
100 year storm 10 minute intensity = 3.540(In/Hr)
100 year storm 60 minute intensity = 1.500(In/Hr)

Storm event year = 10.0
Calculated rainfall intensity data:
1 hour intensity = 0.980(In/Hr)
Slope of intensity duration curve = 0.4800

+++++
Process from Point/Station 100.000 to Point/Station 101.000
**** INITIAL AREA EVALUATION ****

Initial area flow distance = 750.000(Ft.)
Top (of initial area) elevation = 48.900(Ft.)
Bottom (of initial area) elevation = 43.000(Ft.)
Difference in elevation = 5.900(Ft.)
Slope = 0.00787 s(percent)= 0.79
TC = $k(0.710)*[(\text{length}^3)/(\text{elevation change})]^{0.2}$
Initial area time of concentration = 26.432 min.
Rainfall intensity = 1.453(In/Hr) for a 10.0 year storm
UNDEVELOPED (fair cover) subarea
Runoff Coefficient = 0.637
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000

Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2) = 69.00
Pervious area fraction = 1.000; Impervious fraction = 0.000
Initial subarea runoff = 2.221(CFS)
Total initial stream area = 2.400(Ac.)
Pervious area fraction = 1.000

++++
Process from Point/Station 101.000 to Point/Station 102.000
**** NATURAL CHANNEL TIME + SUBAREA FLOW ADDITION ****

Top of natural channel elevation = 43.000(Ft.)
End of natural channel elevation = 41.000(Ft.)
Length of natural channel = 550.000(Ft.)
Estimated mean flow rate at midpoint of channel = 2.994(CFS)

Natural valley channel type used
L.A. County flood control district formula for channel velocity:
Velocity(ft/s) = $(7 + 8(q(\text{English Units})^{.352})(\text{slope}^{0.5}))$
Velocity using mean channel flow = 1.13(Ft/s)

Correction to map slope used on extremely rugged channels with
drops and waterfalls (Plate D-6.2)
Normal channel slope = 0.0036
Corrected/adjusted channel slope = 0.0036
Travel time = 8.10 min. TC = 34.53 min.

Adding area flow to channel
UNDEVELOPED (fair cover) subarea
Runoff Coefficient = 0.613
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2) = 69.00
Pervious area fraction = 1.000; Impervious fraction = 0.000
Rainfall intensity = 1.278(In/Hr) for a 10.0 year storm
Subarea runoff = 1.307(CFS) for 1.670(Ac.)
Total runoff = 3.529(CFS) Total area = 4.070(Ac.)
End of computations, total study area = 4.07 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(A_p) = 1.000
Area averaged RI index number = 69.0

100 YEAR STORM
ULTIMATE CONDITIONS

Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2001 Version 6.4
Rational Hydrology Study Date: 05/02/13 File:hookdevc100.out

Wildomar TR33840
Preliminary Hydrology
100-yr Rational Method
Developed Condition

***** Hydrology Study Control Information *****

English (in-lb) Units used in input data file

RDS Associates, Temecula, CA - S/N 936

Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) = 100.00 Antecedent Moisture Condition = 2

Standard intensity-duration curves data (Plate D-4.1)

For the [Elsinore-Wildomar] area used.

10 year storm 10 minute intensity = 2.320(In/Hr)

10 year storm 60 minute intensity = 0.980(In/Hr)

100 year storm 10 minute intensity = 3.540(In/Hr)

100 year storm 60 minute intensity = 1.500(In/Hr)

Storm event year = 100.0

Calculated rainfall intensity data:

1 hour intensity = 1.500(In/Hr)

Slope of intensity duration curve = 0.4800

+++++

Process from Point/Station 100.000 to Point/Station 101.000

**** INITIAL AREA EVALUATION ****

Initial area flow distance = 638.000(Ft.)

Top (of initial area) elevation = 49.100(Ft.)

Bottom (of initial area) elevation = 44.100(Ft.)

Difference in elevation = 5.000(Ft.)

Slope = 0.00784 s(percent)= 0.78

TC = $k(0.390)*[(length^3)/(elevation\ change)]^{0.2}$

Initial area time of concentration = 13.620 min.

Rainfall intensity = 3.056(In/Hr) for a 100.0 year storm

SINGLE FAMILY (1/4 Acre Lot)

Runoff Coefficient = 0.785

Decimal fraction soil group A = 0.000

Decimal fraction soil group B = 1.000

Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2) = 56.00
Pervious area fraction = 0.500; Impervious fraction = 0.500
Initial subarea runoff = 3.168(CFS)
Total initial stream area = 1.320(Ac.)
Pervious area fraction = 0.500

++++
Process from Point/Station 101.000 to Point/Station 102.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****

Top of street segment elevation = 44.100(Ft.)
End of street segment elevation = 40.960(Ft.)
Length of street segment = 582.000(Ft.)
Height of curb above gutter flowline = 4.0(In.)
Width of half street (curb to crown) = 13.000(Ft.)
Distance from crown to crossfall grade break = 11.250(Ft.)
Slope from gutter to grade break (v/hz) = 0.150
Slope from grade break to crown (v/hz) = 0.020
Street flow is on [2] side(s) of the street
Distance from curb to property line = 10.000(Ft.)
Slope from curb to property line (v/hz) = 0.020
Gutter width = 1.750(Ft.)
Gutter hike from flowline = 1.000(In.)
Manning's N in gutter = 0.0150
Manning's N from gutter to grade break = 0.0150
Manning's N from grade break to crown = 0.0150
Estimated mean flow rate at midpoint of street = 4.871(CFS)
Depth of flow = 0.281(Ft.), Average velocity = 1.743(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width = 11.642(Ft.)
Flow velocity = 1.74(Ft/s)
Travel time = 5.57 min. TC = 19.19 min.
Adding area flow to street
SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.771
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2) = 56.00
Pervious area fraction = 0.500; Impervious fraction = 0.500
Rainfall intensity = 2.593(In/Hr) for a 100.0 year storm
Subarea runoff = 2.837(CFS) for 1.420(Ac.)
Total runoff = 6.004(CFS) Total area = 2.740(Ac.)
Street flow at end of street = 6.004(CFS)
Half street flow at end of street = 3.002(CFS)
Depth of flow = 0.301(Ft.), Average velocity = 1.834(Ft/s)
Flow width (from curb towards crown)= 12.627(Ft.)

++++
Process from Point/Station 200.000 to Point/Station 102.000
**** SUBAREA FLOW ADDITION ****

SINGLE FAMILY (1/4 Acre Lot)
Runoff Coefficient = 0.771
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2) = 56.00
Pervious area fraction = 0.500; Impervious fraction = 0.500
Time of concentration = 19.19 min.
Rainfall intensity = 2.593(In/Hr) for a 100.0 year storm
Subarea runoff = 2.657(CFS) for 1.330(Ac.)
Total runoff = 8.661(CFS) Total area = 4.070(Ac.)
End of computations, total study area = 4.07 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(A_p) = 0.500
Area averaged RI index number = 56.0

100 YEAR STORM
EXISTING CONDITIONS

Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2001 Version 6.4
Rational Hydrology Study Date: 04/26/13 File:hook100undeveloped.out

Wildomar TR 33840
Preliminary Hydrology
100-yr Rational Method
Undeveloped Condition

***** Hydrology Study Control Information *****

English (in-lb) Units used in input data file

RDS Associates, Temecula, CA - S/N 936

Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) = 100.00 Antecedent Moisture Condition = 2

Standard intensity-duration curves data (Plate D-4.1)
For the [Elsinore-Wildomar] area used.
10 year storm 10 minute intensity = 2.320(In/Hr)
10 year storm 60 minute intensity = 0.980(In/Hr)
100 year storm 10 minute intensity = 3.540(In/Hr)
100 year storm 60 minute intensity = 1.500(In/Hr)

Storm event year = 100.0
Calculated rainfall intensity data:
1 hour intensity = 1.500(In/Hr)
Slope of intensity duration curve = 0.4800

+++++
Process from Point/Station 100.000 to Point/Station 101.000
**** INITIAL AREA EVALUATION ****

Initial area flow distance = 750.000(Ft.)
Top (of initial area) elevation = 48.900(Ft.)
Bottom (of initial area) elevation = 43.000(Ft.)
Difference in elevation = 5.900(Ft.)
Slope = 0.00787 s(percent)= 0.79
TC = $k(0.710)*[(\text{length}^3)/(\text{elevation change})]^{0.2}$
Initial area time of concentration = 26.432 min.
Rainfall intensity = 2.223(In/Hr) for a 100.0 year storm
UNDEVELOPED (fair cover) subarea
Runoff Coefficient = 0.709
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000

Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2) = 69.00
Pervious area fraction = 1.000; Impervious fraction = 0.000
Initial subarea runoff = 3.783(CFS)
Total initial stream area = 2.400(Ac.)
Pervious area fraction = 1.000

++++
Process from Point/Station 101.000 to Point/Station 102.000
**** NATURAL CHANNEL TIME + SUBAREA FLOW ADDITION ****

Top of natural channel elevation = 43.000(Ft.)
End of natural channel elevation = 41.000(Ft.)
Length of natural channel = 550.000(Ft.)
Estimated mean flow rate at midpoint of channel = 5.099(CFS)

Natural valley channel type used
L.A. County flood control district formula for channel velocity:
Velocity(ft/s) = $(7 + 8(q(\text{English Units})^{.352})(\text{slope}^{.5}))$
Velocity using mean channel flow = 1.28(Ft/s)

Correction to map slope used on extremely rugged channels with
drops and waterfalls (Plate D-6.2)
Normal channel slope = 0.0036
Corrected/adjusted channel slope = 0.0036
Travel time = 7.17 min. TC = 33.60 min.

Adding area flow to channel
UNDEVELOPED (fair cover) subarea
Runoff Coefficient = 0.691
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2) = 69.00
Pervious area fraction = 1.000; Impervious fraction = 0.000
Rainfall intensity = 1.981(In/Hr) for a 100.0 year storm
Subarea runoff = 2.286(CFS) for 1.670(Ac.)
Total runoff = 6.069(CFS) Total area = 4.070(Ac.)
End of computations, total study area = 4.07 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(A_p) = 1.000
Area averaged RI index number = 69.0

**APPENDIX 8: PRELIMINARY WATER
QUALITY MANAGEMENT PLAN**

Preliminary Project Specific Water Quality Management Plan

For: Tentative Tract Map No. 33840

DEVELOPMENT NO. TENTATIVE TRACT MAP NO. 33840
DESIGN REVIEW NO.

Prepared for:

Zareh Hookasian
3173 Vera Valley Road, Franklin, TN 37064
Telephone: (615) 838-4820

Prepared by:

Rich Soltysiak
RDS and Associates
30519 Wailea Ct
Temecula, Ca 92592
Telephone: (951) 691-7706

WQMP Preparation/Revision Date: May 7, 2013

OWNER'S CERTIFICATION

This project-specific Water Quality Management Plan (WQMP) has been prepared for:

Zareh Hookasian Owner/Developer

by RDS and Associates for the project known as TR 33840 at Wildomar, Ca.

This WQMP is intended to comply with the requirements of the City of Wildomar, Ca for TR 33840, which includes the requirement for the preparation and implementation of a preliminary 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 the City of Wildomar Water Quality Ordinance and San Diego Regional Water Quality Control Board MS-4 permit dated July 14, 2004 (Order No. R9-2012-0016).

If the undersigned transfers its interest in the subject property/project, its successor in interest the undersigned shall notify the successor in interest of its responsibility to implement this WQMP.

"I, the undersigned, certify under penalty of law 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

Date

Owner's Printed Name

Owner's Title/Position

Zareh Hookasian
3173 Vera Valley Road
Franklin, TN 37064
Telephone: (615) 838-4820

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APPENDICES

A.	CONDITIONS OF APPROVAL	
B.	VICINITY MAP, WQMP SITE PLAN, AND RECEIVING WATERS MAP	
C.	SUPPORTING DETAIL RELATED TO HYDRAULIC CONDITIONS OF CONCERN (IF APPLICABLE)	
D.	EDUCATIONAL MATERIALS	
E.	SOILS REPORT (IF APPLICABLE)	
F.	TREATMENT CONTROL BMP SIZING CALCULATIONS AND DESIGN DETAILS	
G.	AGREEMENTS – CC&RS, COVENANT AND AGREEMENTS AND/OR OTHER MECHANISMS FOR ENSURING ONGOING OPERATION, MAINTENANCE, FUNDING AND TRANSFER OF REQUIREMENTS FOR THIS PROJECT-SPECIFIC WQMP	
H.	PHASE 1 ENVIRONMENTAL SITE ASSESSMENT – SUMMARY OF SITE REMEDIATION CONDUCTED AND USE RESTRICTIONS	

I. Project Description

Project Site Address: TR 33840
City of Wildomar, CA, 92595

Planning Area/
Community Name/
Development Name: Wildomar California

APN Number(s): APN 376-043-027

Thomas Bros. Map: Page 897 Grid B7

Project Watershed: Santa Margarita

Sub-watershed: 902.31 Wildomar HSA

Project Site Size: 4.07 Acres

Standard Industrial Classification (SIC) Code: N/A

Formation of Home Owners' Association (HOA) or Property Owners Association (POA):
Y N

Additional Permits/Approvals required for the Project

AGENCY	Permit required
State Department of Fish and Game, 1601 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"/>
Other <i>(please list in the space below as required)</i> Riverside County Flood Control and Water Conservation District City of Wildomar	Encroachment Permit Grading Permit

This Preliminary Project-Specific Water Quality Management Plan is for a future residential tract in the City of Wildomar, Riverside County, Ca. The development presently consists of subdividing an existing vacant 4.07 acre parcel into 15 individual single family residential lots.

The site is located adjacent to Wildomar Channel to the northeast, Gruwell Street to the northwest, Central Street to the southeast, and existing houses to the southwest. The site is presently zoned rural residential, vacant, and unimproved.

Appendix A of this preliminary project-specific WQMP will include a complete copy of the final Conditions of Approval when available. Appendix B of this preliminary project-specific WQMP shall include:

1. A Vicinity Map identifying the project site and surrounding planning areas in sufficient detail to allow the project site to be plotted on Co-Permittee base mapping; and
2. 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 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.
 - Proposed drainage areas boundaries, including tributary offsite areas, for each location where flows exits the property/project site. Each tributary area should be clearly denoted.
 - Pre- and post-project topography.

Appendix G of this preliminary project-specific WQMP shall include copies of CC&Rs, Covenant and Agreements, and/or other mechanisms used to ensure the ongoing operation, maintenance, funding, transfer and implementation of the project-specific WQMP requirements when available.

Project Owner: Zareh Hookasian
3173 Vera Valley Drive
Franklin, TN 36064
Telephone: 615-838-4820

WQMP Preparer: Rich Soltysiak/RDS and Associates
30519 Wailea Ct
Temecula, Ca, 92592
Telephone: 951-691-7706

II. Site Characterization

Land Use Designation or Zoning: MDR/R-R existing to be rezoned MDR/R-1

Current Property Use: Vacant and Unimproved

Proposed Property Use: R-1 Residential Tract

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	303(d) List Impairments	Designated Beneficial Uses	Proximity to RARE Beneficial Use
2.31 Wildomar Channel	Iron, Manganese, Nitrogen	(MUN), (AGR), (IND), (PROC), (REC-2), (WARM), (WILD)	50'
2.32 Murrieta Creek	Iron, Manganese, Nitrogen	(MUN), (AGR), (IND), (PROC), (REC-2), (WARM), (WILD)	1 Mile
2.22 Santa Margarita River	Phosphorous	(MUN), (AGR), (IND), (REC-1) (REC-2), (WARM), (COLD),(WILD), (RARE)	12 Miles

III. Pollutants of Concern

Urban Runoff Pollutants:

Type of Development (Land Use)	Sediment/Turbidity	Nutrients	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Bacteria & Viruses	Oil & Grease	Pesticides	Metals
Detached Residential Development	E	E	N	E	E	E	E	E	N
Streets, Highways & Freeways	P	P ⁽¹⁾	P ⁽⁴⁾	P	P ⁽¹⁾	P ⁽⁶⁾	P	P ⁽¹⁾	P

E = Expected P = Potential N = Not Expected

- (1) A potential pollutant if landscaping or open area exists on the project site
- (2) A potential pollutant if the project includes uncovered parking areas
- (3) A potential pollutant if land use involves animal waste
- (4) Specifically, petroleum hydrocarbons
- (5) Specifically, solvents
- (6) Bacterial indicators are routinely detected in pavement runoff

A description of Urban Runoff Pollutants of Concern Expected per the table above:

Sediments – Sediments are soils or other surficial materials eroded and then transported or deposited by the action of wind, water, ice or gravel. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organisms survival rates, smother bottom dwelling organisms, and suppress aquatic vegetation growth.

Nutrients – Nutrients are inorganic substances, such as nitrogen and phosphorus. They commonly exist in the form of mineral salts that are either dissolved or suspended in water. Primary sources of nutrients in Urban Runoff are fertilizers and eroded soils. Excessive discharge of nutrients to water bodies and streams can cause excessive aquatic algae and plant growth. Such excessive production, referred to as cultural eutrophication, may lead to excessive decay of organic matter in the water body, loss of oxygen in the water, release of toxins in sediment, and the eventual death of aquatic organisms.

Organic Compounds – Pesticides and PCBs are toxic organic compounds that are particularly dangerous in the aquatic environment. Excessive application of insecticides, herbicides, fungicides, and rodenticides, or application of any of these shortly before a storm can result in toxic pesticide chemicals being carried from agricultural lands, construction sites, parks, golf courses, and residential lawns to receiving waters. Many pesticide compounds are extremely toxic to aquatic organisms and can cause fish kills. PCBs are a similar class of toxic organic compounds. They can contaminate stormwater through leaking electrical transformers. PCBs can settle on sediments of receiving waters and like pesticide compounds present a serious toxic threat to aquatic organisms that come in contact with them. Many other toxic organic compounds can also affect receiving waters. These toxic compounds include phenols, glycol ethers, esters, nitrosamines, and other nitrogen compounds. Common sources of these compounds include wood preservatives, antifreeze, dry cleaning chemicals, cleansers, and a variety of other chemical products. Like pesticides and PCBs these other organic compounds can be lethal to aquatic organisms.

Trash and Debris – Trash (such as paper, plastic, polystyrene packing foam, and aluminum materials) and biodegradable organic matter (such as leaves, grass cuttings, and food waste) are general waste products on the landscape. The presence of trash and debris may have a significant impact on the recreational value of water body and aquatic habitat. Excess organic matter can create a high biochemical oxygen demand in a stream and thereby lower its water quality. In addition, in areas where stagnant water exists, the presence of excess organic matter can promote septic conditions resulting in the growth of undesirable organisms and the release of odorous and hazardous compounds such as hydrogen sulfide.

Oxygen-Demanding Substances – This category includes biodegradable organic material as well as chemicals that react with dissolved oxygen in water to form other compounds. Proteins carbohydrates and fats are examples of biodegradable organic compounds such as ammonia and hydrogen sulfide are examples of oxygen-demanding compounds. The oxygen demand of a substance can lead to depletion of dissolved oxygen in a water body and possibly the development of septic conditions.

Pathogens – Pathogens (bacteria and viruses) are ubiquitous microorganisms that thrive under certain environmental conditions. Their proliferation is typically caused by the transport of animal or human fecal wastes from the watershed. Water, containing excessive bacteria and viruses can alter the aquatic habitat and create a harmful environment for humans and aquatic life. Also, the decomposition of excess organic waste causes increased growth of undesirable organisms in the water.

Oil and Grease – Oil and grease are characterized as high-molecular weight organic compounds. Primary sources of oil and grease are petroleum hydrocarbon products, motor products from leaking vehicles, esters, oils, fats, waxes, and high molecular-weight fatty acids. Introduction of these pollutants to the water bodies are very possibly due to the wide uses and applications of some of these products in municipal, residential, commercial, industrial, and construction areas. Elevated oil and grease content can decrease the aesthetic value of the water body, as well as the water quality.

Pesticides – Pesticides (including herbicides) are chemical compounds commonly used to control nuisance growth or prevalence of organisms. Excessive or improper application of a pesticide may result in runoff containing toxic levels of its active ingredient.

Metals – The primary source of metal pollution in Urban Runoff is typically commercially available metals and metal products. Metals of concern include cadmium, chromium, copper, lead, mercury, and zinc. Lead and chromium have been used as corrosion inhibitors in primer coatings and cooling tower systems. Metals are also raw material components in non-metal products such as fuels, adhesives, paints, and other coatings. At low concentrations naturally occurring in soil, metals may not be toxic. However, at higher concentrations, certain metals can be toxic to aquatic life. Humans can be impacted from contaminated groundwater resources, and bioaccumulation of metals in fish and shellfish. Environmental concerns, regarding the potential for release of metals to the environment, have already led to restricted metal usage in certain applications.

IV. Hydrologic Conditions of Concern

Impacts to the hydrologic regime resulting from the Project may include increased runoff volume and velocity; reduced infiltration; increased flow frequency, duration, and peaks; faster time to reach peak flow; and water quality degradation. Under certain circumstances, changes could also result in the reduction in the amount of available sediment for transport; storm flows could fill this sediment-carrying capacity by eroding the downstream channel. These changes have the potential to permanently impact downstream channels and habitat integrity. A change to the hydrologic regime of a Project's site would be considered a hydrologic condition of concern if the change would have a significant impact on downstream erosion compared to the pre-development condition or have significant impacts on stream habitat, alone or as part of a cumulative impact from development in the watershed.

This project-specific WQMP **is not required** to address the issue of Hydrologic Conditions of Concern because Condition A applies in that the site discharges to Wildomar Channel:

- **Condition A:** Runoff from the Project is discharged directly to a publicly-owned, operated and maintained MS4; the discharge is in full compliance with Co-Permittee requirements for connections and discharges to the MS4 (including both quality and quantity requirements); the discharge would not significantly impact stream habitat in proximate Receiving Waters; and the discharge is authorized by the Co-Permittee.
- **Condition B:** The project disturbs less than 1 acre. The disturbed area calculation should 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 minimizing impervious area on a site and incorporating other site-design concepts that mimic pre-development conditions. This condition must be substantiated by hydrologic modeling methods acceptable to the Co-Permittee.

This Project meets the following condition: Condition A: Runoff from the Project is discharged directly to a publicly-owned, operated and maintained MS4; the discharge is in full compliance with Co-Permittee requirements for connections and discharges to the MS4 (including both quality and quantity requirements); the discharge would not significantly impact stream habitat in proximate Receiving Waters; and the discharge is authorized by the Co-Permittee

Therefore, supporting engineering studies, calculations, and reports are not required to be 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

V.1 SITE DESIGN BMPs

TR 33840 consists of 15 lots accessed by a private street. The property is bordered to the east by Wildomar Channel, the upstream portion of Murrieta Creek. The project site plan incorporates a vegetated swale as a structural BMP as well as the various non-structural BMP's as required as part of this WQMP. All 15 lots and the private street drain into the vegetated swale BMP prior to discharging directly to Wildomar Channel.

In addition to the vegetated swale BMP, the following site design concepts have been incorporated to achieve the following:

- 1) Urban Runoff has been minimized by incorporating decomposed granite sidewalks and minimizing the private street configuration to meet minimum Riverside County Fire Department access requirements for a project of this type.
- 2) This residential project attempts to minimize impervious footprints by incorporating lot sizes larger than the R-1 7,100 square foot minimums. In addition the project incorporates decomposed granite sidewalks and a minimum private street configuration allowed by the Riverside County Fire Department.
- 3) Natural areas will be conserved as practical, but the undeveloped site has been disturbed over the years as railroad property and by adjacent development and disposal of earth materials.
- 4) The site has been designed to discharge through a vegetated swale BMP and thereby minimize directly connected impervious areas (DCIAs).

Table 1. Site Design BMPs

Design Concept	Technique	Specific BMP	Included		
			Yes	No	N/A
Site Design Concept 1	<i>Minimize</i>	Maximize the permeable area (See Section 4.5.1 of the WQMP).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Urban</i>	Incorporate landscaped buffer areas between sidewalks and streets.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Runoff</i>	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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Use natural drainage systems.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Where soils conditions are suitable, use perforated pipe or gravel filtration pits for low flow infiltration.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Construct onsite ponding areas or retention facilities to increase opportunities for infiltration consistent with vector control objectives.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

		Other comparable and equally effective site design concepts as approved by the Co-Permittee (Note: Additional narrative required to describe BMP and how it addresses Site Design concept).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Table 1. Site Design BMPs (Cont.)

Design Concept	Technique	Specific BMP	Included		
			Yes	No	N/A
Site Design Concept 2	<i>Minimize Impervious Footprint</i>	Maximize the permeable area (See Section 4.5.1 of the WQMP).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Construct walkways, trails, patios, overflow parking lots, 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Construct streets, sidewalks and parking lot aisles to the minimum widths necessary, provided that public safety and a walk able environment for pedestrians are not compromised.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Reduce widths of street where off-street parking is available.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Minimize the use of impervious surfaces, such as decorative concrete, in the landscape design.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Site Design Concept 3	<i>Conserve Natural Areas</i>	Other comparable and equally effective site design concepts as approved by the Co-Permittee (Note: Additional narrative required describing BMP and how it addresses Site Design concept).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Conserve natural areas (See WQMP Section 4.5.1).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>
		Use natural drainage systems.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Other comparable and equally effective site design concepts as approved by the Co-Permittee (Note: Additional narrative required describing BMP and how it addresses Site Design concept).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Table 1. Site Design BMPs (Cont.)

Design Concept	Technique	Specific BMP	Included			
			Yes	No	N/A	
Site Design Concept 4		Residential and commercial sites must be designed to contain and infiltrate roof runoff, or direct roof runoff to vegetative swales or buffer areas, where feasible.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Where landscaping is proposed, drain impervious sidewalks, walkways, trails, and patios into adjacent landscaping.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Increase the use of vegetated drainage swales in lieu of underground piping or imperviously lined swales.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Rural swale system: street sheet flows to vegetated swale or gravel shoulder, curbs at street corners, culverts under driveways and street crossings.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<i>Minimize</i> <i>Directly</i>	Urban curb/swale system: street slopes to curb; periodic swale inlets drain to vegetated swale/biofilter.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<i>Connected</i>	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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<i>Impervious</i> <i>Areas</i>	Design driveways with shared access, flared (single lane at street) or wheel strips (paving only under tires); or, drain into landscaping prior to discharging to the MS4.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		<i>(DCIAs)</i>	Uncovered temporary or guest parking on private residential lots may be paved with a permeable surface, or designed to drain into landscaping prior to discharging to the MS4.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Where landscaping is proposed in parking areas, incorporate landscape areas into the drainage design.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
			Overflow parking (parking stalls provided in excess of the Co-Permittee's minimum parking requirements) may be constructed with permeable paving.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Other comparable and equally effective design concepts as approved by the Co-Permittee (Note: Additional narrative required describing BMP and how it addresses Site Design concept).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		

Non-applicable Site Design BMPs:

The project is a residential tract and therefore BMP's relating to commercial/industrial site features are not applicable.

Table 2. 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 type="checkbox"/>	<input checked="" type="checkbox"/>	Residential Project
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 checked="" type="checkbox"/>	<input type="checkbox"/>	
Drainage Facility Inspection and Maintenance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Structural Source Control BMPs			
MS4 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"/>	Residential Project
Properly Design:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Fueling Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Residential Project
Air/Water Supply Area Drainage	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Residential Project
Trash Storage Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Residential Project
Loading Docks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Residential Project
Maintenance Bays	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Residential Project
Vehicle and Equipment Wash Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Residential Project
Outdoor Material Storage Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Residential Project
Outdoor Work Areas or Processing Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Residential Project
Provide Wash Water Controls for Food Preparation Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Residential Project

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- Natural areas will be conserved as practical, but the undeveloped site has been disturbed over the years as railroad property and by adjacent development and disposal of earth materials.
- The site has been designed to discharge through a vegetated swale BMP and thereby minimize directly connected impervious areas (DCIAs).

Appendix D includes copies of the educational materials that will be used in implementing this project-specific WQMP.

V.3 TREATMENT CONTROL BMPs

TR 33840 consists of 15 lots accessed by a private street. The property is bordered to the east by Wildomar Channel, the upstream portion of Murrieta Creek. The project site plan incorporates a vegetated swale as a structural BMP as well as the various non-structural BMP's as required as part of this WQMP. All 15 lots and the private street drain into the vegetated swale BMP with Lot 15 and adjacent to the side yard property line with Lot 14 prior to discharging directly to Wildomar Channel.

The vegetated swale filtering the site has been designed to convey the flow base QBMP of 0.4 cfs as well as the 100-yr design storm flow of 8.7 cfs. The vegetated swale was designed in conformance with the Riverside County Stormwater Quality Best Management Practice Design Handbook.

Maintenance Program of Vegetated Swale by Homeowner's Association

The useful life of a vegetated swale system is directly proportional to its maintenance frequency. If regularly maintained, vegetated swales can last indefinitely. The maintenance objectives for vegetated swale systems include keeping up the hydraulic and removal efficiency of the channel and maintaining a dense, healthy grass cover.

Maintenance activities should include periodic mowing (with grass never cut shorter than the design flow depth (0.4')), weed control, watering during drought conditions, reseeding of bare areas, and clearing of debris and blockages. Cuttings should be removed from the channel and disposed in a local composting facility. Accumulated sediment should also be removed manually to avoid concentrated flows in the swale. The application of fertilizers and pesticides should be minimal.

Another aspect of a good maintenance plan is repairing damaged areas within a channel. For example, if the channel develops ruts or holes, it should be repaired utilizing a suitable soil that is properly tamped and seeded. The grass cover should be thick; if it is not, reseed as necessary. Residuals (e.g., silt, grass cuttings) must be disposed in accordance with local or State requirements. Maintenance of grassed swales mostly involves maintenance of the grass or wetland plant cover. Typical maintenance activities are summarized below:

- Inspect swales at least twice annually for erosion, damage to vegetation, and sediment and debris accumulation preferably at the end of the wet season to schedule summer maintenance and before major fall runoff to be sure the swale is ready for winter. However, additional inspection after periods of heavy runoff is desirable. The swale should be checked for debris and litter, and areas of sediment accumulation.
- Grass height and mowing frequency may not have a large impact on pollutant removal. Consequently, mowing may only be necessary once or twice a year for safety or aesthetics or to suppress weeds and woody vegetation.
- Trash tends to accumulate in swale areas. The need for litter removal is determined through periodic inspection, but litter should always be removed prior to mowing.
- Sediment accumulating in channels should be removed when it builds up to 75 mm (3 in.) at any spot, or covers vegetation.

- Regularly inspect swales for pools of standing water. Swales can become a nuisance due to mosquito breeding in standing water if obstructions develop (e.g. debris accumulation, invasive vegetation) and/or if proper drainage slopes are not implemented and maintained.

Table 3: Treatment Control BMP Selection Matrix ⁽¹⁾

Pollutant of Concern	Treatment Control BMP Categories ⁽²⁾							
	Veg. Swale & Veg. Filter Strips ⁽³⁾	Detention Basins ⁽⁴⁾	Infiltration Basins, Infiltration Trenches, & Porous Pavement ⁽⁵⁾	Wet Ponds or Wetlands ⁽⁶⁾	Sand Filter or Media Filters	Water Quality Inlets	Hydrodynamic Separator Systems ⁽⁷⁾	Manufactured / Proprietary Devices ⁽⁸⁾
Sediment/Turbidity Y <input type="checkbox"/> N <input type="checkbox"/>	H/M <input checked="" type="checkbox"/>	M <input type="checkbox"/>	H/M <input type="checkbox"/>	H/M <input type="checkbox"/>	H/M <input type="checkbox"/>	L <input type="checkbox"/>	H/M (L for turbidity) <input type="checkbox"/>	U <input type="checkbox"/>
Nutrients Y <input type="checkbox"/> N <input type="checkbox"/>	L <input checked="" type="checkbox"/>	M <input type="checkbox"/>	H/M <input type="checkbox"/>	H/M <input type="checkbox"/>	L/M <input type="checkbox"/>	L <input type="checkbox"/>	L <input type="checkbox"/>	U <input type="checkbox"/>
Organic Compounds Y <input type="checkbox"/> N <input type="checkbox"/>	U <input checked="" type="checkbox"/>	U <input type="checkbox"/>	U <input type="checkbox"/>	U <input type="checkbox"/>	H/M <input type="checkbox"/>	L <input type="checkbox"/>	L <input type="checkbox"/>	U <input type="checkbox"/>
Trash & Debris Y <input type="checkbox"/> N <input type="checkbox"/>	L <input checked="" type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>	U <input type="checkbox"/>	H/M <input type="checkbox"/>	M <input type="checkbox"/>	H/M <input type="checkbox"/>	U <input type="checkbox"/>
Oxygen Demanding Substances Y <input type="checkbox"/> N <input type="checkbox"/>	L <input checked="" type="checkbox"/>	M <input type="checkbox"/>	H/M <input type="checkbox"/>	H/M <input type="checkbox"/>	H/M <input type="checkbox"/>	L <input type="checkbox"/>	L <input type="checkbox"/>	U <input type="checkbox"/>
Bacteria & Viruses Y <input type="checkbox"/> N <input type="checkbox"/>	U <input checked="" type="checkbox"/>	U <input type="checkbox"/>	H/M <input type="checkbox"/>	U <input type="checkbox"/>	H/M <input type="checkbox"/>	L <input type="checkbox"/>	L <input type="checkbox"/>	U <input type="checkbox"/>
Oils & Grease Y <input type="checkbox"/> N <input type="checkbox"/>	H/M <input checked="" type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>	U <input type="checkbox"/>	H/M <input type="checkbox"/>	M <input type="checkbox"/>	L/M <input type="checkbox"/>	U <input type="checkbox"/>
Pesticides (non-soil bound) Y <input type="checkbox"/> N <input type="checkbox"/>	U <input checked="" type="checkbox"/>	U <input type="checkbox"/>	U <input type="checkbox"/>	U <input type="checkbox"/>	U <input type="checkbox"/>	L <input type="checkbox"/>	L <input type="checkbox"/>	U <input type="checkbox"/>
Metals Y <input type="checkbox"/> N <input type="checkbox"/>	H/M <input checked="" type="checkbox"/>	M <input type="checkbox"/>	H <input type="checkbox"/>	H <input type="checkbox"/>	H <input type="checkbox"/>	L <input type="checkbox"/>	L <input type="checkbox"/>	U <input type="checkbox"/>

Abbreviations:

L: Low removal efficiency H/M: High or medium removal efficiency U: Unknown removal efficiency

Notes:

- (1) Periodic performance assessment and updating of the guidance provided by this table may be necessary.
- (2) Project applicants should base BMP designs on the Riverside County Stormwater Quality Best Management Practice Design Handbook. However, project applicants may also wish to reference the California Stormwater BMP Handbook – New Development and Redevelopment (www.cabmphandbooks.com). The Handbook contains additional information on BMP operation and maintenance.
- (3) Includes grass swales, grass strips, wetland vegetation swales, and bioretention.
- (4) Includes extended/dry detention basins with grass lining and extended/dry detention basins with impervious lining. Effectiveness based upon minimum 36-48-hour drawdown time.
- (5) Projects that will utilize infiltration-based Treatment Control BMPs (e.g., Infiltration Basins, Infiltration Trenches, Porous Pavement, etc.) must include a copy of the property/project soils report as Appendix E to the project-specific WQMP. The selection of a Treatment Control BMP (or BMPs) for the project must specifically consider the effectiveness of the Treatment Control BMP for pollutants identified as causing an impairment of Receiving Waters to which the project will discharge Urban Runoff.
- (6) Includes permanent pool wet ponds and constructed wetlands.
- (7) Also known as hydrodynamic devices, baffle boxes, swirl concentrators, or cyclone separators.
- (8) 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, or newly developed/emerging stormwater treatment technologies.

V.4 EQUIVALENT TREATMENT CONTROL ALTERNATIVES

“Not Applicable”

V.5 REGIONALLY-BASED TREATMENT CONTROL BMPs

“Not Applicable”

VI. Operation and Maintenance Responsibility for Treatment Control BMPs

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spot, or covers vegetation.

- Regularly inspect swales for pools of standing water. Swales can become a nuisance due to mosquito breeding in standing water if obstructions develop (e.g. debris accumulation, invasive vegetation) and/or if proper drainage slopes are not implemented and maintained.

VII. Funding

The funding source for the operation and maintenance of the project's vegetated swale shall be a Homeowner's Association.

Appendix A

Conditions of Approval

Planning Commission Resolution _____

Dated _____

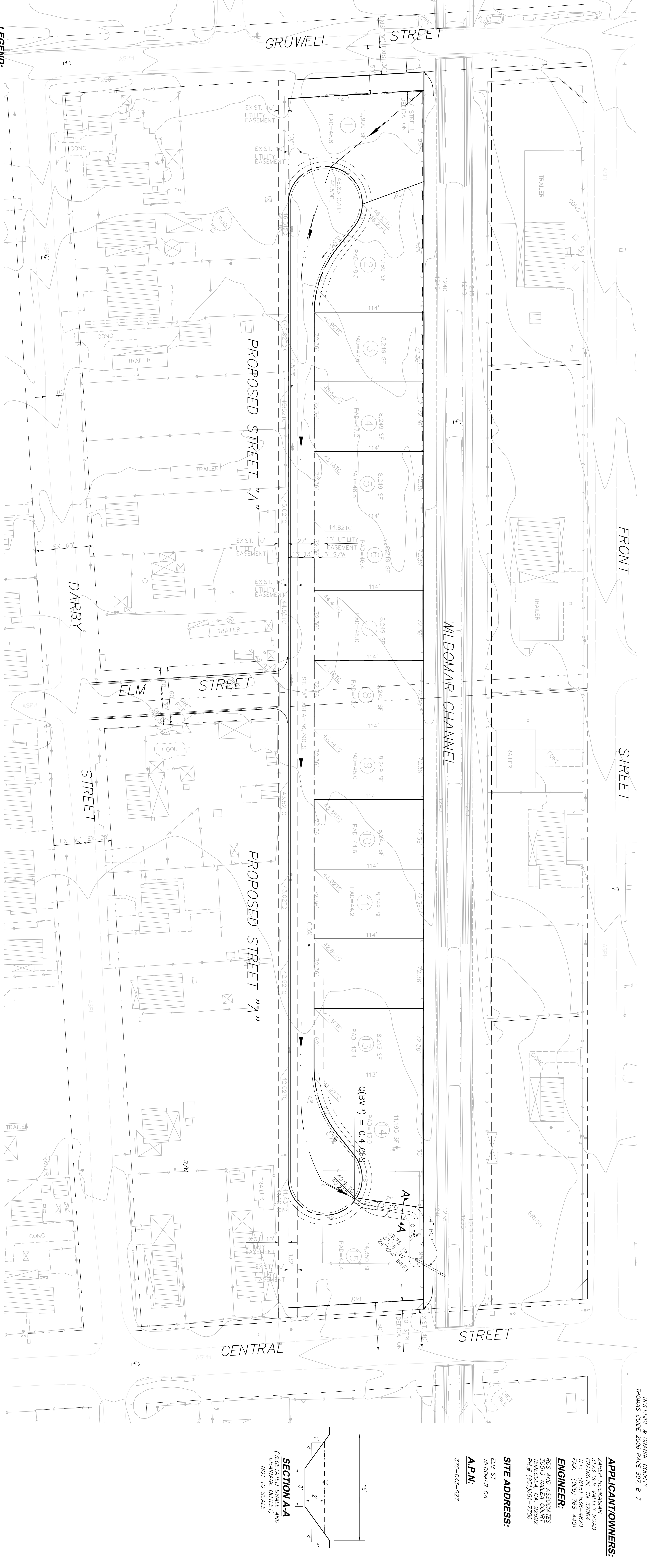
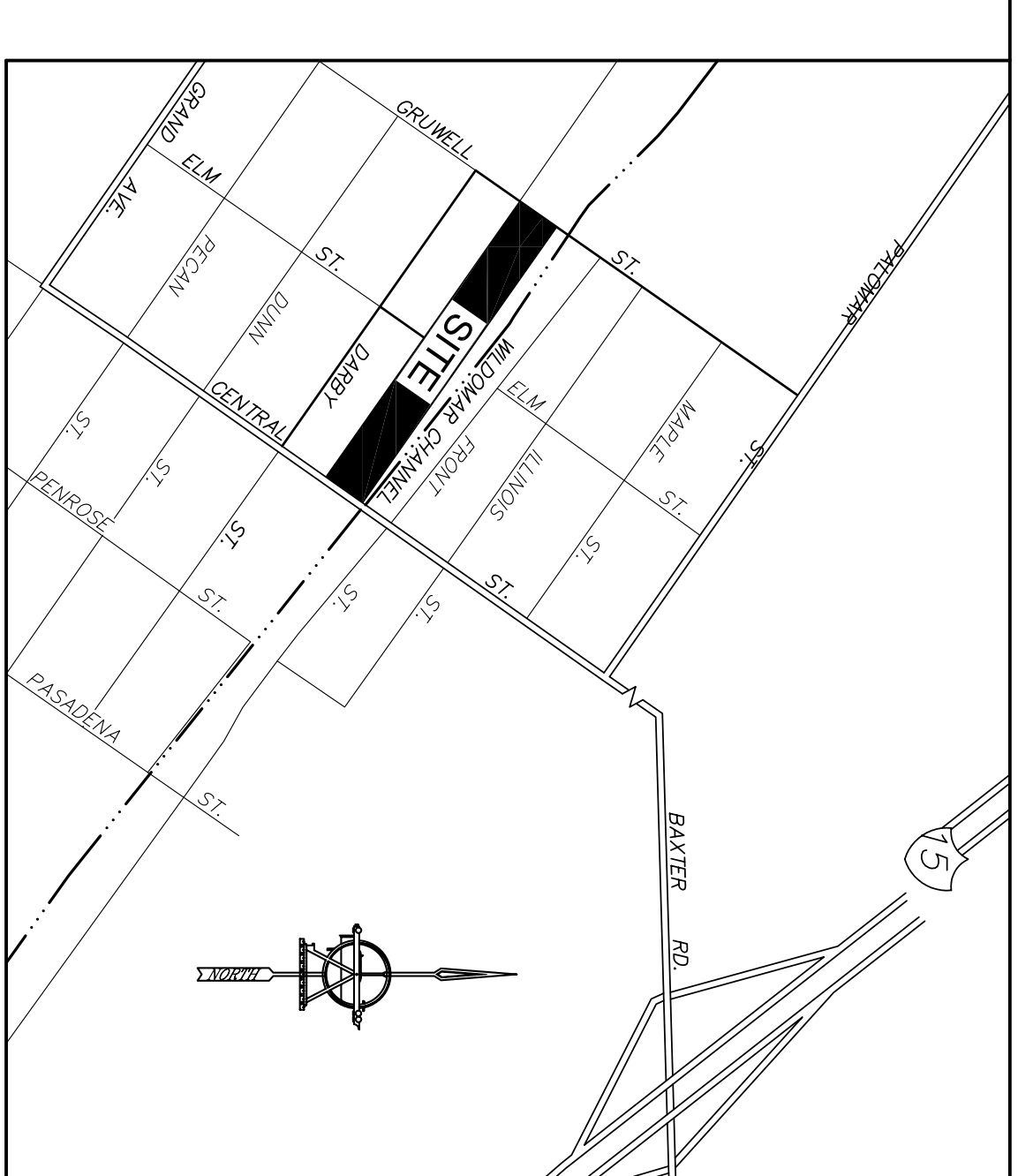
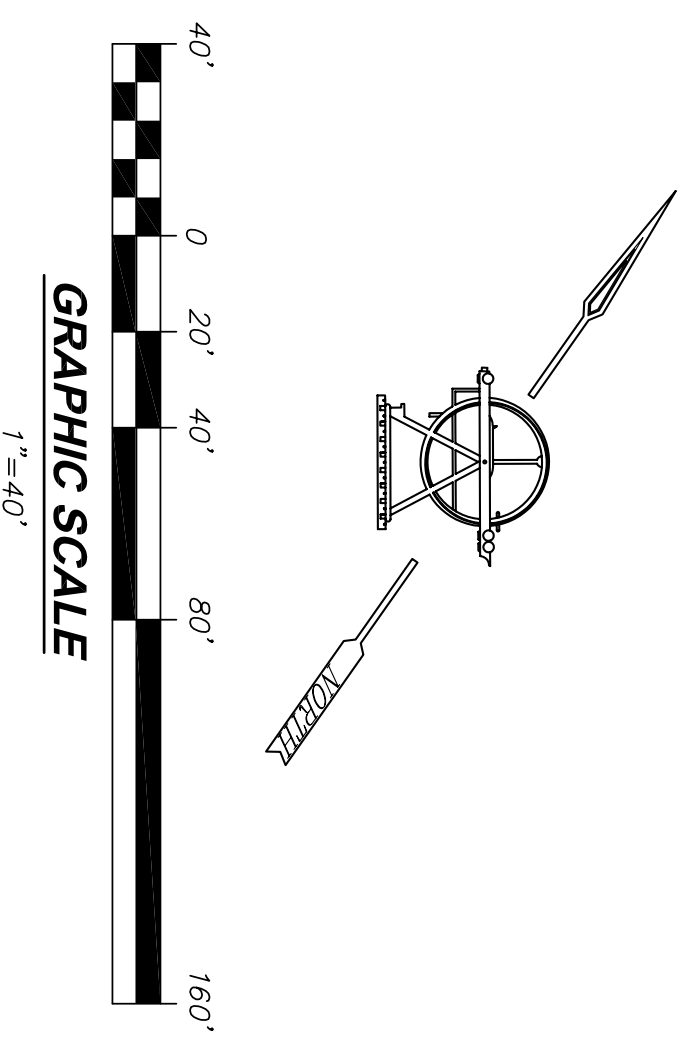
Appendix B

Vicinity Map, WQMP Site Plan, and Receiving Waters Map

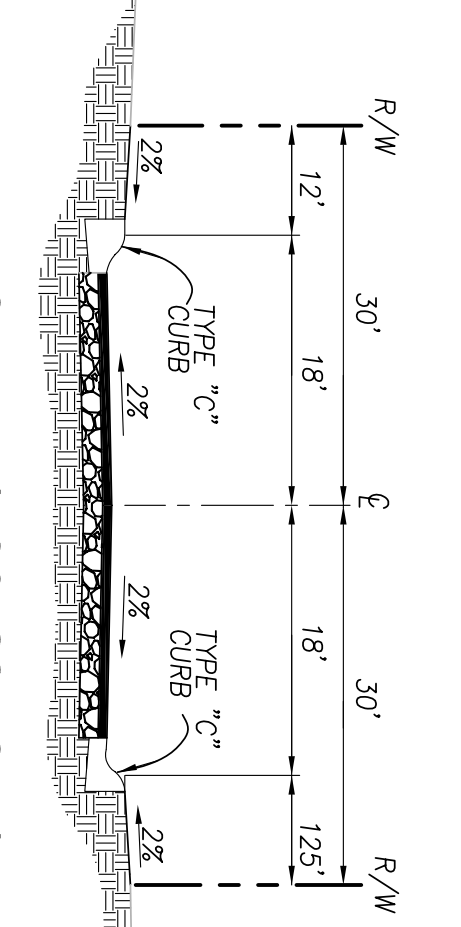
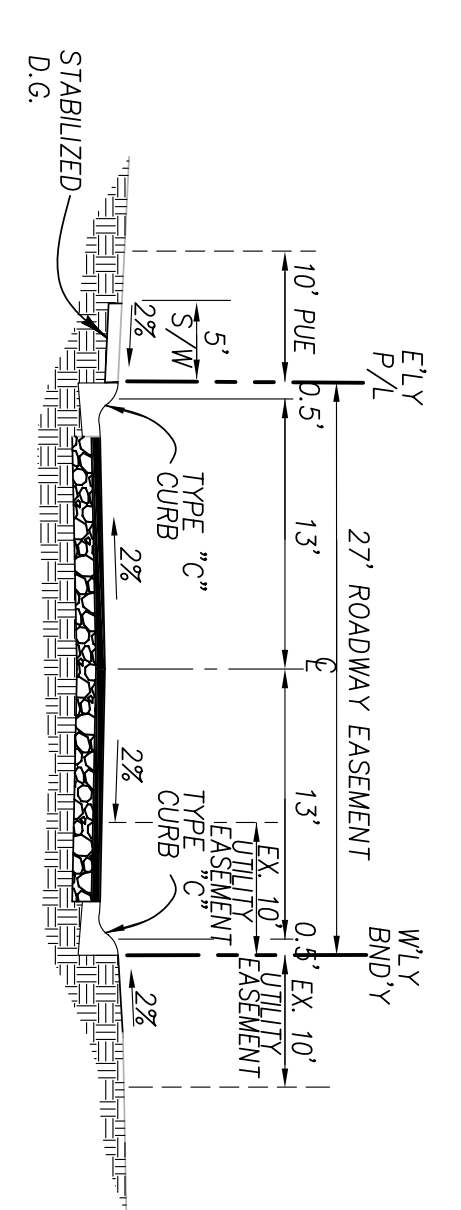
TENTATIVE TRACT MAP NO. 33840

WQMP

VICINITY MAP, SITE PLAN AND RECEIVING WATERS MAP



LEGEND:
 SUBAREA BOUNDARY
 FLOWPATH DIRECTION



SECTION A-A
 (VEGETATED SWALE AND DRAINAGE SWALE)
 NOT TO SCALE

APPLICANT/OWNERS:
 ZAREH HOOKASIAN ROAD
 FRANKLIN, TN 37064
 TEL: (615) 838-4820
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ENGINEER:
 ROS AND ASSOCIATES
 TEMECULA, CA 92592
 PH # (951) 981-7706

SITE ADDRESS:
 ELM ST
 WILDOMAR CA
A.P.N.:
 376-043-027

DATE	REVISIONS	CITY OF WILDOMAR
		WQMP SITE PLAN
		TENTATIVE TRACT MAP 33840
		ADN# 376-043-027
		APR 2013

RDS & ASSOCIATES
 30519 Wales Ct.
 Temecula, CA 92592
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Appendix C

Supporting Detail Related to Hydraulic Conditions of Concern

Appendix D

Educational Materials

For Information:

LOCAL SEWERING AGENCIES IN RIVERSIDE COUNTY:

City of Beaumont	(909) 769-8520
Belair Homeowners Association	(909) 277-1414
City of Banning	(909) 922-3130
City of Blythe	(760) 922-6161
City of Coachella	(760) 391-5008
Coachella Valley Water District	(760) 398-2651
City of Corona	(909) 736-2259
Desert Center, CSA #51	(760) 227-3203
Eastern Municipal Water District	(909) 928-3777
Elsinore Valley MWD	(909) 674-3146
Farm Mutual Water Company	(909) 244-4198
Idyllwild Water District	(909) 659-2143
Jurupa Community Services Dist.	(909) 685-7434
Lake Hemet MWD	(909) 658-3241
Lee Lake Water District	(909) 277-1414
March Air Force Base	(909) 656-7000
Mission Springs Water District	(760) 329-6448
City of Palm Springs	(760) 323-8242
Rancho Caballero	(909) 780-9272
Rancho California Water Dist.	(909) 676-4101
Ripley, CSA #62	(760) 922-4909
Rubidoux Community Services Dist.	(909) 684-7580
City of Riverside	(909) 782-5341
Silent Valley Club, Inc	(909) 849-4501
Valley Sanitary District	(760) 347-2356
Western Municipal Water District	(909) 780-4170

SPILL RESPONSE AGENCY:

HAZ-MAT: (909) 358-5055

HAZARDOUS WASTE DISPOSAL: (909) 358-5055

TO REPORT ILLEGAL DUMPING OR A CLOGGED

STORM DRAIN: 1-800-506-2555

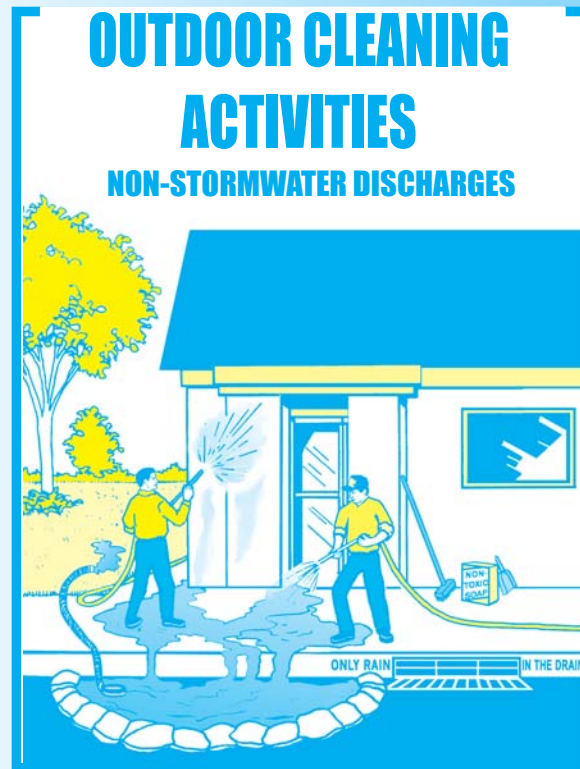


**Storm Water
Clean Water**
PROTECTION PROGRAM

Riverside County gratefully acknowledges the Bay Area Stormwater Management Agencies Association and the Cleaning Equipment Trade Association for information provided in this brochure.

StormWater Pollution

What you should know for...



GUIDELINES for disposal of washwater from:

- Sidewalk, plaza or parking lot cleaning
- Vehicle washing or detailing
- Building exterior cleaning
- Waterproofing
- Equipment cleaning or degreasing

Do you know . . . where the water should go?



Riverside County has two drainage systems - sanitary sewers and storm drains. The storm drain system is designed to prevent flooding by carrying excess rainwater away from streets. . . it's not designed to be a waste disposal system. Since the storm drain system does not provide for water treatment, it often serves the unintended function of transporting pollutants directly to our waterways.

Unlike sanitary sewers, storm drains are not connected to a treatment plant - they flow directly to our local streams, rivers and lakes.

Soaps, degreasers, automotive fluids, litter, and a host of other materials washed off buildings, sidewalks, plazas, parking areas, vehicles, and equipment can all pollute our waterways.

Non-stormwater discharges such as washwater generated from outdoor cleaning projects often transport harmful pollutants into storm drains and our local waterways. Polluted runoff contaminates local waterways and poses a threat to groundwater resources.

The Cities and County of Riverside StormWater/CleanWater Protection Program

Since preventing pollution is much easier, and less costly than cleaning up "after the fact," the Cities and County of Riverside StormWater/CleanWater Protection Program informs residents and businesses of pollution prevention activities such as those described in this pamphlet.

The Cities and County of Riverside have adopted ordinances for stormwater management and discharge control. In accordance with state and federal law, these local stormwater ordinances **prohibit** the discharge of wastes into the storm drain system or local surface waters. This includes non-stormwater discharges containing oil, grease, detergents, degreasers, trash, or other waste materials.



PLEASE NOTE: The discharge of pollutants into the street, gutters, storm drain system, or waterways - without a Regional Water Quality Control Board permit or waiver - is **strictly prohibited** by local ordinances and state and federal law.

Help Protect Our Waterways!

Use These Guidelines For Outdoor Cleaning Activities and Washwater Disposal

DO . . . Dispose of **small amounts** of washwater from cleaning **building exteriors, sidewalks, or plazas** onto landscaped or unpaved surfaces provided you have the owner's permission and the discharge will not cause flooding or nuisance problems, or flow into a storm drain.

DO NOT . . . Discharge **large amounts** of these types of washwater onto landscaped areas or soil where water may run to a street or storm drain. Wastewater from exterior cleaning may be pumped to a sewer line with specific permission from the local sewerage agency.

DO . . . Check with your local sewerage agency's policies and requirements concerning waste water disposal. **Water from many outdoor cleaning activities** may be acceptable for disposal to the sewer system. See the list on the back of this flyer for phone numbers of the sewerage agencies in your area.

DO NOT . . . Pour **hazardous wastes** or toxic materials into the storm drain or sewer system . . . properly dispose of it instead. When in doubt, contact the local sewerage agency! The agency will tell you what types of liquid wastes can be accepted.

DO . . . Understand that **water (without soap)** used to remove dust from clean vehicles may be discharged to a street or storm drain. **Washwater from sidewalk, plaza, and building surface cleaning** may go into a street or storm drain if ALL of the following conditions are met:

- 1) The surface being washed is free of residual oil stains, debris and similar pollutants by using dry cleanup methods (sweeping, and cleaning any oil or chemical spills with rags or other absorbent materials before using water).
- 2) Washing is done with water only - no soap or other cleaning materials.
- 3) You have not used the water to remove paint from surfaces during cleaning.

DO NOT . . . Dispose of water containing **soap or any other type of cleaning agent** into a storm drain or water body. This is a direct violation of state and/or local regulations. Because **wastewater from cleaning parking areas or roadways** normally contains metallic brake pad dust, oil and other automotive fluids, it should never be discharged to a street, gutter, or storm drain.

DO . . . Understand that **mobile auto detailers** should divert washwater to landscaped or dirt areas. Note: Be aware that soapy washwater may adversely affect landscaping; consult with the property owner. Residual washwater may remain on paved surfaces to evaporate; sweep up any remaining residue. If there is sufficient water volume to reach the storm drain, collect the runoff and obtain permission to pump it into the sanitary sewer. Follow local sewerage agency's requirements for disposal.

DO NOT . . . Dispose of left over cleaning agents into the gutter, storm drain or sanitary sewer.

Regarding Cleaning Agents:

If you must use soap, use biodegradable/phosphate free cleaners. Avoid use of petroleum based cleaning products. Although the use of nontoxic cleaning products is strongly encouraged, **do** understand that these products can still degrade water quality and, therefore, the discharge of these products into



the street, gutters, storm drain system, or waterways is prohibited by local ordinances and the State Water Code.

Note: When cleaning surfaces with a high pressure washer or steam cleaning methods, additional precautions should be taken to prevent the discharge of pollutants into the storm drain system. These two methods of surface cleaning, as compared to the use of a low pressure hose, can remove additional materials that can contaminate local waterways.

OTHER TIPS TO HELP PROTECT OUR WATER . . .

SCREENING WASH WATER

A thorough dry cleanup before washing (without soap) surfaces such as building exteriors and decks without loose paint, sidewalks, or plaza areas, *should be sufficient to protect storm drains*. **However**, if any debris (solids) could enter storm drains or remain in the gutter or street after cleaning, washwater should first pass through a "20 mesh" or finer screen to catch the solid material, which should then be disposed of in the trash.

DRAIN INLET PROTECTION/CONTAINING & COLLECTING WASH WATER

- Sand bags can be used to create a barrier around storm drain inlets.
- Plugs or rubber mats can be used to temporarily seal storm drain openings.
- You can also use vacuum booms, containment pads, or temporary berms to keep wash water away from the street, gutter, or storm drain.

EQUIPMENT AND SUPPLIES

Special materials such as absorbents, storm drain plugs and seals, small sump pumps, and vacuum booms are available from many vendors. For more information check catalogs such as New Pig (800-468-4647), Lab Safety Supply (800-356-0783), C&H (800-558-9966), and W.W. Grainger (800-994-9174); or call the Cleaning Equipment Trade Association (800-441-0111) or the Power Washers of North America (800-393-PWNA).

Appendix E

Soils Report

Appendix F

Treatment Control BMP Sizing Calculations and Design Details



Design Considerations

- Tributary Area
- Area Required
- Slope
- Water Availability

Description

Vegetated swales are open, shallow channels with vegetation covering the side slopes and bottom that collect and slowly convey runoff flow to downstream discharge points. They are designed to treat runoff through filtering by the vegetation in the channel, filtering through a subsoil matrix, and/or infiltration into the underlying soils. Swales can be natural or manmade. They trap particulate pollutants (suspended solids and trace metals), promote infiltration, and reduce the flow velocity of stormwater runoff. Vegetated swales can serve as part of a stormwater drainage system and can replace curbs, gutters and storm sewer systems.

California Experience

Caltrans constructed and monitored six vegetated swales in southern California. These swales were generally effective in reducing the volume and mass of pollutants in runoff. Even in the areas where the annual rainfall was only about 10 inches/yr, the vegetation did not require additional irrigation. One factor that strongly affected performance was the presence of large numbers of gophers at most of the sites. The gophers created earthen mounds, destroyed vegetation, and generally reduced the effectiveness of the controls for TSS reduction.

Advantages

- If properly designed, vegetated, and operated, swales can serve as an aesthetic, potentially inexpensive urban development or roadway drainage conveyance measure with significant collateral water quality benefits.

Targeted Constituents

<input checked="" type="checkbox"/>	Sediment	▲
<input checked="" type="checkbox"/>	Nutrients	●
<input checked="" type="checkbox"/>	Trash	●
<input checked="" type="checkbox"/>	Metals	▲
<input checked="" type="checkbox"/>	Bacteria	●
<input checked="" type="checkbox"/>	Oil and Grease	▲
<input checked="" type="checkbox"/>	Organics	▲

Legend (Removal Effectiveness)

- Low
- High
- ▲ Medium



- Roadside ditches should be regarded as significant potential swale/buffer strip sites and should be utilized for this purpose whenever possible.

Limitations

- Can be difficult to avoid channelization.
- May not be appropriate for industrial sites or locations where spills may occur
- Grassed swales cannot treat a very large drainage area. Large areas may be divided and treated using multiple swales.
- A thick vegetative cover is needed for these practices to function properly.
- They are impractical in areas with steep topography.
- They are not effective and may even erode when flow velocities are high, if the grass cover is not properly maintained.
- In some places, their use is restricted by law: many local municipalities require curb and gutter systems in residential areas.
- Swales are more susceptible to failure if not properly maintained than other treatment BMPs.

Design and Sizing Guidelines

- Flow rate based design determined by local requirements or sized so that 85% of the annual runoff volume is discharged at less than the design rainfall intensity.
- Swale should be designed so that the water level does not exceed 2/3rds the height of the grass or 4 inches, whichever is less, at the design treatment rate.
- Longitudinal slopes should not exceed 2.5%
- Trapezoidal channels are normally recommended but other configurations, such as parabolic, can also provide substantial water quality improvement and may be easier to mow than designs with sharp breaks in slope.
- Swales constructed in cut are preferred, or in fill areas that are far enough from an adjacent slope to minimize the potential for gopher damage. Do not use side slopes constructed of fill, which are prone to structural damage by gophers and other burrowing animals.
- A diverse selection of low growing, plants that thrive under the specific site, climatic, and watering conditions should be specified. Vegetation whose growing season corresponds to the wet season are preferred. Drought tolerant vegetation should be considered especially for swales that are not part of a regularly irrigated landscaped area.
- The width of the swale should be determined using Manning's Equation using a value of 0.25 for Manning's n.

Construction/Inspection Considerations

- Include directions in the specifications for use of appropriate fertilizer and soil amendments based on soil properties determined through testing and compared to the needs of the vegetation requirements.
- Install swales at the time of the year when there is a reasonable chance of successful establishment without irrigation; however, it is recognized that rainfall in a given year may not be sufficient and temporary irrigation may be used.
- If sod tiles must be used, they should be placed so that there are no gaps between the tiles; stagger the ends of the tiles to prevent the formation of channels along the swale or strip.
- Use a roller on the sod to ensure that no air pockets form between the sod and the soil.
- Where seeds are used, erosion controls will be necessary to protect seeds for at least 75 days after the first rainfall of the season.

Performance

The literature suggests that vegetated swales represent a practical and potentially effective technique for controlling urban runoff quality. While limited quantitative performance data exists for vegetated swales, it is known that check dams, slight slopes, permeable soils, dense grass cover, increased contact time, and small storm events all contribute to successful pollutant removal by the swale system. Factors decreasing the effectiveness of swales include compacted soils, short runoff contact time, large storm events, frozen ground, short grass heights, steep slopes, and high runoff velocities and discharge rates.

Conventional vegetated swale designs have achieved mixed results in removing particulate pollutants. A study performed by the Nationwide Urban Runoff Program (NURP) monitored three grass swales in the Washington, D.C., area and found no significant improvement in urban runoff quality for the pollutants analyzed. However, the weak performance of these swales was attributed to the high flow velocities in the swales, soil compaction, steep slopes, and short grass height.

Another project in Durham, NC, monitored the performance of a carefully designed artificial swale that received runoff from a commercial parking lot. The project tracked 11 storms and concluded that particulate concentrations of heavy metals (Cu, Pb, Zn, and Cd) were reduced by approximately 50 percent. However, the swale proved largely ineffective for removing soluble nutrients.

The effectiveness of vegetated swales can be enhanced by adding check dams at approximately 17 meter (50 foot) increments along their length (See Figure 1). These dams maximize the retention time within the swale, decrease flow velocities, and promote particulate settling. Finally, the incorporation of vegetated filter strips parallel to the top of the channel banks can help to treat sheet flows entering the swale.

Only 9 studies have been conducted on all grassed channels designed for water quality (Table 1). The data suggest relatively high removal rates for some pollutants, but negative removals for some bacteria, and fair performance for phosphorus.

Removal Efficiencies (% Removal)							
Study	TSS	TP	TN	NO ₃	Metals	Bacteria	Type
Caltrans 2002	77	8	67	66	83-90	-33	dry swales
Goldberg 1993	67.8	4.5	-	31.4	42-62	-100	grassed channel
Seattle Metro and Washington Department of Ecology 1992	60	45	-	-25	2-16	-25	grassed channel
Seattle Metro and Washington Department of Ecology, 1992	83	29	-	-25	46-73	-25	grassed channel
Wang et al., 1981	80	-	-	-	70-80	-	dry swale
Dorman et al., 1989	98	18	-	45	37-81	-	dry swale
Harper, 1988	87	83	84	80	88-90	-	dry swale
Kercher et al., 1983	99	99	99	99	99	-	dry swale
Harper, 1988.	81	17	40	52	37-69	-	wet swale
Koon, 1995	67	39	-	9	-35 to 6	-	wet swale

While it is difficult to distinguish between different designs based on the small amount of available data, grassed channels generally have poorer removal rates than wet and dry swales, although some swales appear to export soluble phosphorus (Harper, 1988; Koon, 1995). It is not clear why swales export bacteria. One explanation is that bacteria thrive in the warm swale soils.

Siting Criteria

The suitability of a swale at a site will depend on land use, size of the area serviced, soil type, slope, imperviousness of the contributing watershed, and dimensions and slope of the swale system (Schueler et al., 1992). In general, swales can be used to serve areas of less than 10 acres, with slopes no greater than 5 %. Use of natural topographic lows is encouraged and natural drainage courses should be regarded as significant local resources to be kept in use (Young et al., 1996).

Selection Criteria (NCTCOG, 1993)

- Comparable performance to wet basins
- Limited to treating a few acres
- Availability of water during dry periods to maintain vegetation
- Sufficient available land area

Research in the Austin area indicates that vegetated controls are effective at removing pollutants even when dormant. Therefore, irrigation is not required to maintain growth during dry periods, but may be necessary only to prevent the vegetation from dying.

The topography of the site should permit the design of a channel with appropriate slope and cross-sectional area. Site topography may also dictate a need for additional structural controls. Recommendations for longitudinal slopes range between 2 and 6 percent. Flatter slopes can be used, if sufficient to provide adequate conveyance. Steep slopes increase flow velocity, decrease detention time, and may require energy dissipating and grade check. Steep slopes also can be managed using a series of check dams to terrace the swale and reduce the slope to within acceptable limits. The use of check dams with swales also promotes infiltration.

Additional Design Guidelines

Most of the design guidelines adopted for swale design specify a minimum hydraulic residence time of 9 minutes. This criterion is based on the results of a single study conducted in Seattle, Washington (Seattle Metro and Washington Department of Ecology, 1992), and is not well supported. Analysis of the data collected in that study indicates that pollutant removal at a residence time of 5 minutes was not significantly different, although there is more variability in that data. Therefore, additional research in the design criteria for swales is needed. Substantial pollutant removal has also been observed for vegetated controls designed solely for conveyance (Barrett et al, 1998); consequently, some flexibility in the design is warranted.

Many design guidelines recommend that grass be frequently mowed to maintain dense coverage near the ground surface. Recent research (Colwell et al., 2000) has shown mowing frequency or grass height has little or no effect on pollutant removal.

Summary of Design Recommendations

- 1) The swale should have a length that provides a minimum hydraulic residence time of at least 10 minutes. The maximum bottom width should not exceed 10 feet unless a dividing berm is provided. The depth of flow should not exceed 2/3rds the height of the grass at the peak of the water quality design storm intensity. The channel slope should not exceed 2.5%.
- 2) A design grass height of 6 inches is recommended.
- 3) Regardless of the recommended detention time, the swale should be not less than 100 feet in length.
- 4) The width of the swale should be determined using Manning's Equation, at the peak of the design storm, using a Manning's n of 0.25.
- 5) The swale can be sized as both a treatment facility for the design storm and as a conveyance system to pass the peak hydraulic flows of the 100-year storm if it is located "on-line." The side slopes should be no steeper than 3:1 (H:V).
- 6) Roadside ditches should be regarded as significant potential swale/buffer strip sites and should be utilized for this purpose whenever possible. If flow is to be introduced through curb cuts, place pavement slightly above the elevation of the vegetated areas. Curb cuts should be at least 12 inches wide to prevent clogging.
- 7) Swales must be vegetated in order to provide adequate treatment of runoff. It is important to maximize water contact with vegetation and the soil surface. For general purposes, select fine, close-growing, water-resistant grasses. If possible, divert runoff (other than necessary irrigation) during the period of vegetation

establishment. Where runoff diversion is not possible, cover graded and seeded areas with suitable erosion control materials.

Maintenance

The useful life of a vegetated swale system is directly proportional to its maintenance frequency. If properly designed and regularly maintained, vegetated swales can last indefinitely. The maintenance objectives for vegetated swale systems include keeping up the hydraulic and removal efficiency of the channel and maintaining a dense, healthy grass cover.

Maintenance activities should include periodic mowing (with grass never cut shorter than the design flow depth), weed control, watering during drought conditions, reseeding of bare areas, and clearing of debris and blockages. Cuttings should be removed from the channel and disposed in a local composting facility. Accumulated sediment should also be removed manually to avoid concentrated flows in the swale. The application of fertilizers and pesticides should be minimal.

Another aspect of a good maintenance plan is repairing damaged areas within a channel. For example, if the channel develops ruts or holes, it should be repaired utilizing a suitable soil that is properly tamped and seeded. The grass cover should be thick; if it is not, reseed as necessary. Any standing water removed during the maintenance operation must be disposed to a sanitary sewer at an approved discharge location. Residuals (e.g., silt, grass cuttings) must be disposed in accordance with local or State requirements. Maintenance of grassed swales mostly involves maintenance of the grass or wetland plant cover. Typical maintenance activities are summarized below:

- Inspect swales at least twice annually for erosion, damage to vegetation, and sediment and debris accumulation preferably at the end of the wet season to schedule summer maintenance and before major fall runoff to be sure the swale is ready for winter. However, additional inspection after periods of heavy runoff is desirable. The swale should be checked for debris and litter, and areas of sediment accumulation.
- Grass height and mowing frequency may not have a large impact on pollutant removal. Consequently, mowing may only be necessary once or twice a year for safety or aesthetics or to suppress weeds and woody vegetation.
- Trash tends to accumulate in swale areas, particularly along highways. The need for litter removal is determined through periodic inspection, but litter should always be removed prior to mowing.
- Sediment accumulating near culverts and in channels should be removed when it builds up to 75 mm (3 in.) at any spot, or covers vegetation.
- Regularly inspect swales for pools of standing water. Swales can become a nuisance due to mosquito breeding in standing water if obstructions develop (e.g. debris accumulation, invasive vegetation) and/or if proper drainage slopes are not implemented and maintained.

Cost

Construction Cost

Little data is available to estimate the difference in cost between various swale designs. One study (SWRPC, 1991) estimated the construction cost of grassed channels at approximately \$0.25 per ft². This price does not include design costs or contingencies. Brown and Schueler (1997) estimate these costs at approximately 32 percent of construction costs for most stormwater management practices. For swales, however, these costs would probably be significantly higher since the construction costs are so low compared with other practices. A more realistic estimate would be a total cost of approximately \$0.50 per ft², which compares favorably with other stormwater management practices.

Table 2 Swale Cost Estimate (SEWRPC, 1991)

Component	Unit	Extent	Unit Cost			Total Cost		
			Low	Moderate	High	Low	Moderate	High
Mobilization / Demobilization-Light	Swale	1	\$107	\$274	\$441	\$107	\$274	\$441
Site Preparation Clearing ^b Grubbing ^c General Excavation ^d Level and Till ^e	Acres	0.5	\$2,200	\$3,800	\$5,400	\$1,100	\$1,900	\$2,700
	Acres	0.25	\$3,800	\$5,200	\$6,600	\$950	\$1,300	\$1,650
	Yd ³	372	\$2,10	\$3,70	\$5,30	\$781	\$1,376	\$1,972
	Yd ³	1,210	\$0,20	\$0,35	\$0,50	\$242	\$424	\$605
Sites Development Salvaged Topsoil Seed, and Mulch ^f Sod ^g	Yd ²	1,210	\$0,40	\$1,00	\$1,60	\$484	\$1,210	\$1,936
	Yd ²	1,210	\$1,20	\$2,40	\$3,60	\$1,452	\$2,904	\$4,356
Subtotal	--	--	--	--	--	\$5,116	\$9,388	\$13,660
Contingencies	Swale	1	25%	25%	25%	\$1,279	\$2,347	\$3,415
Total	--	--	--	--	--	\$6,395	\$11,735	\$17,075

Source: (SEWRPC, 1991)

Note: Mobilization/demobilization refers to the organization and planning involved in establishing a vegetative swale.

^a Swale has a bottom width of 1.0 foot, a top width of 10 feet with 1:3 side slopes, and a 1,000-foot length.

^b Area cleared = (top width + 10 feet) x swale length.

^c Area grubbed = (top width x swale length).

^d Volume excavated = (0.67 x top width x swale depth) x swale length (parabolic cross-section).

^e Area filled = (top width + $\frac{8}{3}$ (swale depth)² x swale length (parabolic cross-section).

^f Area seeded = area cleared x 0.5.

^g Area sodded = area cleared x 0.5.

Table 3 Estimated Maintenance Costs (SEWRPC, 1991)

Component	Unit Cost	Swale Size (Depth and Top Width)		Comment
		1.5 Foot Depth, One-Foot Bottom Width, 10-Foot Top Width	3-Foot Depth, 3-Foot Bottom Width, 21-Foot Top Width	
Lawn Mowing	\$0.85 / 1,000 ft ² / mowing	\$0.14 / linear foot	\$0.21 / linear foot	Lawn maintenance area = (top width + 10 feet) x length. Mow eight times per year
General Lawn Care	\$9.00 / 1,000 ft ² / year	\$0.18 / linear foot	\$0.28 / linear foot	Lawn maintenance area = (top width + 10 feet) x length
Swale Debris and Litter Removal	\$0.10 / linear foot / year	\$0.10 / linear foot	\$0.10 / linear foot	-
Grass Reseeding with Mulch and Fertilizer	\$0.30 / yd ²	\$0.01 / linear foot	\$0.01 / linear foot	Area revegetated equals 1% of lawn maintenance area per year
Program Administration and Swale Inspection	\$0.15 / linear foot / year, plus \$25 / inspection	\$0.15 / linear foot	\$0.15 / linear foot	Inspect four times per year
Total	--	\$0.58 / linear foot	\$0.75 / linear foot	--

Maintenance Cost

Caltrans (2002) estimated the expected annual maintenance cost for a swale with a tributary area of approximately 2 ha at approximately \$2,700. Since almost all maintenance consists of mowing, the cost is fundamentally a function of the mowing frequency. Unit costs developed by SEWRPC are shown in Table 3. In many cases vegetated channels would be used to convey runoff and would require periodic mowing as well, so there may be little additional cost for the water quality component. Since essentially all the activities are related to vegetation management, no special training is required for maintenance personnel.

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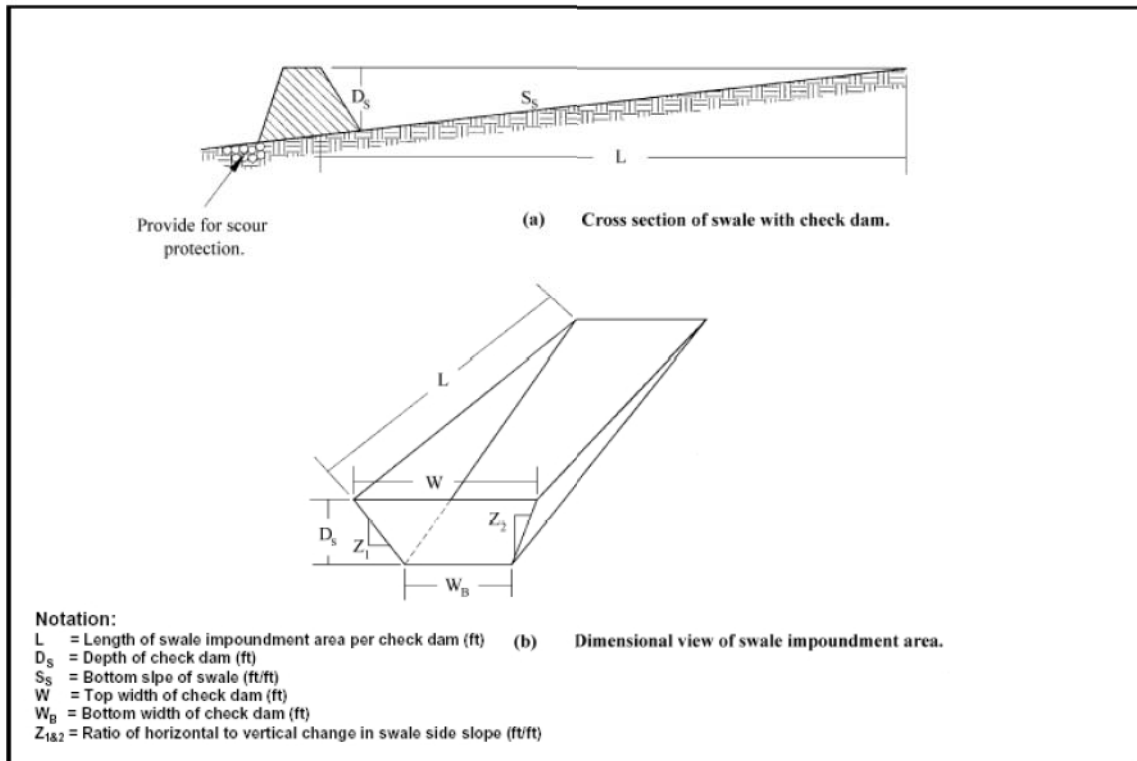
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Flow Based BMPs

General

Flow based BMPs are sized to treat flows up to the design flow rate, which will remove pollutants to the MEP. This handbook bases the design flow rate on a uniform rainfall intensity of 0.2 inches per hour, as recommended by the California BMP Handbook. The flow rate is also dependent on the type of soil and percentage of impervious area in the development.

Uniform Intensity Approach

The Uniform Intensity Approach is where the Design Rainfall Intensity, I is specified as:

$$I = 0.2 \text{ in/hr}$$

That Intensity is then plugged into the Rational Equation to find the BMP design flow rate (Q).

$$Q_{\text{BMP}} = CIA$$

Where

- A = Tributary Area to the BMP
- C = Runoff Coefficient, based upon a Rainfall Intensity = 0.2 in/hr
- I = Design Rainfall intensity, 0.2 in/hr

A step-by-step procedure for calculating the design flow rate is presented on [Worksheet 2](#). [Table 4](#) shows runoff coefficient values pertaining to the type of soils and percent imperviousness.

Table 4. Runoff Coefficients for an Intensity = 0.2 ⁱⁿ/_{hr} for Urban Soil Types*

Impervious %	A Soil RI =32	B Soil RI =56	C Soil RI =69	D Soil RI =75
0 (Natural)	0.06	0.14	0.23	0.28
5	0.10	0.18	0.26	0.31
10	0.14	0.22	0.29	0.34
15	0.19	0.26	0.33	0.37
20 (1-Acre)	0.23	0.30	0.36	0.40
25	0.27	0.33	0.39	0.43
30	0.31	0.37	0.43	0.47
35	0.35	0.41	0.46	0.50
40 (1/2-Acre)	0.40	0.45	0.50	0.53
45	0.44	0.48	0.53	0.56
50 (1/4-Acre)	0.48	0.52	0.56	0.59
55	0.52	0.56	0.60	0.62
60	0.56	0.60	0.63	0.65
65 (Condominiums)	0.61	0.64	0.66	0.68
70	0.65	0.67	0.70	0.71
75 (Mobilehomes)	0.69	0.71	0.73	0.74
80 (Apartments)	0.73	0.75	0.77	0.78
85	0.77	0.79	0.80	0.81
90 (Commercial)	0.82	0.82	0.83	0.84
95	0.86	0.86	0.87	0.87
100	0.90	0.90	0.90	0.90

*Complete District's standards can be found in the Riverside County Flood Control Hydrology Manual

Design Procedure Form for Design Flow

Uniform Intensity Design Flow

Designer: _____
 Company: _____
 Date: _____
 Project: _____
 Location: _____

<p>1. Determine Impervious Percentage</p> <p>a. Determine total tributary area</p> <p>b. Determine Impervious %</p>	<p>$A_{total} =$ _____ acres (1)</p> <p>$i =$ _____ % (2)</p>
<p>2. Determine Runoff Coefficient Values Use Table 4 and impervious % found in step 1</p> <p>a. A Soil Runoff Coefficient</p> <p>b. B Soil Runoff Coefficient</p> <p>c. C Soil Runoff Coefficient</p> <p>d. D Soil Runoff Coefficient</p>	<p>$C_a =$ _____ (3)</p> <p>$C_b =$ _____ (4)</p> <p>$C_c =$ _____ (5)</p> <p>$C_d =$ _____ (6)</p>
<p>3. Determine the Area decimal fraction of each soil type in tributary area</p> <p>a. Area of A Soil / (1) =</p> <p>b. Area of B Soil / (1) =</p> <p>c. Area of C Soil / (1) =</p> <p>d. Area of D Soil / (1) =</p>	<p>$A_a =$ _____ (7)</p> <p>$A_b =$ _____ (8)</p> <p>$A_c =$ _____ (9)</p> <p>$A_d =$ _____ (10)</p>
<p>4. Determine Runoff Coefficient</p> <p>a. $C = (3) \times (7) + (4) \times (8) + (5) \times (9) + (6) \times (10) =$</p>	<p>$C =$ _____ (11)</p>
<p>5. Determine BMP Design flow</p> <p>a. $Q_{BMP} = C \times I \times A = (11) \times 0.2 \times (1)$</p>	<p>$Q_{BMP} =$ _____ $\frac{ft^3}{s}$ (12)</p>

Grassed Swales

General

A Grass swale is a wide, shallow densely vegetated channel that treats stormwater runoff as it is slowly conveyed into a downstream system. These swales have very shallow slopes in order to allow maximum contact time with the vegetation. The depth of water of the design flow should be less than the height of the vegetation. Contact with vegetation improves water quality by plant uptake of pollutants, removal of sediment, and an increase in infiltration. Overall the effectiveness of a grass swale is limited and it is recommended that they are used in combination with other BMPs.

This BMP is not appropriate for industrial sites or locations where spills occur. Important factors to consider when using this BMP include: natural channelization should be avoided to maintain this BMP's effectiveness, large areas must be divided and treated with multiple swales, thick cover is required to function properly, impractical for steep topography, and not effective with high flow velocities.

Grass Swale Design Criteria:

Design Parameter	Unit	Design Criteria
Design Flow	cfs	Q_{BMP}
Minimum bottom width	ft	2 ft ²
Maximum channel side slope	H:V	3:1 ²
Minimum slope in flow direction	%	0.2 (provide underdrains for slopes < 0.5) ¹
Maximum slope in flow direction	%	2.0 (provide grade-control checks for slopes >2.0) ¹
Maximum flow velocity	ft/sec	1.0 (based on Manning n = 0.20) ¹
Maximum depth of flow	inches	3 to 5 (1 inch below top of grass) ¹
Minimum contact time	minutes	7 ¹
Minimum length	ft	Sufficient length to provide minimum contact time ¹
Vegetation	-	Turf grass or approved equal ¹
Grass height	inches	4 to 6 (mow to maintain height) ¹

¹ Ventura County's Technical Guidance Manual for Stormwater Quality Control Measures

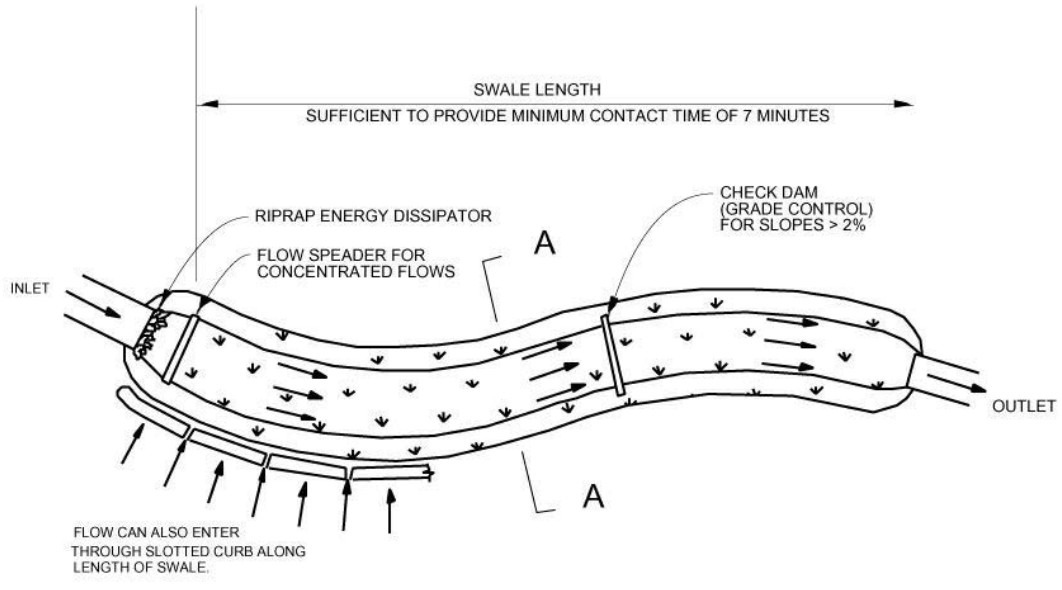
² City of Modesto's Guidance Manual for New Development Stormwater Quality Control Measures

³ CA Stormwater BMP Handbook for New Development and Significant Redevelopment

⁴ Riverside County DAMP Supplement A Attachment

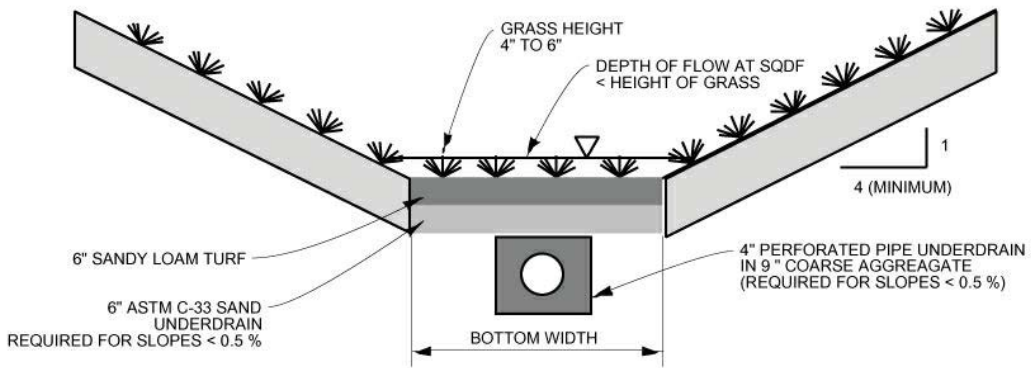
Grass Swale Design Procedure

1. Design Flow
Use [Worksheet 2](#) - Design Procedure Form for Design Flow Rate, Q_{BMP} .
2. Swale Geometry
 - a. Determine bottom width of swale (must be at least 2 feet).
 - b. Determine side slopes (must not be steeper than 3:1; flatter is preferred).
 - c. Determine flow direction slope (must be between 0.2% and 2%; provide underdrains for slopes less than 0.5% and provide grade control checks for slopes greater than 2.0%)
3. Flow Velocity
Maximum flow velocity should not exceed 1.0 ft/sec based on a Mannings $n = 0.20$
4. Flow Depth
Maximum depth of flow should not exceed 3 to 5 inches based on a Manning $n = 0.20$
5. Swale Length
Provide length in the flow direction sufficient to yield a minimum contact time of 7 minutes.
$$L = (7 \text{ min}) \times (\text{flow velocity ft/s}) \times (60 \text{ sec/min})$$
6. Vegetation
Provide irrigated perennial turf grass to yield full, dense cover. Mow to maintain height of 4 to 6 inches.
7. Provide sufficient flow depth for flood event flows to avoid flooding of critical areas or structures.



TRAPEZOIDAL GRASS SWALE PLAN

NOT TO SCALE



TRAPEZOIDAL GRASS SWALE SECTION

NOT TO SCALE

Figure 11: Grassed Swale

Source: Ventura County Guidance Manual

Design Procedure Form for Grassed Swale	
Designer: _____ Company: _____ Date: _____ Project: _____ Location: _____	
1. Determine Design Flow (Use Worksheet 2)	$Q_{BMP} =$ _____ cfs
2. Swale Geometry a. Swale bottom width (b) b. Side slope (z) c. Flow direction slope (s)	b = _____ ft z = _____ s = _____ %
3. Design flow velocity (Manning n = 0.2)	v = _____ ft/s
4. Depth of flow (D)	D = _____ ft
5. Design Length (L) L = (7 min) x (flow velocity, ft/sec) x 60	L = _____ ft
6. Vegetation (describe)	_____ _____ _____
8. Outflow Collection (check type used or describe "other")	<input type="checkbox"/> Grated Inlet' <input type="checkbox"/> Infiltration Trench <input type="checkbox"/> Underdrain <input type="checkbox"/> Other _____
Notes: _____ _____ _____ _____ _____ _____	

Worksheet 2

Design Procedure Form for Design Flow

Uniform Intensity Design Flow

Designer: Rich Soltysiak

Company: RDS and Associates

Date: May 9, 2013

Project: Wildomar TR 33840

Location: _____

<p>1. Determine Impervious Percentage</p> <p style="margin-left: 20px;">a. Determine total tributary area</p> <p style="margin-left: 20px;">b. Determine Impervious %</p>	<p>$A_{total} = \underline{\hspace{2cm} 4.07 \hspace{2cm}} \text{ acres} \quad (1)$</p> <p>$i = \underline{\hspace{2cm} 0.42 \hspace{2cm}} \% \quad (2)$</p>
<p>2. Determine Runoff Coefficient Values Use Table 4 and impervious % found in step 1</p> <p style="margin-left: 20px;">a. A Soil Runoff Coefficient</p> <p style="margin-left: 20px;">b. B Soil Runoff Coefficient</p> <p style="margin-left: 20px;">c. C Soil Runoff Coefficient</p> <p style="margin-left: 20px;">d. D Soil Runoff Coefficient</p>	<p>$C_a = \underline{\hspace{2cm}} \quad (3)$</p> <p>$C_b = \underline{\hspace{2cm} 0.48 \hspace{2cm}} \quad (4)$</p> <p>$C_c = \underline{\hspace{2cm}} \quad (5)$</p> <p>$C_d = \underline{\hspace{2cm}} \quad (6)$</p>
<p>3. Determine the Area decimal fraction of each soil type in tributary area</p> <p style="margin-left: 20px;">a. Area of A Soil / (1) =</p> <p style="margin-left: 20px;">b. Area of B Soil / (1) =</p> <p style="margin-left: 20px;">c. Area of C Soil / (1) =</p> <p style="margin-left: 20px;">d. Area of D Soil / (1) =</p>	<p>$A_a = \underline{\hspace{2cm}} \quad (7)$</p> <p>$A_b = \underline{\hspace{2cm} 1.0 \hspace{2cm}} \quad (8)$</p> <p>$A_c = \underline{\hspace{2cm}} \quad (9)$</p> <p>$A_d = \underline{\hspace{2cm}} \quad (10)$</p>
<p>4. Determine Runoff Coefficient</p> <p style="margin-left: 20px;">a. $C = (3) \times (7) + (4) \times (8) + (5) \times (9) + (6) \times (10) =$</p>	<p>$C = \underline{\hspace{2cm} 0.48 \hspace{2cm}} \quad (11)$</p>
<p>5. Determine BMP Design flow</p> <p style="margin-left: 20px;">a. $Q_{BMP} = C \times I \times A = (11) \times 0.2 \times (1)$</p>	<p>$Q_{BMP} = \underline{\hspace{2cm} 0.4 \hspace{2cm}} \frac{\text{ft}^3}{\text{s}} \quad (12)$</p>



LEGEND

— SOILS GROUP BOUNDARY
A SOILS GROUP DESIGNATION

RCFC & WCD
HYDROLOGY MANUAL

0 FEET 5000

**HYDROLOGIC SOILS GROUP MAP
FOR
WILDOMAR**

Design Procedure Form for Grassed Swale	
Designer: <u>Rich Soltysiak</u> Company: <u>RDS and Associates</u> Date: <u>May 9, 2013</u> Project: <u>Wildomar TR 33840</u> Location: _____	
1. Determine Design Flow (Use Worksheet 2)	$Q_{BMP} = \underline{0.4} \text{ cfs}$
2. Swale Geometry a. Swale bottom width (b) b. Side slope (z) c. Flow direction slope (s)	$b = \underline{3} \text{ ft}$ $z = \underline{3}$ $s = \underline{3} \%$
3. Design flow velocity (Manning n = 0.2)	$v = \underline{0.24} \text{ ft/s}$
4. Depth of flow (D)	$D = \underline{0.4} \text{ ft}$
5. Design Length (L) $L = (7 \text{ min}) \times (\text{flow velocity, ft/sec}) \times 60$	$L = \underline{101} \text{ ft}$
6. Vegetation (describe)	_____ _____
8. Outflow Collection (check type used or describe "other")	<input checked="" type="checkbox"/> Grated Inlet' <input type="checkbox"/> Infiltration Trench <input type="checkbox"/> Underdrain <input type="checkbox"/> Other _____
Notes: $Q = 1.49(0.2)(AR^{2/3})S^{1/2}$ _____ _____ _____ _____ _____	

FHWA Urban Drainage Design Program, HY-22
HYDRAULIC PARAMETERS OF OPEN CHANNELS

Trapezoidal, Rectangular, or Triangular X-Section
Date: 04/05/2013

Project No. :
Project Name.: Wildomar TR33840
Computed by : Rich Soltysiak

Project Description
Grass Swale BMP Hydraulics

INPUT PARAMETERS

1. Channel Slope (ft/ft)	0.0050
2. Channel Bottom Width (ft)	3.00
3. Left Side Slope (Horizontal to 1)	3.00
4. Right Side Slope (Horizontal to 1)	3.00
5. Manning's Coefficient	0.200
6. Discharge (cfs)	0.40
7. Depth of Flow (ft)	0.40

OUTPUT RESULTS

Cross Section Area (Sqft)	1.68
Average Velocity (ft/sec)	0.24
Top Width (ft)	5.40
Hydraulic Radius (ft)	0.30
Froude Number	0.08

Appendix G

AGREEMENTS – CC&Rs, COVENANT AND AGREEMENTS AND/OR OTHER
MECHANISMS FOR ENSURING ONGOING OPERATION,
MAINTENANCE, FUNDING AND TRANSFER OF REQUIREMENTS FOR
THIS PROJECT-SPECIFIC WQMP

Appendix H

PHASE 1 ENVIRONMENTAL SITE ASSESSMENT – SUMMARY OF SITE REMEDIATION CONDUCTED AND USE RESTRICTIONS

**APPENDIX 9:
ELM STREET NOISE CONTOUR -
EXISTING CONDITIONS**

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number: 28-0047C 018 03

Project Name: ELM STREET

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
 Source of Traffic Volumes: Abrams Associates Traffic Engineering
 Community Noise Descriptor: L_{dn}: _____ CNEL: x

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Existing Condition Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
						Medium Trucks	Heavy Trucks	CNEL at 100 Feet	Distance to Contour			
								70 CNEL	65 CNEL	60 CNEL	55 CNEL	
Central Street												
West of Palomar Street	2	0	9,700	40	0.5	1.8%	0.7%	59.9	-	46	98	211
East of Palomar Street	2	0	10,300	40	0.5	1.8%	0.7%	60.1	-	47	102	220

¹ Distance is from the centerline of the roadway segment to the receptor location.

"-" = contour is located within the roadway right-of-way.



**RESPONSE TO COMMENTS ON THE INITIAL
STUDY/MITIGATED NEGATIVE DECLARATION FOR**

Elm Street Tentative Tract Map

(Planning Application 08-0154)

SCH# 2014071028

Lead Agency:

CITY OF WILDOMAR

23873 Clinton Keith Road, Suite 201

Wildomar, CA 92595

Prepared by:

PMC

6020 Cornerstone Court West, Suite 260

San Diego, CA 92121

June 2015

1.0 INTRODUCTION

1.1 Background of Environmental Review Process for the Project 1.0-1
1.2 Intended Uses of the IS/MND 1.0-1
1.3 Organization and Scope of this Document 1.0-3

2.0 COMMENTS AND RESPONSES TO COMMENTS

2.1 List of Commenters 2.0-1
2.2 Comments and Responses 2.0-1

3.0 MINOR REVISIONS TO THE IS/MND

3.1 Introduction 3.0-1
3.2 Minor Changes and Edits to the IS/MND 3.0-1

ATTACHMENTS TO THIS DOCUMENT

A Public Notices

TABLE OF CONTENTS

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1.0 INTRODUCTION

This document, in conjunction with the draft Initial Study/Mitigated Negative Declaration (IS/MND) responds to comments made on the proposed Elm Street Tentative Tract Map (TTM No. 33840) project. While the State California Environmental Quality Act (CEQA) Guidelines do not require a final initial study or the preparation of formal responses to comments on draft initial studies/mitigated negative declarations, in order to provide further disclosure of the project's impacts, the City has determined to provide responses to the comments it has received.

1.1 BACKGROUND OF ENVIRONMENTAL REVIEW PROCESS FOR THE PROJECT

FIRST INITIAL STUDY

The first IS/MND was circulated for public and agency review from July 9, 2014 through August 7, 2014. Three comments were received on this Initial Study. Because of changes proposed to the project, the City decided to revise and recirculate the initial IS/MND.

RECIRCULATED INITIAL STUDY

The recirculated IS/MND was released for public and agency review from March 25, 2015 through April 23, 2015. The City received six comments during this review period.

RESPONSE TO COMMENTS

This document provides a response to comments received on both versions of the IS/MND. The nine comment letters are listed chronologically in Chapter 2.0, Response to Comments. It should be noted that the comments received during the first circulated draft IS/MND were incorporated into the recirculated draft IS/MND.

1.2 INTENDED USES OF THE IS/MND

The IS/MND in its final form will be used by the City of Wildomar in considering approval of the proposed project. In accordance with CEQA Guidelines Section 15074, the IS/MND will be used as the primary environmental document in consideration of all subsequent planning and permitting actions associated with the project, to the extent such actions require CEQA compliance and as otherwise permitted under applicable law.

CONSIDERATION OF COMMENTS

Prior to taking action on the proposed project, the City will consider the IS/MND, this response to comments document, and any additional comments or testimony. Negative declarations and mitigated declarations are considered and adopted per CEQA Guidelines Section 15074, which reads as follows:

15074. CONSIDERATION AND ADOPTION OF A NEGATIVE DECLARATION OR MITIGATED NEGATIVE DECLARATION.

- (a) Any advisory body of a public agency making a recommendation to the decision-making body shall consider the proposed negative declaration or mitigated negative declaration before making its recommendation.
- (b) Prior to approving a project, the decision-making body of the lead agency shall consider the proposed negative declaration or mitigated negative declaration together with any comments received during the public review process. The

1.0 INTRODUCTION

decision-making body shall adopt the proposed negative declaration or mitigated negative declaration only if it finds on the basis of the whole record before it (including the initial study and any comments received), that there is no substantial evidence that the project will have a significant effect on the environment and that the negative declaration or mitigated negative declaration reflects the lead agency's independent judgment and analysis.

- (c) When adopting a negative declaration or mitigated negative declaration, the lead agency shall specify the location and custodian of the documents or other material which constitute the record of proceedings upon which its decision is based.*
- (d) When adopting a mitigated negative declaration, the lead agency shall also adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to mitigate or avoid significant environmental effects.*
- (e) A lead agency shall not adopt a negative declaration or mitigated negative declaration for a project within the boundaries of a comprehensive airport land use plan or, if a comprehensive airport land use plan has not been adopted, for a project within two nautical miles of a public airport or public use airport, without first considering whether the project will result in a safety hazard or noise problem for persons using the airport or for persons residing or working in the project area.*
- (f) When a non-elected official or decision making body of a local lead agency adopts a negative declaration or mitigated negative declaration, that adoption may be appealed to the agency's elected decision making body, if one exists. For example, adoption of a negative declaration for a project by a city's planning commission may be appealed to the city council. A local lead agency may establish procedures governing such appeals.*

Upon review and consideration of the IS/MND, the City may take action to adopt, revise, or reject the proposed project. A decision to approve the proposed project would be made in a resolution recommending certification of the IS/MND as part of the consideration of the proposed project. The City of Wildomar has prepared this IS/MND and has determined that the environmental impacts of the proposed project have been reduced to a less than significant level through mitigation measures adopted as part of a Mitigation Monitoring and Reporting Program (MMRP).

1.3 ORGANIZATION AND SCOPE OF THIS DOCUMENT

This document is organized in the following manner:

SECTION 1.0 – INTRODUCTION

Section 1.0 provides an overview of the environmental review process to date and discusses the CEQA requirements for consideration and adoption of a mitigated negative declaration.

SECTION 2.0 – COMMENTS AND RESPONSES TO COMMENTS

Section 2.0 provides a list of commenters, copies of written comments (coded for reference), and the responses to those comments made on the IS/MND.

SECTION 3.0 – MINOR REVISIONS TO THE IS/MND

Section 3.0 provides a list of minor edits made to the IS/MND as a result of comments received or other staff-initiated changes.

1.0 INTRODUCTION

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2.0 RESPONSE TO COMMENTS

2.0 COMMENTS AND RESPONSES TO COMMENTS

2.1 LIST OF COMMENTERS

The following individuals and representatives of organizations and agencies submitted written comments on the Draft MND. As discussed in Chapter 1.0, Introduction, the Initial Study/Mitigated Negative Declaration ("IS/MND") was circulated during two different public review/comment periods. The initial IS/MND was first circulated from July 9, 2014 through August 7, 2014 ("First Distribution"), a revised IS/MND was circulated from March 25, 2015 through April 23, 2015 ("Second Distribution").

Letter	Agency, Organization, or Individual	Date
First Distribution – July 2014		
Aa	Native American Heritage Commission	July 17, 2014
Bb	Johnson & Sedlack	August 7, 2014
Cc	Pechanga Cultural Resources	August 7, 2014
Second Distribution – March 2015		
A	Riverside County Flood Control	April 15, 2015
B	Elsinore Valley Municipal Water District	April 15, 2015
C	California Department of Fish and Wildlife	April 20, 2015
D	Pechanga Cultural Resources	April 23, 2015
1	Bridges-Bucket-St. Marie	April 23, 2015
2	Soboba Band of Luiseno Indians	April 23, 2015

2.2 COMMENTS AND RESPONSES

RESPONSES TO COMMENT LETTERS

Written comments on the draft IS/MND are reproduced on the following pages, along with responses to those comments. Note that the comments span two versions of the IS/MND. CEQA does not require lead agencies to provide formal responses to comments received on initial studies supporting proposed mitigated negative declarations; however, the City prepared these response to comments document to provide responses to comments received on both circulations of the IS/MND in order to provide comprehensive information and disclosure for both the public and City's decision-makers.

Where changes deemed necessary to clarify the draft IS/MND text result from responding to comments, those minor changes are included in the response and demarcated with revision marks (underline for new text, ~~strikeout~~ for deleted text). The six comment letters are listed chronologically.

Letter Aa

STATE OF CALIFORNIA

Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691
(916) 373-3715
Fax (916) 373-5471
Web Site www.nahc.ca.gov
Ds_nahc@pacbell.net
e-mail: ds_nahc@pacbell.net

RECEIVED

JUL 21 2'



July 17, 2014 CITY OF WILDOMAR

Mr. Matthew C. Bassi, Planning Director

City of Wildomar

23873 Clinton Keith Road, Suite 201
Wildomar, CA 92595

RE: SCH# 2014071028 CEQA Notice of Completion and Environmental Document Transmittal for the **"Elm Street Tentative Tract Map MND, Change of Zone 08-0154, Tentative Tract Map No. 33840"** project located in the City of Wildomar, Riverside County, California

Dear Mr. Bassi:

The Native American Heritage Commission (NAHC) has reviewed the above-referenced environmental document.

The California Environmental Quality Act (CEQA) states that any project which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA guidelines 15064.5(b)). To adequately comply with this provision and mitigate project-related impacts on archaeological resources, the Commission recommends the following actions be required:

Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, pursuant to California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities. Also, California Public Resources Code Section 21083.2 require documentation and analysis of archaeological items that meet the standard in Section 15064.5 (a)(b)(f).

We suggest that this (additional archaeological activity) be coordinated with the NAHC, if possible. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. Any information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure pursuant

Aa-1

Letter Aa Continued

to California Government Code Section 6254.10.

Aa-1
cont.

A list of appropriate Native American Contacts for consultation concerning the project site has been provided and is attached to this letter to determine if the proposed active might impinge on any cultural resources.

California Government Code Section 65040.12(e) defines "environmental justice" to provide "fair treatment of People...with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations and policies." (The California Code is consistent with the Federal Executive Order 12898 regarding 'environmental justice.' Also, applicable to state agencies is Executive Order B-10-11 requires consultation with Native American tribes their elected officials and other representatives of tribal governments to provide meaningful input into the development of legislation, regulations, rules, and policies on matters that may affect tribal communities.

Lead agencies should consider first, avoidance for sacred and/or historical sites, pursuant to CEQA Guidelines 15370(a). Then if the project goes ahead then, lead agencies include in their mitigation and monitoring plan provisions for the analysis and disposition of recovered artifacts, pursuant to California Public Resources Code Section 21083.2 in consultation with culturally affiliated Native Americans.

Aa-2

Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

Sincerely,



Gayle Totton
Program Analyst

CC: State Clearinghouse

Attachment: Native American Contacts list

Letter Aa Continued
Native American Contacts
Riverside County
July 17, 2014

Pechanga Band of Mission Indians
Paul Macarro, Cultural Resources Manager
P.O. Box 1477 Luiseno
Temecula , CA 92593
pmacarro@pechanga-nsn.gov
(951) 770-8100
(951) 506-9491 Fax

Pechanga Cultural Resources Department
Anna Hoover, Cultural Analyst
P.O. Box 2183 Luiseño
Temecula , CA 92593
ahoover@pechanga-nsn.gov
(951) 770-8104
(951) 694-0446 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting locative Americans with regard to cultural resources for the proposed Elm Street Tentative Tract Map MND, Change of Zone 08-0154; Tentative Tract Map No. 33840 Project; located near the City of Wildomar; Riverside County, California for which a Sacred Lands file search and Native American Contacts list were requested.

Comment Letter Aa – Native American Heritage Commission

- Aa-1** The commenter states that pursuant to California Environmental Quality Act (CEQA) 15064.5(f), lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered resources. Furthermore, California Public Resources Code Section 21083.2 requires documentation and analysis of archaeological items that meet the standard in Section 15064.5 (a)(b)(f). The commenter suggests that this (additional archaeological activity) be coordinated with the NAHC, if possible.

Mitigation measure CUL-6 on Page 40 of the IS/MND includes identification and evaluation of accidentally discovered archaeological resources pursuant to CEQA 15064.5(a)(b)(f) and California Public Resources Code Section 21083.2. Mitigation measure CUL-6 has been revised and is reflected in Chapter 3 of the Final IS/MND to include coordination with the NAHC.

CUL-6 If inadvertent discoveries of subsurface archaeological resources are discovered during grading, work shall be halted immediately within 50 feet of the discovery. The developer, the project archeologist, the Native American Heritage Commission and the Tribe shall assess the significance of such resources and shall meet and confer regarding the mitigation for such resources. If the developer and the Tribe cannot agree on the significance of or the mitigation for such resources, these issues will be presented to the City of Wildomar Planning Director. The Planning Director shall make the determination based on the provisions of CEQA with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the Pechanga Tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the City of Wildomar. In the event the significant resources are recovered and if the qualified archaeologist determines the resources to be historic or unique as defined by relevant state and local law, avoidance and mitigation would be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.

- Aa-2** The commenter states that lead agencies should consider first, avoidance for sacred and/or historical sites, pursuant to CEQA Guidelines 15370(a) and should include provisions for discovery of Native American human remains in their mitigation plan.

Mitigation Measures CUL-3, CUL-4, CUL-5 on Page 40 of the IS/MND include mitigation for addressing sacred and/or historical sites and human remains.

Letter Bb

Johnson & Sedlack

ATTORNEYS at LAW

Raymond W. Johnson, Esq. AICP, LEED GA 26785 Camino Seco, Temecula, CA 92590
Carl T. Sedlack, Esq. Retired
Abigail A. Smith, Esq.
Kimberly Foy, Esq.
Kendall Holbrook, Esq.

E-mail EsqAICP@gmail.com

Abby.JSLaw@gmail.com
Kim.JSLaw@gmail.com
Kendall.JSLaw@gmail.com
Telephone: (951) 506-9925
Facsimile: (951) 506-9725

August 7, 2013

City of Wildomar
23873 Clinton Keith Road, Suite 201
Wildomar, CA 92595

VIA US MAIL AND EMAIL

RE: Elm Street Tentative Tract Map No. 33840 (PA 08-0154), Initial Study/Mitigated Negative Declaration.

Greetings:

On behalf of Alliance for Intelligent Planning, I hereby submit these comments on, and in opposition to, the Initial Study/Mitigated Negative Declaration for the Elm Street Tentative Tract Map Mitigated Negative Declaration, TTM No. 33840 ("Project").

The Project foresees the development of TTM 33840 to subdivide an existing 4.16-acre parcel into 12 single family lots, construct a private street, and make improvements to Elm Street from Darby Street to the project site including paving, rolled curbs and gutters, and traffic striping. The Project would rezone parcel from Rural Residential to One-Family Dwelling (R-1).

GENERAL COMMENTS

The California Environmental Quality Act ("CEQA") was adopted as a disclosure and transparency document. The theory is that by providing a document that adequately describes the environmental consequences of a project to decision makers and the public, the decision makers will make a rational decision based upon the true environmental consequences of the project and if they do not, the electorate can hold them accountable for their decisions. The core of this statutory structure is the adequacy of the document as an informational document.

The EIR requirement is the "heart of CEQA." (California Code of Regulations, tit. 14 ("CEQA Guidelines") § 15003(a).) An EIR is required for any proposed project that may have a significant effect on the environment. (Public Resources Code § 21100 (a).) A lead agency may prepare a mitigated negative declaration for a proposed project only when: (1) revisions in the project would avoid or mitigate the potentially significant project effects to a point where *clearly* no significant effects would occur; and (2) there is no substantial evidence in light of the whole record that the project as revised *may* have a significant effect on the environment. (CEQA Guidelines § 15070 (b).)

Letter Bb Continued

August 7, 2014
Page 2

CEQA also mandates that mitigation measures be certain, enforceable, and not deferred. (CEQA Guidelines § 15126.4.) “Formulation of mitigation measures should not be deferred until some future time. (CEQA Guidelines § 15126.4(a)(1)(B).) Deferral can be found improper if unnecessary and no reason is given for such deferral. (*Sacramento Old City Assn. v. City Council* (1991) 229 Cal. App. 3d 1011, 1028-9; 1 Kostka & Zischke Mitigation Measures § 14.12, p. 699.) The MND relies on vague, unenforceable, and deferred mitigation measures not permitted by law. Moreover, all feasible mitigation has not been adopted for this Project.

The adoption of the Mitigated Negative Declaration (“MND”) for the Elm Street Tentative Tract Map, TTM No. 33840 (“Project”), is improper where, as here, there is substantial evidence in the record of a fair argument of significant environmental impacts as a result of the project. There is a fair argument of significant unmitigated impacts to, at least, biological resources, hydrology and water quality, and noise. Significant impacts are not shown to be mitigated below a level of significance. For the reasons detailed below, an EIR must be prepared for this Project.

POTENTIAL SIGNIFICANT IMPACTS

Geology Soils

Over-excavation of the building areas and extending distance of at least 5 feet beyond the building areas to a depth of 5 feet is required as a mitigation measure to reduce the potentially significant impacts from expansive soils. While some of the material may be reused, the over-excavation may require exportation and importation of new soils. The MND provides no discussion of the potential amount of soils to be imported/exported, or potential construction air quality and traffic impacts of this soils work.

Bb-1

Hydrology and Water Quality

The MND incorrectly states that the Project site is not located within a 100-year flood hazard area. Yet, the portion of the Project site adjacent to Murrieta Creek Channel is within the 100-year flood hazard area (Zone A) (according to Federal Emergency Management Agency (FEMA) Flood Map Number 06065C2682G). Because a portion of the Project site is located within a 100-year flood hazard area, the Project would place housing within a 100-year flood hazard area and impacts would be potentially significant. The MND does not propose any mitigation to reduce such impacts below a level of significance. Therefore, impacts from placing housing with a 100-year flood should be considered significant and an EIR must be prepared.

Bb-2

Noise

The MND states that since construction noise impacts “would not approach a dangerous threshold”, which is 140 dB, and the City’s noise ordinance places limits on the time of construction, the impacts to temporary ambient noise levels is less than significant. However, the threshold is not whether temporary ambient noise will be above safe noise levels; rather, the issue is whether ambient noise would be increased above *existing* noise levels. The Project is expected to cause construction noise impacts above the General Plan’s 60 dBA CNEL community noise exposure level for single family homes, and thus will cause significant noise

Bb-3

Letter Bb Continued

August 7, 2014
Page 3

impacts well above existing ambient noise levels. Noise increases may be particularly significant on this presently undeveloped site and in an area with rural residences, as the existing noise levels are relatively low so that increases may be more markedly perceived. Therefore, an EIR must be prepared to consider these significant impacts.

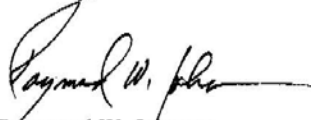
Under CEQA, consideration must be given to the magnitude of any noise increase, the existing ambient noise levels, and the location of noise-sensitive receptors in order to determine if a noise increase represents a significant adverse environmental effect. This is because noise impacts may be greater if substantial increases occur in a relatively quiet area, or if noise is added to an existing high noise level in a manner that increases noise to a problem/tipping point level. (*See, e.g., Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1122-23.) Attachments incorporated herein by reference, detail the properties of noise and its potential effects on people, including where noise increases occur in a relatively quiet area. Preparation of an EIR is needed to quantify, disclose, and mitigate the noise impacts of this Project to the extent feasible.

**Bb-3
cont.**

Conclusion

For each of these reasons, an EIR must be prepared for the Elm Street Tentative Tract Map.

Sincerely,



Raymond W. Johnson
JOHNSON & SEDLACK

Letter Bb Continued

August 7, 2014
Page 4

Attachments

1. U.S. Department of Transportation, Federal Highway Administration. (August 2006) *Construction Noise Handbook, Chapter 4.0 Construction Noise Criteria and Descriptors*.
2. U.S. Department of Transportation, Federal Highway Administration. (August 2006) *Construction Noise Handbook, Chapter 9.0 Construction Equipment Noise Levels and Ranges*.
3. U.S. Department of Housing and Urban Development. (March 1985) *The Noise Guidebook*.
4. Suter, Dr. Alice H., Administrative Conference of the United States. (November 1991) *Noise and Its Effects*.
5. Federal Interagency Committee on Urban Noise. (June 1980) *Guidelines for Considering Noise in Land Use Planning and Control*.

Letter Bb Continued

RAYMOND W. JOHNSON, Esq., AICP LEED GA
26785 Camino Seco
Temecula, CA 92590
(951) 506-9925
(951) 506-9725 Fax
(951) 775-1912 Cellular

Johnson & Sedlack, an Environmental Law firm representing plaintiff environmental groups in environmental law litigation, primarily CEQA.

City Planning:

Current Planning

- Two years principal planner, Lenexa, Kansas (consulting)
- Two and one half years principal planner, Lee's Summit, Missouri
- One year North Desert Regional Team, San Bernardino County
- Thirty years subdivision design: residential, commercial and industrial
- Thirty years as applicants representative in various jurisdictions in: Missouri, Texas, Florida, Georgia, Illinois, Wisconsin, Kansas and California
- Twelve years as applicants representative in the telecommunications field

General Plan

- Developed a policy oriented Comprehensive Plan for the City of Lenexa, Kansas.
- Updated Comprehensive Plan for the City of Lee's Summit, Missouri.
- Created innovative zoning ordinance for Lenexa, Kansas.
- Developed Draft Hillside Development Standards, San Bernardino County, CA.
- Developed Draft Grading Standards, San Bernardino County.
- Developed Draft Fiscal Impact Analysis, San Bernardino County

Environmental Analysis

- Two years, Environmental Team, San Bernardino County
 - Review and supervision of preparation of EIR's and joint EIR/EIS's
 - Preparation of Negative Declarations
 - Environmental review of proposed projects
- Eighteen years as an environmental consultant reviewing environmental documentation for plaintiffs in CEQA and NEPA litigation

Letter Bb Continued

Representation:

- Represented various clients in litigation primarily in the fields of Environmental and Election law. Clients include:
 - Sierra Club
 - San Bernardino Valley Audubon Society
 - Sea & Sage Audubon Society
 - San Bernardino County Audubon Society
 - Center for Community Action and Environmental Justice
 - Endangered Habitats League
 - Rural Canyons Conservation Fund
 - California Native Plant Society
 - California Oak Foundation
 - Citizens for Responsible Growth in San Marcos
 - Union for a River Greenbelt Environment
 - Citizens to Enforce CEQA
 - Friends of Riverside's Hills
 - De Luz 2000
 - Save Walker Basin
 - Elsinore Murrieta Anza Resource Conservation District

Education:

- B. A. Economics and Political Science, Kansas State University 1970
- Masters of Community and Regional Planning, Kansas State University, 1974
- Additional graduate studies in Economics at the University of Missouri at Kansas City
- J.D. University of La Verne. 1997 Member, Law Review, Deans List, Class Valedictorian, Member Law Review, Published, Journal of Juvenile Law

Professional Associations:

- Member, American Planning Association
- Member, American Institute of Certified Planners
- Member, Association of Environmental Professionals
- Member, U.S. Green Building Council, LEED GA

Letter Bb Continued

Johnson & Sedlack, Attorneys at Law

26785 Camino Seco
Temecula, CA 92590
(951) 506-9925

12/97- Present

Principal in the environmental law firm of Johnson & Sedlack. Primary areas of practice are environmental and election law. Have provided representation to the Sierra Club, Audubon Society, AT&T Wireless, Endangered Habitats League, Center for Community Action and Environmental Justice, California Native Plant Society and numerous local environmental groups. Primary practice is writ of mandate under the California Environmental Quality Act.

Planning-Environmental Solutions

26785 Camino Seco
Temecula, CA 92590
(909) 506-9825

8/94- Present

Served as applicant's representative for planning issues to the telecommunications industry. Secured government entitlements for cell sites. Provided applicant's representative services to private developers of residential projects. Provided design services for private residential development projects. Provided project management of all technical consultants on private developments including traffic, geotechnical, survey, engineering, environmental, hydrogeological, hydrologic, landscape architectural, golf course design and fire consultants.

San Bernardino County Planning Department

Environmental Team
385 N. Arrowhead
San Bernardino, CA 92415
(909) 387-4099

6/91-8/94

Responsible for coordination of production of EIR's and joint EIR/EIS's for numerous projects in the county. Prepared environmental documents for numerous projects within the county. Prepared environmental determinations and environmental review for projects within the county.

San Bernardino County Planning Department

General Plan Team
385 N. Arrowhead
San Bernardino, CA 92415
(909) 387-4099

6/91-6/92

Created draft grading ordinance, hillside development standards, water efficient landscaping ordinance, multi-family development standards, revised planned development section and fiscal impact analysis. Completed land use plans and general plan amendment for approximately 250 square miles. Prepared proposal for specific plan for the Oak Hills community.

San Bernardino County Planning Department

Letter Bb Continued

North Desert Regional Planning Team
15505 Civic
Victorville, CA
(619) 243-8245

6/90-6/91

Worked on regional team. Reviewed general plan amendments, tentative tracts, parcel maps and conditional use permits. Prepared CEQA documents for projects.

Broadmoor Associates/Johnson Consulting

229 NW Blue Parkway
Lee's Summit, MO 64063
(816) 525-6640

2/86-6/90

Sold and leased commercial and industrial properties. Designed and developed an executive office park and an industrial park in Lee's Summit, Mo. Designed two additional industrial parks and residential subdivisions. Prepared study to determine target industries for the industrial parks. Prepared applications for tax increment financing district and grants under Economic Development Action Grant program. Prepared input/output analysis of proposed race track. Provided conceptual design of 800 acre mixed use development.

Shepherd Realty Co.

Lee's Summit, MO

6/84-2-86

Sold and leased commercial and industrial properties. Performed investment analysis on properties. Provided planning consulting in subdivision design and rezoning.

Contemporary Concepts Inc.

Lee's Summit, MO
Owner

9/78-5/84

Designed and developed residential subdivision in Lee's Summit, Mo. Supervised all construction trades involved in the development process and the building of homes.

Environmental Design Association

Lee's Summit, Mo.
Project Coordinator

6/77-9/78

Was responsible for site design and preliminary building design for retirement villages in Missouri, Texas and Florida. Was responsible for preparing feasibility studies of possible conversion projects. Was in charge of working with local governments on zoning issues and any problems that might arise with projects. Coordinated work of local architects on projects. Worked with marketing staff regarding design changes needed or contemplated.

City of Lee's Summit, MO
220 SW Main

Letter Bb Continued

Lee's Summit, MO 64063
Community Development Director

4/75-6/77

Supervised Community Development Dept. staff. Responsible for preparation of departmental budget and C.D.B.G. budget. Administered Community Development Block Grant program. Developed initial Downtown redevelopment plan with funding from block grant funds. Served as a member of the Lee's Summit Economic Development Committee and provided staff support to them. Prepared study of available industrial sites within the City of Lee's Summit. In charge of all planning and zoning matters for the city including comprehensive plan.

Howard Needles Tammen & Bergendoff

9200 Ward Parkway
Kansas City, MO 64114
(816) 333-4800
Economist/Planner

5/73-4/75

Responsible for conducting economic and planning studies for Public and private sector clients. Consulting City Planner for Lenexa, KS.

Conducted environmental impact study on maintaining varying channel depth of the Columbia River including an input/output analysis. Environmental impact studies of dredging the Mississippi River. Worked on the Johnson County Industrial Airport industrial park master plan including a study on the demand for industrial land and the development of target industries based upon location analysis. Worked on various airport master plans. Developed policy oriented comprehensive plan for the City of Lenexa, KS. Developed innovative zoning ordinance heavily dependent upon performance standards for the City of Lenexa, KS.

Comment Letter Bb – Johnson & Sedlack

- Bb-1 Geology and Soils – the commenter makes recommendations to include a mitigation measure for over-excavation of the building areas to mitigate for expansive soils.**

This request was addressed in the recirculated MND on page 45 as mitigation measure GEO-1 which includes over-excavation requirements prescribed in the accompanying Soils Investigation conducted by John R. Byerly, Inc. (Appendix 6 of the recirculated MND).

- Bb-2 Hydrology and Water Quality – the commenter states that the MND incorrectly states that the project site is not within the 100-year flood hazard area. The commenter states that according to Flood Hazard Map Number 06065C2682G, the project site is within a 100-year flood hazard area and therefore impacts are potentially significant, requiring mitigation.**

A more detailed analysis is provided on page 56 of the recirculated MND which states that a portion of the project may be within the 100-year floodplain as mapped by Flood Insurance Rate Map (FIRM) Panel Number 06065C2682G (FEMA 2008) and therefore, may be subject to flooding. The City’s Municipal Code Chapter 15.96 relates to flood hazard area regulations. One of the provisions of the Flood Hazard Area Regulations is that “for all new construction and substantial improvements, fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices; provided that they permit the automatic entry and exit of floodwaters.” If the area is within the 100-year flood elevation, the FIRM map indicates that flooding would be 1 foot or less in elevation. The 100-year flood line appears to be within the channel and adjacent right-of-way for the Murrieta Creek Channel, but the actual location of the line will need to be determined by final engineering. If the project engineer can demonstrate to the City Engineer that the property is outside of the floodplain, the provisions of Municipal Code Chapter 15.96 will not apply. Either compliance with Chapter 15.96 or evidence that the property is outside of the 100-year floodplain will result in a less than significant impact.

- Bb-3 Noise – The commenter states that the MND states that since construction noise impacts “would not approach a dangerous threshold”, which is 140 dB, and the City’s noise ordinance places limits on the time of construction, the impacts to temporary ambient noise levels is less than significant. The commenter states that the project is expected to cause construction noise impacts above the General Plan’s 60 dBA CNEL community noise exposure level for single family homes, and thus will cause significant noise impacts well above existing ambient noise levels.**

In the recirculated MND, pages 64 through 70 provide a more detailed discussion on temporary construction noise impacts and a temporary increase in ambient noise, Thresholds A and G, respectively. Initially, in the MND dated July 2014, these thresholds were determined to be “Less Than Significant.” However, in the recirculated MND, the determination for these thresholds was revised to “Less than Significant with Mitigation” due to project related construction noise. This determination is based on thresholds of other agencies, since the City’s General Plan does not set decibel standards for

temporary construction noise impacts. Additionally, Chapter 9.48 of the Wildomar Municipal Code contains noise standards in addition to the standards included in the General Plan, but Section 9.48.010 specifically states that the noise standards contained in that chapter are not thresholds of significance for the purposes of CEQA review. However, Section 9.48.020(l) of the Wildomar Municipal Code states that sound emanating from private construction projects located within one-quarter of a mile of an inhabited dwelling is exempt from the noise ordinance, and restricts construction noise from 6:00pm to 6:00am during June through September and 6:00pm to 7:00am during October through May. Therefore, mitigation measure NOI-1 was added. This mitigation measure requires that owners and occupants immediately bordering the project site are notified of major construction activities; puts limitations on the hours of grading and excavation; and requires that noise attenuation measures be implemented and monitored for effectiveness.



Letter Cc

PECHANGA CULTURAL RESOURCES *Temecula Band of Luiseño Mission Indians*

Post Office, Box 2183 • Temecula, CA 92593
Telephone (951) 308-9295 • Fax (951) 506-9491

August 7, 2014

VIA E-MAIL and USPS

Mr. Matthew Bassi
Planning Director
City of Wildomar
23873 Clinton Keith Road, Ste 201
Wildomar, CA 92595

RECEIVED

AUG 20 2014

CITY OF WILDOMAR

Chairperson:
Mary Bear Magee

Vice Chairperson:
Darlene Miranda

Committee Members:
Evie Gerber
Bridgett Barcello Maxwell
Richard B. Searce, III

Director:
Gary DuBois

Coordinator:
Paul Macarro

Planning Specialist:
Tuba Ebru Ozdil

Cultural Analyst:
Anna Hoover

Re: Pechanga Tribe Comments on the Notice of Availability of a Mitigated Negative Declaration for Tentative Tract Map 33840, Change of Zone 08-0154, Planning Application 12-0364, Elm Street Project

Dear Mr. Bassi:

This comment letter is written on behalf of the Pechanga Band of Luiseño Indians (hereinafter, "the Tribe"), a federally recognized Indian tribe and sovereign government. The Tribe formally requests, pursuant to Public Resources Code §21092.2, to be notified and involved in the entire CEQA environmental review process for the duration of the above referenced project (the "Project"). If you have not done so already, please add the Tribe to your distribution list(s) for public notices and circulation of all documents, including environmental review documents, archaeological reports, and all documents pertaining to this Project. The Tribe further requests to be directly notified of all public hearings and scheduled approvals concerning this Project. Please also incorporate these comments into the record of approval for this Project.

The Tribe thanks the City of Wildomar and the Developer for providing mitigation to preserve and protect any sensitive Luiseño cultural resources and traditional landscapes that could be impacted and to require both archaeological and Pechanga tribal monitoring during earthmoving activities. The State and Federal governments have mandated that cultural resources must be appropriately mitigated for within the confines of development projects. The Tribe appreciates the active role the City takes to maintain the significant history of the Tribe and California.

DRAFT ENVIRONMENTAL IMPACT REPORT MITIGATION MEASURES

The Pechanga Band is not opposed to this Project; however, we are opposed to any direct, indirect and cumulative impacts this Project may have to tribal cultural resources. The

Sacred Is The Duty Trusted Unto Our Care And With Honor We Rise To The Need

Letter Cc Continued

Pechanga Comment Letter to the City of Wildomar
Re: Pechanga Tribe Comments on TR 33840
August 7, 2014
Page 2

Tribe's primary concerns stem from the Project's proposed impacts on Native American cultural resources. The Tribe is concerned about both the protection of unique and irreplaceable cultural resources, such as Luiseño village sites, sacred sites and archaeological items which would be displaced by ground disturbing work on the Project, and on the proper and lawful treatment of cultural items, Native American human remains and sacred items likely to be discovered in the course of the work.

The Tribe is in receipt of the Mitigated Negative Declaration (MND) and the Project archaeological study. The proposed Project is located in a sensitive region of Luiseño territory and the Tribe concurs with the City that there is the potential for impacting cultural resources during earthmoving activities.

Based upon the information provided to the Tribe, there are no known cultural resources located within the Project boundaries. Therefore, the sensitivity of this Project lies with the potential to impact subsurface, unknown cultural resources during earthmoving activities. At this time, the Tribe thanks the City of Wildomar for working closely with us to develop appropriate and adequate mitigation measures. These are identified in the MND as CUL-1 to 6 and -8 and have been copied below for reference. We request that these mitigation measures, with the few minor updated edits proposed, be incorporated into the final MND, as Conditions of Approval and in any other final environmental documents approved by the City for this Project.

CUL-1 If during grading or construction activities cultural resources are discovered on the project site, work shall be halted immediately within 50 feet of the discovery and the resources shall be evaluated by a qualified archeologist and the Pechanga Tribe. Any unanticipated cultural resources that are discovered shall be evaluated ~~and~~ in the final report prepared by the qualified archeologist. The report shall include a list of the resources discovered, documentation of each site/locality, and interpretation of the resources identified, and the method of preservation and/or recovery for identified resources. In the event the significant resources are recovered and if the qualified archaeologist and the Tribe determines the resources to be historic or unique, avoidance and/or mitigation would be required pursuant to and consistent with CEQA Guidelines Sections 15064.5 and 15126.4 and Public Resources Code Section 21083.2 and the Cultural Resources Treatment and Monitoring Agreement required by mitigation measure CUL-2. This mitigation measure shall be incorporated in all construction contract documentation.

Cc-1

CUL-2 At least 30 days prior to seeking a grading permit, the project applicant(s) for future development shall contact the Pechanga appropriate¹ Tribe to notify the Tribe of grading, excavation, and the monitoring program and the project applicant(s) shall

Cc-2

¹ It is anticipated that the Pechanga Band of Luiseño Indians will be the "appropriate" Tribe due to their prior and extensive coordination with the surrounding cities City of Wildomar in determining potentially significant impacts and appropriate mitigation measures.

*Pechanga Cultural Resources • Temecula Band of Luiseño Mission Indians
Post Office Box 2183 • Temecula, CA 92592*

Sacred Is The Duty Trusted Unto Our Care And With Honor We Rise To The Need

Letter Cc Continued

Pechanga Comment Letter to the City of Wildomar
 Re: Pechanga Tribe Comments on TR 33840
 August 7, 2014
 Page 3

coordinate with the City of Wildomar and the Tribe to develop a Cultural Resources Treatment and Monitoring Agreement. The agreement shall address the treatment of known cultural resources; the designation, responsibilities, and participation of Native American Tribal monitors during grading, excavation, and ground-disturbing activities; project grading and development scheduling; terms of compensation; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site. A copy of this signed agreement shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit.

Cc-2
 cont.

CUL-3 If human remains are encountered, California Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, 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. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within a ~~reasonable time frame~~ 24 hours. Subsequently, the Native American Heritage Commission shall identify the "most likely descendant." The most likely descendant shall then make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98. This mitigation measure shall also be included in all construction contract documentation.

Cc-3

CUL-4 All cultural materials, with the exception of sacred items, burial goods, and human remains, (which will be addressed in the Cultural Resources Treatment and Monitoring Agreement required by mitigation measure **CUL-2**), that are collected during the grading monitoring program and from any previous archeological studies or excavations on the project site shall be curated according to the current professional repository standards. The collections and associated records shall be transferred, including title, to the Pechanga Tribe's curation facility, which meets the standards set forth in 36 CRF Part 79 for federal repositories.

Cc-4

CUL-5 All sacred sites, should they be encountered within the project area, shall be avoided and preserved as the preferred mitigation, if feasible as determined by a qualified professional in consultation with the Pechanga Tribe. To the extent that a sacred site cannot be feasibly preserved in place or left in an undisturbed state, mitigation measures shall be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.

CUL-6 If inadvertent discoveries of subsurface archaeological resources are discovered during grading, work shall be halted immediately within 50 feet of the discovery and the developer, the project archeologist, and the Tribe shall assess the significance of

Cc-5

*Pechanga Cultural Resources • Temecula Band of Luiseño Mission Indians
 Post Office Box 2183 • Temecula, CA 92592*

Sacred Is The Duty Trusted Unto Our Care And With Honor We Rise To The Need

Letter Cc Continued

Pechanga Comment Letter to the City of Wildomar
Re: Pechanga Tribe Comments on TR 33840
August 7, 2014
Page 4

~~such resources and the Tribe~~ shall meet and confer regarding the mitigation for such resources. If the developer and the Tribe cannot agree on the significance of or the mitigation for such resources, these issues will be presented to the City of Wildomar Planning Director for decision. The Planning Director shall make the determination based on the provisions of CEQA with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the Pechanga Tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the City Council of the City of Wildomar. In the event the significant resources are recovered and if the qualified archaeologist determines the resources to be historic or unique as defined by relevant state and local law, avoidance and mitigation would be required pursuant to and consistent with CEQA Guidelines Sections 15064.5 and 15126.4 and Public Resources Code Section 21083.2

Cc-5
cont.

CUL-8

To address the possibility that cultural resources may be encountered during future grading or construction, a qualified professional archeologist shall monitor all construction activities that could potentially impact archaeological deposits (e.g., grading, excavation, and/or trenching). However, monitoring should be discontinued as soon the qualified professional is satisfied that construction will not disturb cultural resources. A final mitigation monitoring report shall be prepared by the archaeologist documenting any resources found, their treatment, ultimate disposition, new or updated site records and any other pertinent information associated with the Project. Final copies of the report will be submitted to the City of Wildomar, the Developer, the Eastern Information Center and the Pechanga Tribe.

Cc-6

The Pechanga Tribe appreciates the consultation efforts and provided mitigation and we look forward to continuing to work together with the City of Wildomar in protecting the invaluable Pechanga cultural resources found in the Project area. Please contact me at 951-770-8104 or at ahoover@pechanga-nsn.gov once you have had a chance to review these comments if you have any comments or concerns. Thank you.

Sincerely,



Anna Hoover
Cultural Analyst

Cc Pechanga Office of the General Counsel
Mark Teague, PMC

*Pechanga Cultural Resources • Temecula Band of Luiseño Mission Indians
Post Office Box 2183 • Temecula, CA 92592*

Sacred Is The Duty Trusted Unto Our Care And With Honor We Rise To The Need

Comment Letter Cc – Pechanga Cultural Resources

Cc-1 The commenter states the following revisions be made to mitigation measure CUL-1:

CUL-1 If during grading or construction activities cultural resources are discovered on the project site, work shall be halted immediately within 50 feet of the discovery and the resources shall be evaluated by a qualified archeologist and the Pechanga Tribe (Tribe). Any unanticipated cultural resources that are discovered shall be evaluated ~~and a~~ in the final report prepared by the qualified archeologist. The report shall include a list of the resources discovered, documentation of each site/locality, and interpretation of the resources identified, and the method of preservation and/or recovery for identified resources. In the event the significant resources are recovered and if the qualified archaeologist and the Tribe determines the resources to be historic or unique, avoidance and/or mitigation would be required pursuant to and consistent with CEQA Guidelines Sections 15064.5 and 15126.4 and Public Resources Code Section 21083.2 and the Cultural Resources Treatment and Monitoring Agreement required by mitigation measure CUL-2. This mitigation measure shall also be included in all construction contract documentation.

This mitigation measure does not need to be updated because it is written as the commenter requested it in the first distribution. Therefore, no changes were made to the subsequent second distribution of the MND.

Cc-2 The commenter states the following revisions be made to mitigation measure CUL-2:

CUL-2 At least 30 days prior to seeking a grading permit, the project applicant(s) for future development shall contact the appropriate Pechanga Tribe to notify the Tribe of the proposed grading, excavation, and the monitoring program and the project applicant(s) shall coordinate with the City of Wildomar and the Tribe to develop a Cultural Resources Treatment and Monitoring Agreement.[‡] The agreement shall address the treatment of known cultural resources; the designation, responsibilities, and participation of Native American Tribal monitors during grading, excavation, and ground-disturbing activities; project grading and development scheduling; terms of compensation; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site. A copy of this signed agreement shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit.

Mitigation measure CUL-2 on page 39 of the IS/MND has been revised and is reflected in the recirculated initial IS/MND.

Cc-3 The commenter states the following revisions be made to mitigation measure CUL-3:

CUL-3 If human remains are encountered, California Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place

[‡] ~~It is anticipated that the Pechanga Band of Luiseño Indians will be the “appropriate” Tribe due to their prior and extensive coordination with the surrounding cities in determining potentially significant impacts and appropriate mitigation measures.~~

COMMENTS AND RESPONSES TO COMMENTS

and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within ~~a reasonable time frame~~ 24 hours. Subsequently, the Native American Heritage Commission shall identify the "most likely descendant." The most likely descendant shall then make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

Mitigation measure CUL-3 on Page 40 of the IS/MND has been revised and is reflected in the recirculated initial IS/MND.

Cc-4 The commenter states the following revisions be made to mitigation measure CUL-5:

CUL-5 All sacred sites, should they be encountered within the project area, shall be avoided and preserved as the preferred mitigation, if feasible as determined by a qualified professional in consultation with the Pechanga Tribe. To the extent that a sacred site cannot be feasibly preserved in place or left in an undisturbed state, mitigation measures shall be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guideline Sections 15064.5 and 15126.4.

Mitigation measure CUL-5 on Page 40 of the IS/MND has been revised in the initial IS/MND.

Cc-5 The commenter states the following revisions be made to mitigation measure CUL-6.

CUL-6 If inadvertent discoveries of subsurface archaeological resources are discovered during grading, work shall be halted immediately within 50 feet of the discovery and the developer, the project archaeologist, and the Tribe shall assess the significance of such resource and ~~Tribe~~ shall meet and confer regarding the significance of and mitigation for such resources. If the developer and the Tribe cannot agree on the significance of or the mitigation for such resources, these issues will be presented to the City of Wildomar Planning Director for decision. The Planning Director shall make the determination based on the provisions of CEQA with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the Pechanga Tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the City Council of the City of Wildomar. In the event the significant resources are recovered and if the qualified archaeologist determines the resources to be historic or unique as defined by relevant state and local law, avoidance and mitigation would be required pursuant to and consistent with CEQA Guidelines Sections 15064.5 and 15126.4 and Public Resources Code Section 21083.2.

This mitigation measure shall also be included in all construction contract documentation.

Mitigation measure CUL-6 on Page 40 of the IS/MND has been revised in the initial IS/MND.

Cc-6 The commenter states the following revisions be made to mitigation measure CUL-8 (now CUL-7):

CUL-7~~8~~ To address the possibility that cultural resources may be encountered during future grading or construction, a qualified professional archeologist shall monitor all construction activities that could potentially impact archaeological deposits (e.g., grading, excavation, and/or trenching). However, monitoring should be discontinued as soon the qualified professional is satisfied that construction will not disturb cultural resources. A final mitigation monitoring report shall be prepared by the archaeologist documenting any resources found, their treatment, ultimate disposition, new or updated site records and any other pertinent information associated with the project. Final copies of the report will be submitted to the City of Wildomar, the developer, the Eastern Information Center, and the Pechanga Tribe.

Mitigation measure CUL-7 on Page 41 of the IS/MND has been revised in the initial IS/MND.

Letter A

WARREN D. WILLIAMS
General Manager-Chief Engineer



1995 MARKET STREET
RIVERSIDE, CA 92501
951.955.1200
FAX 951.788.9965
www.rcflood.org

169087

RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT

RECEIVED
APR 1 6 2015

CITY OF WILDOMAR

City of Wildomar
Planning Department
23873 Clinton Keith Road, Suite 201
Wildomar, California 92595

Attention: Mathew C. Bassi

Ladies and Gentlemen:

Re: Initial Study/MND for TR 33840 (P808-0154)

The District does not normally recommend conditions for land divisions or other land use cases in incorporated cities. The District also does not plan check city land use cases, or provide State Division of Real Estate letters or other flood hazard reports for such cases. District comments/recommendations for such cases are normally limited to items of specific interest to the District including District Master Drainage Plan facilities, other regional flood control and drainage facilities which could be considered a logical component or extension of a master plan system, and District Area Drainage Plan fees (development mitigation fees). In addition, information of a general nature is provided.

The District has not reviewed the proposed project in detail and the following checked comments do not in any way constitute or imply District approval or endorsement of the proposed project with respect to flood hazard, public health and safety or any other such issue:

- No comment.
- This project would not be impacted by District Master Drainage Plan facilities nor are other facilities of regional interest proposed.
- This project involves District Master Plan facilities. The District will accept ownership of such facilities on written request of the City. Facilities must be constructed to District standards, and District plan check and inspection will be required for District acceptance. Plan check, inspection and administrative fees will be required.
- This project proposes channels, storm drains 36 inches or larger in diameter or other facilities that could be considered regional in nature and/or a logical extension of the adopted Master Drainage Plan. The District would consider accepting ownership of such facilities on written request of the City. Facilities must be constructed to District standards, and District plan check and inspection will be required for District acceptance. Plan check, inspection and administrative fees will be required.
- This project is located within the limits of the District's Area Drainage Plan for which drainage fees have been adopted; applicable fees should be paid by cashier's check or money order only to the Flood Control District or City prior to issuance of grading permits. Fees to be paid should be at the rate in effect at the time of issuance of the actual permit.
- An encroachment permit shall be obtained for any construction related activities occurring within District right of way or facilities. For further information, contact the District's encroachment permit section at 951.955.1266.
- The District's previous comments are still valid. Tract 33840

A-1

GENERAL INFORMATION

This project may require a National Pollutant Discharge Elimination System (NPDES) permit from the State Water Resources Control Board. Clearance for grading, recordation or other final approval should not be given until the City has determined that the project has been granted a permit or is shown to be exempt.

If this project involves a Federal Emergency Management Agency (FEMA) mapped flood plain, then the City should require the applicant to provide all studies, calculations, plans and other information required to meet FEMA requirements, and should further require that the applicant obtain a Conditional Letter of Map Revision (CLOMR) prior to grading, recordation or other final

A-2

Comment Letter A – Riverside County Flood Control

- A-1 The commenter states that the project would not be impacted by District Plan facilities nor are other facilities of regional interest proposed.**

This comment does not raise an environmental issue; therefore, no further response is necessary.

- A-2 The commenter states that the project may require a National Pollutant Discharge Elimination System (NPDES) permit from the State Water Resources Control Board. In addition, the commenter states that the applicant is required to provide relevant information (studies, calculations, plans, and other information) if the project involves a Federal Emergency Management Agency (FEMA) flood plain. Further, the commenter requests that a Conditional Letter of Map Revision (CLOMR) be obtained prior to grading or recordation or other final approval.**

NPDES

As stated on page 44 and page 57 (Standard Conditions and Requirements) of the IS/MND, the project is conditioned to provide the City (Engineering Department) evidence of compliance with the NPDES and obtain a construction permit from the SWRCB. Therefore, the project would meet this regulatory requirement.

FEMA

Page 56 of the IS/MND discusses that a portion of the residential project may be located inside of the 100-year floodplain as mapped by FIRM Panel Number 06065C2682G (FEMA 2008) and therefore, may be subject to flooding. The 100-year flood line appears to be within the channel and adjacent right-of-way for the Murrieta Creek Channel, but the actual location of the line will need to be determined by final engineering (see **Figure 7** of the IS/MND). If the area is within the 100-year flood elevation, the FIRM map indicates that flooding would be 1 foot or less in elevation.

Chapter 15.96 of the City's Municipal Code regulates flood hazard areas and requires that "for all new construction and substantial improvements, fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices; provided that they permit the automatic entry and exit of floodwaters." Section 15.96.040 of the City of Wildomar Municipal code requires compliance with Chapter 15.96 of the Municipal Code and precludes any development if there are any conflicts.

It should be noted that if the project engineer can demonstrate to the City Engineer that the property is outside of the floodplain, the provisions of Municipal Code Chapter 15.96 will not apply. As stated on page 56 of the IS/MND, the project has to either comply with Chapter 15.96 or provide evidence that the property is outside of the 100-year floodplain. If the property is demonstrated to be outside of the 100-year floodplain, then it may be prudent to request an amendment to the Flood Insurance Rate Map (FIRM) through a Letter of Map Revision (LOMR) however a map amendment is not required.

Letter B

Board of Directors
Phil Williams, President
Harvey R. Ryan, Vice President
Andy Morris, Treasurer
George Cambero, Director
Nancy Horton, Director



Our Mission...

EVMWD will provide reliable, cost-effective, high quality water and wastewater services that are dedicated to the people we serve.

General Manager
John D. Vega
District Secretary
Terese Quintanar
Legal Counsel
Best Best & Krieger

April 10, 2015

Attn: Matt Bassi
City of Wildomar
23873 Clinton Keith Road, Suite 201
Wildomar, CA 92595

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APR 15 2015

CITY OF WILDOMAR

**Subject: Initial Study/MND for Elm St. TTM 33840 (15 Single Family Homes)
WO# 2013-073**

On March 27, 2015, the District received the above Initial study/MND for review. The project proposes a subdivision of 4.07 acres with 15 single family residential lots, including a change of zone (from R-R to R-1) located south of Gruwell Street, west of Front Street, north of Central Ave. and east of Darby Street (APN 376-043-027).

Please make the following corrections/additions to the document:

- 1) Page 80 – **17. Utilities and Service Systems – b) Less Than Significant Impact.** Correct “Current capacity at lift station B-2 is 3,600 gallons per minute,” to say “2,806” gallons per minute. | B-1
- 2) Page 82 – **f,g) Standard Conditions and Requirements**
 - a) The sewer collection system shall be privately owned and maintained.
 - b) The water system shall be looped; also show an access and maintenance easement in favor of EVMWD for the full width of Street A. | B-2
 - c) Detailed plans and specifications will be required during the plan review process.

Please feel free to call me at (951) 674-3146, Ext. 6705, should you have any questions.

Respectfully,

Imad Baiyasi
Development Services Manager

IB/ac

cc: File

F:\ENGIN\2_Developer Projects\2013\13-073 - Tract 33840 (City of Wildomar)\1. Pre-Planning\3rd PAR\04-10-15 - Comments to City - Initial Study-MND - 13-073.doc

951.674.3146
Fax 951.674.9872
www.evmwd.com

31315 Chaney Street
P.O. Box 3000
Lake Elsinore, CA 92530

Comment Letter B – Elsinore Valley Municipal Water District

- B-1 The commenter requests that the gallons per minute capacity for lift station B-2 LS be corrected on Page 80 , Utilities and Service Systems” for Threshold B.**

Page 80 of the IS/MND has been revised and is reflected in Chapter 3 of the Final IS/MND:

“Current capacity at lift station B-2 LS is ~~3,600~~ 2,806 gallons per minute...”

- B-2 The commenter requests that the project be conditioned to include sewer collection system and water system requirements.**

Page 82 of the IS/MND has been revised and is reflected in Chapter 3 of the Final IS/MND:

- a) The sewer collection system shall be privately owned and maintained.
- b) The water system shall be looped; also show an access and maintenance easement in favor of EVMWD for the full width of Street A.
- c) Detailed plans and specification will be required during the plan review process.

Letter C



State of California - Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
3602 Inland Empire Blvd., Suite C-220
Ontario, CA 91764
(909) 484-0459
www.wildlife.ca.gov

EDMUND G. BROWN, Jr., Governor
CHARLTON H. BONHAM, Director



April 20, 2015

Matthew Bassi
Planning Director
City of Wildomar
23873 Clinton Keith Road, Suite 201
Wildomar, CA 92595

Subject: Initial Study and Mitigated Negative Declaration
Elm Street Subdivision Project
State Clearinghouse No. 2014071028

Dear Mr. Bassi:

The Department of Fish and Wildlife (Department) appreciates the opportunity to comment on the Initial Study (IS) and Mitigated Negative Declaration (MND) for the Elm (Project) [State Clearinghouse No. 2015031036]. The Department is responding to the IS and MND as a Trustee Agency for fish and wildlife resources (California Fish and Game Code Sections 711.7 and 1802, and the California Environmental Quality Act [CEQA] Guidelines Section 15386), and as a Responsible Agency regarding any discretionary actions (CEQA Guidelines Section 15381), such as the issuance of a Lake or Streambed Alteration Agreement (California Fish and Game Code Sections 1600 *et seq.*) and/or a California Endangered Species Act (CESA) Permit for Incidental Take of Endangered, Threatened, and/or Candidate species (California Fish and Game Code Sections 2080 and 2080.1).

Project Description

The Project is located in the City of Wildomar, California, at the end of Elm Street between Central Street to the northeast and Gruwell Street to the southwest, with the Murrieta Creek Channel drainage course to the northeast. The Riverside County Assessor's Parcel Number (APN) for the Project Site is 376-043-027.

The Project would involve the subdivision of an existing 4.16-acre parcel into 15 parcels, each meeting or exceeding the 7,200-square-foot minimum lot size required in the One-Family Dwelling (R-1) zone. All 15 parcels are intended for future single-family residential dwelling units.

Conserving California's Wildlife Since 1870

Letter C Continued

Initial Study and Mitigated Negative Declaration
 Elm Street Subdivision Project
 SCH No. 2014071028
 Page 2 of 3

Biological Resources and Impacts

Following review of the Biological Resources section of the IS, the Department identified a number of questions, comments and concerns, and requests that each of these be addressed prior to adoption of the proposed MND. The Department's questions, comments, and concerns include:

1. Impacts to Nesting Birds. Mitigation Measure Bio-1 requires that the developer conduct a pre-construction nesting bird survey during the nesting bird season, described as January 15 – August 31, up to 14 days prior to initiation of construction activities. The Department recommends that the City of Wildomar require the completion of a pre-construction nesting bird survey no more than three (3) days prior to ground disturbance activities, as instances of nesting could be missed if surveys are conducted sooner. Because not all species adhere to these nesting dates, the Department recommends that the City of Wildomar require nesting bird surveys regardless of time of year to ensure compliance with all applicable laws related to nesting birds and birds-of-prey. Nesting bird surveys should be carried out over the entire project site, not just areas with trees and shrubs, as some species nest directly on the ground.

Please note that it is the Project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Migratory non-game native bird species are protected by international treaty under the federal Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 *et seq.*). In addition, sections 3503, 3503.5, and 3513 of the Fish and Game Code (FGC) stipulate the following: Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by FGC or any regulation made pursuant thereto; Section 3503.5 states that it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by FGC or any regulation adopted pursuant thereto; and Section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

C-1

2. Conversion of Oak Woodlands. Oak Woodland, defined by the Riverside County Planning Department's Oak Tree Management Guidelines as "an area of natural vegetation that includes at least one oak tree and associated understory," occurs on-site. Please clarify whether any of the native oak trees on-site will be removed as a result of the Project and, if so, whether mitigation measures under CEQA Guidelines §21083.4(b) (Conversion of Oak Woodlands; exemptions) will be required.

C-2

Letter C Continued

Initial Study and Mitigated Negative Declaration
Elm Street Subdivision Project
SCH No. 2014071028
Page 3 of 3

The Department appreciates the opportunity to comment on the Initial Study and proposed Mitigated Negative Declaration for the Elm Street Subdivision Project (SCH No. 2014071028), and requests that the City address the Department's comments and concerns prior to adoption of the MND. If you should have any questions pertaining to these comments, please contact Gabriele Quillman at (909) 980-3818 or at gabriele.quillman@wildlife.ca.gov.

Sincerely,


(Fm) Leslie MacNair
Acting Regional Manager

cc: State Clearinghouse, Sacramento

Comment Letter C – California Department of Fish and Wildlife

- C-1 The commenter recommends that mitigation measure BIO-1 be revised to require preconstruction nesting bird surveys no more than 3 days prior to vegetation clearing or ground disturbing activities, as instances of nesting may be missed if surveys are conducted sooner. The commenter goes on to state that some avian species may not adhere to the nesting dates stated in the IS/MND, and recommends that the City of Wildomar revise mitigation measure BIO-1 to require the completion of nesting bird surveys regardless of time of year to ensure compliance with all applicable laws related to nesting birds and birds of prey. The commenter states that nesting bird surveys should be carried out over the entire project site, not just areas with trees and shrubs, as some species nest directly on the ground. Lastly, the commenter states that it is the Project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey.

Mitigation measure BIO-1 was incorporated to ensure that project-related activities will not result impacts to migratory birds. Nesting of migratory birds in Southern California typically occurs between March 15 and August 15, while raptors typically nest between January 15 and August 31; therefore, the proposed survey window was designed to ensure that project-related impacts to special-status birds are less than significant. Additionally, there is no language in mitigation measure BIO-1 that obviates the need to survey the entire project site, including herbaceous vegetation. Page 36 of the IS/MND has been revised and is reflected in Chapter 3 of the Final IS/MND:

BIO-1 All developers of the proposed project site shall conduct ~~construction and clearing activities outside of the avian nesting season (January 15 August 31), where feasible. If clearing and/or construction activities occur during the nesting season,~~ preconstruction surveys for nesting raptors, migratory birds, and special-status resident birds (e.g., coastal California gnatcatcher). Surveys shall be conducted by a qualified biologist, up to 3 14 days before initiation of construction activities. The qualified biologist shall survey the construction zone and a 250-foot radius surrounding the construction zone to determine whether the activities may have the potential to disturb or otherwise harm nesting birds.

- C-2 The Commenter incorrectly refers to a Riverside County Ordinance that does not apply within the corporate limits of the City of Wildomar.

There are no state or local requirements regarding the oak trees that apply to the property as noted on page 34 of the initial study.

Letter D



PECHANGA CULTURAL RESOURCES *Temecula Band of Luiseño Mission Indians*

Post Office, Box 2183 • Temecula, CA 92593
Telephone (951) 308-9295 • Fax (951) 506-9491

April 23, 2015

Chairperson:
Mary Bear Magee

Vice Chairperson:
Darlene Miranda

Committee Members:
Evie Gerber
Bridgett Barcello Maxwell
Richard B. Scearce, III
Neal Ibanez
Michael Vasquez

Director:
Gary DuBois

Coordinator:
Paul Macarro

Planning Specialist:
Tuba Ebru Ozdil

Cultural Analyst:
Anna Hoover

VIA E-Mail and USPS

Mr. Matthew Bassi
Planning Director
City of Wildomar
Planning Department
23873 Clinton Keith Rd., Ste. 201
Wildomar, CA 92595

Re: Pechanga Tribe Comments on the Elm Street Tentative Tract Map 33840 Initial Study/Mitigated Negative Declaration (Planning Application No. 08-0154)

Dear Mr. Bassi:

This comment letter is submitted by the Pechanga Band of Luiseño Indians (hereinafter, "the Tribe"), a federally recognized Indian tribe and sovereign government, in response to receipt of the March 2015 Revised Initial Study/Mitigated Negative Declaration (IS/MND) for the above named project

The Tribe is in agreement with the proposed mitigation measures for cultural resources as presented in the revised document for this Project and request that they be incorporated into the final MND and added as conditions of approval for the Project. Wildomar is a culturally significant area and the Tribe appreciates the opportunity to preserve and protect our sensitive cultural resources and to monitor earthmoving activities in the area. The Tribe thanks the City for the proposed mitigation measures which address the potential impacts to cultural resources, and for the inclusion of the Tribe in those measures.

D-1

The Pechanga Tribe looks forward to continuing to work together with the City of Wildomar in protecting the invaluable Pechanga cultural resources found in the City. Please contact me at 951-770-8113 if you have any questions or comments.

Sincerely,

Tuba Ebru Ozdil
Planning Specialist

cc: Pechanga Office of the General Counsel

Sacred Is The Duty Trusted Unto Our Care And With Honor We Rise To The Need

Comment Letter D – Pechanga Cultural Resources

- D-1 The commenter states that the Tribe agrees with the proposed mitigation measures for cultural resources, as presented in the revised document, and requests that they be incorporated into the final IS/MND and also added as conditions of approval for the project.

The mitigation measures are included in the final IS/MND and included in the Mitigation Monitoring and Reporting Program (MMRP), which is adopted when the Final IS/MND is certified.

Letter 1

April 23, 2015

From: Martha Bridges John Burkett Gerard Ste. Marie
35465 Woshka Lane 32721 Mesa Drive P.O. Box 486
Wildomar, CA 92595 Lake Elsinore, CA 92530 Wildomar, CA 92595

To: City of Wildomar – Attn: Matthew C. Bassi, Planning Director
23873 Clinton Keith Road, Suite 201
Wildomar, CA 92595
[By Email to: mbassi@cityofwildomar.org, dlee@cityofwildomar.org]

Re: Written Comments to Elm Street Tentative Tract Map No. 33840 Project (Planning Application No. 08-0154) Mitigated Negative Declaration (SCH No. 2014071028)

To Matthew C. Bassi, Planning Director for the City of Wildomar:
Please consider the following comments to the Elm Street Tentative Tract Map No. 33840 Project (Planning Application No. 08-0154) Mitigated Negative Declaration (SCH No. 2014071028).
Please also make this Letter, and all documents referred to in the Letter, a part of the Administrative Record for this Project.

I. The Conclusion of the MND of a “Less than Significant Impact” Pertaining to Placement of Housing Within a 100-Year Flood Hazard Zone is Contradicted by Facts Cited in the Analysis, which Indicate a “Potentially Significant Impact” Requiring Preparation of an EIR

Under Section 9 (Hydrology and Water Quality) of the “*Initial Study-Mitigated Negative Declaration*” (“MND”) for the Project, while Wildomar acknowledges that “*A portion of the residential project may be located inside of the 100-year floodplain as mapped on a Flood Insurance Rate Map (FIRM) Panel Number 06065C2682G (FEMA 2008) and may be subject to flooding*” (see also Exhibit “1” attached hereto, a Parcel Report from the Riverside County Land Information System indicating the site is “WITHIN AREAS OF FLOODING SENSITIVITY”), the MND inexplicably concludes that there is a “Less Than Significant Impact” under this criteria. However, the conclusion is contradicted by the facts, which constitute a fair argument for a “Potentially Significant Impact” requiring preparation of a full EIR.

Project site is location within a 100-year flood hazard zone is a threshold of

1-1

Letter 1 Continued

significance under CEQA which requires preparation of an EIR. The fair argument standard only requires that there be a potentially significant impact under any CEQA threshold of significance to trigger the requirement for preparation of a full EIR. That very low evidentiary standard is easily met here where it is undisputed that the “*project may be located inside of the 100-year floodplain as mapped on a Flood Insurance Rate Map (FIRM) Panel Number 06065C2682G (FEMA 2008) and may be subject to flooding.*” Indeed, the FEMA Flood Insurance Rate Map referred to by Wildomar shows that part of the site is in fact contained within the floodplain, and the attached Parcel Report acknowledges that the site is “WITHIN AREAS OF FLOODING SENSITIVITY.” A full EIR must be prepared.

1-1
Cont.

II. The MND Improperly Defers Analysis and Mitigation of Floodplain Impacts

Furthermore, the MND improperly defers analysis and mitigation of floodplain impacts. Again, under Section 9 (Hydrology and Water Quality) of the MND, Wildomar states “*The 100-year flood line appears to be within the channel and adjacent right-of-way for the Murrieta Creek Channel, but the actual location of the line will need to be determined by final engineering (see Figure 7).*” The purposes of CEQA are only properly served when analysis and mitigation of potential impacts are considered and implemented prior to project approval. Location of the floodplain boundary must be done, and any mitigation determined, prior to project approval, not deferred to some unknown time in the future after the project is approved. The MND fails as an informational document under CEQA, and an EIR must be prepared.

1-2

DATED: April 23, 2015

By: Martha Bridges, John Burkett
& Gerard Ste. Marie

Letter 1 Continued

Exhibit “1” Separator

Exhibit “1” Separator

Exhibit “1” Separator

4/23/2015

Riverside County GIS

Letter 1 Continued

Report for APN 376-043-027



Selected parcel(s):
376-043-027

IMPORTANT

Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.

STANDARD REPORT

APNs

376-043-027-4

OWNER NAME

NOT AVAILABLE ONLINE

ADDRESS

376-043-027

<http://tlmabl5.agency.tlma.co.riverside.ca.us/website/rcdis/MapFrame.htm>

1/5

4/23/2015

Riverside County GIS

Letter 1 Continued

ADDRESS NOT AVAILABLE

MAILING ADDRESS

(SEE OWNER)
3173 VERA VALLEY RD
FRANKLIN TN. 37064

LEGAL DESCRIPTION

RECORDED BOOK/PAGE: MB 6/294 SD
SUBDIVISION NAME: TOWN OF WILDOMAR
LOT/PARCEL: 17, BLOCK: NOT AVAILABLE
TRACT NUMBER: NOT AVAILABLE

LOT SIZE

RECORDED LOT SIZE IS 4.07 ACRES

PROPERTY CHARACTERISTICS

NO PROPERTY DESCRIPTION AVAILABLE

THOMAS BROS. MAPS PAGE/GRID

PAGE: 697 GRID: B7

CITY BOUNDARY/SPHERE

CITY OF WILDOMAR
NOT WITHIN A CITY SPHERE
ANNEXATION DATE: JUL. 1, 2008
LAFCO CASE #: 2007-107-1&3
PROPOSALS: NOT APPLICABLE

MARCH JOINT POWERS AUTHORITY

NOT IN THE JURISDICTION OF THE MARCH JOINT POWERS AUTHORITY

INDIAN TRIBAL LAND

NOT IN A TRIBAL LAND

SUPERVISORIAL DISTRICT 2011 (ORD. 813)

KEVIN JEFFRIES, DISTRICT 1

SUPERVISORIAL DISTRICT (2001 BOUNDARIES)

BOB BUSTER, DISTRICT 1

TOWNSHIP/RANGE

T6SR4W SEC 34
T8SR4W SEC 35

ELEVATION RANGE

1248/1256 FEET

PREVIOUS APN

NO DATA AVAILABLE

PLANNING

LAND USE DESIGNATIONS

Consult with the city for land use information.

SANTA ROSA ESCARPMENT BOUNDARY

NOT IN THE SANTA ROSA ESCARPMENT BOUNDARY

AREA PLAN (RCIP)

ELSINORE

COMMUNITY ADVISORY COUNCILS

NOT IN A COMMUNITY ADVISORY COUNCIL AREA

GENERAL PLAN POLICY OVERLAYS

NOT IN A GENERAL PLAN POLICY OVERLAY AREA

GENERAL PLAN POLICY AREAS

<http://t1mabl05.agency.tlma.co.riverside.ca.us/website/rcdis/MapFrame.htm>

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4/23/2015

Riverside County GIS

Letter 1 Continued

NONE

ZONING CLASSIFICATIONS (ORD. 348)

See the city for more information

ZONING DISTRICTS AND ZONING AREAS

NOT IN A ZONING DISTRICT/AREA

ZONING OVERLAYS

NOT IN A ZONING OVERLAY

HISTORIC PRESERVATION DISTRICTS

NOT IN AN HISTORIC PRESERVATION DISTRICT

SPECIFIC PLANS

NOT WITHIN A SPECIFIC PLAN

AGRICULTURAL PRESERVE

NOT IN AN AGRICULTURAL PRESERVE

REDEVELOPMENT AREAS

PROJECT AREA NAME: 1-1988
SUBAREA NAME: LAKELAND VILLAGE/WILDOMAR
AMENDMENT NUMBER: 1
ADOPTION DATE: JUL. 20, 1999
ACREAGE: 2888 ACRES

AIRPORT INFLUENCE AREAS

NOT IN AN AIRPORT INFLUENCE AREA

AIRPORT COMPATIBILITY ZONES

NOT IN AN AIRPORT COMPATIBILITY ZONE

ENVIRONMENTAL

CVMSHCP (COACHELLA VALLEY MULTI-SPECIES HABITAT CONSERVATION PLAN) CONSERVATION AREA

NOT IN A CONSERVATION AREA

CVMSHCP FLUVIAL SAND TRANSPORT SPECIAL PROVISION AREAS

NOT IN A FLUVIAL SAND TRANSPORT SPECIAL PROVISION AREA

WRMSHCP (WESTERN RIVERSIDE COUNTY MULTI-SPECIES HABITAT CONSERVATION PLAN) CELL GROUP

NOT IN A CELL GROUP

WRMSHCP CELL NUMBER

NOT IN A CELL

HANS/ERP (HABITAT ACQUISITION AND NEGOTIATION STRATEGY/EXPEDITED REVIEW PROCESS)

NONE

VEGETATION (2005)

DEVELOPED/DISTURBED LAND

FIRE

HIGH FIRE AREA (ORD. 787)

NOT IN A HIGH FIRE AREA

FIRE RESPONSIBILITY AREA

NOT IN A FIRE RESPONSIBILITY AREA

DEVELOPMENT FEES

CVMSHCP FEE AREA (ORD. 875)

NOT WITHIN THE COACHELLA VALLEY MSHCP FEE AREA

<http://t1mabld5.agency.tlma.co.riverside.ca.us/website/rcgis/MapFrame.htm>

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4/23/2015

Riverside County GIS

Letter 1 Continued

WRMSHCP FEE AREA (ORD. 810)

IN OR PARTIALLY WITHIN THE WESTERN RIVERSIDE MSHCP FEE AREA. SEE MAP FOR MORE INFORMATION.

ROAD & BRIDGE DISTRICT

SOUTHWEST AREA A

EASTERN TUMF (TRANSPORTATION UNIFORM MITIGATION FEE ORD. 673)

NOT WITHIN THE EASTERN TUMF FEE AREA

WESTERN TUMF (TRANSPORTATION UNIFORM MITIGATION FEE ORD. 824)

IN OR PARTIALLY WITHIN A TUMF FEE AREA. SEE MAP FOR MORE INFORMATION.SOUTHWEST

DIF (DEVELOPMENT IMPACT FEE AREA ORD. 659)

ELSINORE

SKR FEE AREA (STEPHEN'S KANGAROO RAT ORD. 663.10)

NOT WITHIN AN SKR FEE AREA.

DEVELOPMENT AGREEMENTS

NOT IN A DEVELOPMENT AGREEMENT AREA

TRANSPORTATION

CIRCULATION ELEMENT ULTIMATE RIGHT-OF-WAY

IN OR PARTIALLY WITHIN A CIRCULATION ELEMENT RIGHT-OF-WAY. SEE MAP FOR MORE INFORMATION. CONTACT THE TRANSPORTATION DEPT. PERMITS SECTION AT (951) 955-6790 FOR INFORMATION REGARDING THIS PARCEL IF IT IS IN AN UNINCORPORATED AREA.

ROAD BOOK PAGE

77

TRANSPORTATION AGREEMENTS

NOT IN A TRANSPORTATION AGREEMENT

CETAP (COMMUNITY AND ENVIRONMENTAL TRANSPORTATION ACCEPTABILITY PROCESS) CORRIDORS

NOT IN A CETAP CORRIDOR.

HYDROLOGY

FLOOD PLAIN REVIEW

WITHIN AREAS OF FLOODING SENSITIVITY. CONTACT THE FLOOD PLAIN MANAGEMENT SECTION AT (951) 955-1200 FOR INFORMATION

WATER DISTRICT

WMWD

FLOOD CONTROL DISTRICT

RIVERSIDE COUNTY FLOOD CONTROL DISTRICT

WATERSHED

SANTA MARGARITA

GEOLOGIC

FAULT ZONE

NOT IN A FAULT ZONE

FAULTS

WITHIN A 1/2 MILE OF

ELSINORE FAULT

ELSINORE FAULTS

WILDOMAR FAULT

WILLARD FAULT

LIQUEFACTION POTENTIAL

<http://t1mabl5.agency.tlma.co.riverside.ca.us/website/rcdis/MapFrame.htm>

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4/23/2015

Riverside County GIS

Letter 1 Continued

MODERATE

SUBSIDENCE
SUSCEPTIBLE

PALEONTOLOGICAL SENSITIVITY

LOW POTENTIAL.

FOLLOWING A LITERATURE SEARCH, RECORDS CHECK AND A FIELD SURVEY, AREAS MAY BE DETERMINED BY A QUALIFIED VERTEBRATE PALEONTOLOGIST AS HAVING LOW POTENTIAL FOR CONTAINING SIGNIFICANT PALEONTOLOGICAL RESOURCES SUBJECT TO ADVERSE IMPACTS.

MISCELLANEOUS

SCHOOL DISTRICT

LAKE ELSINORE UNIFIED

COMMUNITIES

NOT IN A COMMUNITY

COUNTY SERVICE AREA

NOT IN A COUNTY SERVICE AREA.

LIGHTING (ORD. 655)

ZONE B, 29.09 MILES FROM MT. PALOMAR OBSERVATORY

2010 CENSUS TRACT

043271

FARMLAND

URBAN-BUILT UP LAND

TAX RATE AREAS

025066

- CITY OF WILDOMAR
- COUNTY FREE LIBRARY
- CSA 152
- ELS MURRIETA ANZA RESOURCE CONS
- ELSINORE AREA ELEM SCHOOL FUND
- ELSINORE VAL MUN WTR IMP DIST 1
- ELSINORE VALLEY MUNICIPAL WATER
- ERAF RDV
- FLOOD CONTROL ADMINISTRATION
- FLOOD CONTROL ZONE 7
- GENERAL
- GENERAL PURPOSE
- LAKE ELSINORE UNIF IMP NO 98-1
- LAKE ELSINORE UNIFIED
- METRO WATER EAST 1301999
- METRO WATER WEST
- MT SAN JACINTO JUNIOR COLLEGE
- PROJECT 1-LAKELANDRDV AB1290
- RIV CO REG PARK & OPEN SPACE
- RIV. CO. OFFICE OF EDUCATION
- WESTERN MUNICIPAL WATER
- WILDOMAR CEMETERY
- WILDOMAR FIRE PROTECTION

SPECIAL NOTES

NO SPECIAL NOTES

REPORT PRINTED ON...Thu Apr 23 2015 12:58:46 GMT-0700 (Pacific Daylight Time)
Version 131127

Report for APN 376-043-027

<http://lmapd5.agency.tlma.co.riverside.ca.us/website/rcgis/MapFrame.htm>

5/5

Comment Letter 1 – Bridges – Bucket – Ste. Marie

- 1-1 The commenter states that the IS/MND incorrectly concludes a “Less than Significant” impact determination for Thresholds G and H of Hydrology and Water Quality (page 56 of the IS/MND) section. The commenter also states that because the project is within a 100-year floodplain and as per the Parcel Report (attachment 1 to the Comment Letter) “within areas of flooding sensitivity,” the correct determination should have been “Potentially Significant Impact” requiring an EIR.

It should be noted that the GIS used by Riverside County to generate a Parcel Report has general information and may not be accurate to the project level scale needed for analysis and development. The two maps depict slightly conflicting information as to the boundary of the 100-year floodplain in relation to the project site. As such, the project engineer has to provide evidence that the property is outside of the 100-year floodplain. If a portion of the project does indeed fall within the 100-year floodplain, the project applicant will be subject to provisions in Chapter 15.96 of the City of Wildomar Municipal Code. See also response to comment A-2.

- 1-2 The commenter states that the MND improperly defers analysis and mitigation of floodplain impacts under Hydrology and Water Quality, (Section 9, Thresholds G and H in the IS/MND) discussion and analysis.

In this case, the Riverside County GIS and FEMA FIRM Panel Number 06065C2682G depict slightly conflicting information as to the boundary of the 100-year floodplain in relation to the project site. The IS/MND conditioned the project to comply with required provisions in Chapter 15.96 of the City of Wildomar Municipal Code, if the project is determined to be within the 100-year floodplain. In fact, reliance on required future compliance with the applicable regulatory framework is common practice (Tracy First V. City of Tracy (2009)). A previous court case (*Oakland Heritage Alliance v. City of Oakland* (2011)) determined that requiring compliance with Seismic Hazards Mapping Act and relevant provisions of State and City’s Building Codes as an EIR mitigation measure is considered acceptable under CEQA and therefore, not considered to be deferring mitigation.

Letter 2

RECEIVED
MAY 06 2015
CITY OF WILDOMAR



April 23, 2015

Matthew C. Bassi, Planning Director
City of Wildomar, Planning Division
23873 Clinton Keith Road, Ste. 201
Wildomar, CA 92595

Re: Initial Study/ Mitigated Negative Declaration for Elm Street Tentative Tract Map 33840 (Planning Application No. 08-0154)

The Soboba Band of Luiseño Indians has reviewed the Initial Study/ Mitigated Negative Declaration for this project. We have several concerns regarding the mitigation measures for the cultural resources, and respectfully requested that that revisions be made to the document.

- CUL-1 states, “If during construction or grading activities Cultural Resources are discovered on the project site, work shall be halted immediately within 50 feet of the discovery and the resources shall be evaluated by a qualified archaeologist and the **Pechanga Tribe** (Tribe).

The Project Applicant shall notify **both** the Soboba Band and the Pechanga Band to notify them of grading, excavation, and the proposed monitoring program. Although this project is located outside the Soboba Band’s existing reservation boundaries, the project area does fall within the bounds of our Traditional Luiseno Use Area. This project location is in close proximity to known village sites, is a shared use area that was not just utilized by one existing Band, but rather the Luiseño people, and was used in ongoing trade between tribes. This area is regarded as highly sensitive to the people of Soboba Band, as well as those of the Pechanga Band, and we are equally concerns about potential cultural resources that may be affected by the future ground-disturbance associated with this project.

2-1

- CUL-2 states, “At least 30 days prior to any grading activities, the project applicant(s) shall **contact the Pechanga Tribe** to notify the Tribe of grading, excavation, and the monitoring program and to coordinate with the City of Wildomar and the Tribe to develop a Cultural Resources Treatment and Monitoring Agreement.

The Project Applicant shall notify **both** the Soboba Band and the Pechanga Band to notify them of grading, excavation, and the proposed monitoring program.

2-2

As part of the mitigation measures, the tribe requests that it be mandated that an Agreement **between the project applicant and both the Soboba Band and the Pechanga Band shall be provided to the City of Wildomar prior to the issuance of a grading permit** and before conducting any additional archaeological fieldwork

Soboba Band of Luiseño Indians

P.O. Box 387

San Jacinto, CA 92581

Letter 2 Continued

The Soboba Band of Luiseno Indians is requesting a face-to-face meeting between a representative from the City of Wildomar and the Soboba Cultural Resource Department. Please contact me at your earliest convenience either by email or on my cell phone in order to make arrangements.

Sincerely,



Joseph Ontiveros
Director of Cultural Resources
Soboba Band of Luiseño Indians
P.O. Box 487
San Jacinto, CA 92581
Phone (951) 654-5544 ext. 4137
Cell (951) 663-5279
jontiveros@soboba-nsn.gov

Soboba Band of Luiseño Indians

P.O. Box 487

San Jacinto, CA 92581

Comment Letter 2 – Soboba Band of Luiseno Indians

- 2-1 The commenter states mitigation measure CUL-1 should also include the Soboba Band in the notification process.**

Page 39 of the IS/MND has been revised and is reflected in Chapter 3 of the Final IS/MND:

CUL-1 If during grading or construction activities cultural resources are discovered on the project site, work shall be halted immediately within 50 feet of the discovery and the resources shall be evaluated by a qualified archeologist and the Pechanga Tribe ~~(Tribe)~~ and the Soboba Band of Luiseno Indians. Any unanticipated cultural resources that are discovered shall be evaluated in the final report prepared by the qualified archeologist. The report shall include a list of the resources discovered, documentation of each site/locality, and interpretation of the resources identified, and the method of preservation and/or recovery for identified resources. In the event the significant resources are recovered and if the qualified archaeologist and the Tribe determines the resources to be historic or unique, avoidance and/or mitigation would be required pursuant to and consistent with CEQA Guidelines Sections 15064.5 and 15126.4 and Public Resources Code Section 21083.2 and the Cultural Resources Treatment and Monitoring Agreement required by mitigation measure CUL-2.

This mitigation measure shall be incorporated in all construction contract documentation.

- 2-2 The commenter states that mitigation measure CUL-2 should also include the Soboba Band in the notification process.**

Page 39 of the IS/MND has been revised and is reflected in Chapter 3 of the Final IS/MND:

CUL-2 At least 30 days prior to seeking a grading permit, the project applicant(s) shall contact the Pechanga Tribe and the Soboba Band of Luiseno Indians to notify ~~both tribes~~ the Tribe of grading, excavation, and the monitoring program and to coordinate with the City of Wildomar and the Pechanga Tribe and Soboba Band of Luiseno Indians to develop a Cultural Resources Treatment and Monitoring Agreement. The agreement shall include, but not be limited to, outlining provisions and requirements for addressing the treatment of cultural resources; project grading and development scheduling; terms of compensation for the monitors; treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site; and establishing on-site monitoring provisions and/or requirements for professional Tribal monitors during all ground-disturbing activities. A copy of this signed agreement shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit.

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3.0 MINOR REVISIONS TO THE IS/MND

3.1 INTRODUCTION

This section includes minor edits to the IS/MND. These modifications resulted from responses to comments received during the public review period as well as from staff-initiated changes.

Revisions herein do not result in new significant environmental impacts, do not constitute significant new information, and do not alter the conclusions of the environmental analysis. Changes are provided in revision marks (underline for new text and ~~strikeout~~ for deleted text).

3.2 MINOR CHANGES AND EDITS TO THE IS/MND

The following minor changes are made to clarify the IS/MND based on comments received on the project and review of those comments by the City and by the technical experts responsible for the supporting studies.

BIOLOGICAL RESOURCES

Mitigation measure BIO-1 on page 36 is amended as follows:

- BIO-1** All developers of the proposed project site shall conduct ~~construction and clearing activities outside of the avian nesting season (January 15 August 31), where feasible. If clearing and/or construction activities occur during the nesting season,~~ preconstruction surveys for nesting raptors, migratory birds, and special-status resident birds (e.g., coastal California gnatcatcher). Surveys shall be conducted by a qualified biologist, up to ~~3~~ 14 days before initiation of construction activities. The qualified biologist shall survey the construction zone and a 250-foot radius surrounding the construction zone to determine whether the activities may have the potential to disturb or otherwise harm nesting birds.

CULTURAL RESOURCES

1. Mitigation measure CUL-1 on page 39 is amended as follows:

- CUL-1** If during grading or construction activities cultural resources are discovered on the project site, work shall be halted immediately within 50 feet of the discovery and the resources shall be evaluated by a qualified archeologist and the Pechanga Tribe ~~(Tribe)~~ and the Soboba Band of Luiseno Indians. Any unanticipated cultural resources that are discovered shall be evaluated in the final report prepared by the qualified archeologist. The report shall include a list of the resources discovered, documentation of each site/locality, and interpretation of the resources identified, and the method of preservation and/or recovery for identified resources. In the event the significant resources are recovered and if the qualified archaeologist and the Tribe determines the resources to be historic or unique, avoidance and/or mitigation would be required pursuant to and consistent with CEQA Guidelines Sections 15064.5 and 15126.4 and Public Resources Code Section 21083.2 and the Cultural Resources Treatment and Monitoring Agreement required by mitigation measure CUL-2.

This mitigation measure shall be incorporated in all construction contract documentation.

3.0 MINOR REVISIONS TO THE IS/MND

2. Mitigation measure CUL-2 on page 39 is amended as follows:

CUL-2 At least 30 days prior to seeking a grading permit, the project applicant(s) shall contact the Pechanga Tribe and the Soboba Band of Luiseno Indians to notify both tribes ~~the Tribe~~ of grading, excavation, and the monitoring program and to coordinate with the City of Wildomar and the Pechanga Tribe and Soboba Band of Luiseno Indians to develop a Cultural Resources Treatment and Monitoring Agreement. The agreement shall include, but not be limited to, outlining provisions and requirements for addressing the treatment of cultural resources; project grading and development scheduling; terms of compensation for the monitors; treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site; and establishing on-site monitoring provisions and/or requirements for professional Tribal monitors during all ground-disturbing activities. A copy of this signed agreement shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit.

3. Mitigation measure CUL-6 on page 40 is amended as follows:

CUL-6 If inadvertent discoveries of subsurface archaeological resources are discovered during grading, work shall be halted immediately within 50 feet of the discovery. The developer, the project archeologist, the Native American Heritage Commission and the Tribe shall assess the significance of such resources and shall meet and confer regarding the mitigation for such resources. If the developer and the Tribe cannot agree on the significance of or the mitigation for such resources, these issues will be presented to the City of Wildomar Planning Director. The Planning Director shall make the determination based on the provisions of CEQA with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the Pechanga Tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the City of Wildomar. In the event the significant resources are recovered and if the qualified archaeologist determines the resources to be historic or unique as defined by relevant state and local law, avoidance and mitigation would be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.

HYDROLOGY AND WATER QUALITY

Thresholds G and H of the IS/MND are amended as follows:

- g, h) **Less Than Significant.** A portion of the residential project may be located inside of the 100-year floodplain as mapped on a Flood Insurance Rate Map (FIRM) Panel Number 06065C2682G (FEMA 2008) and may be subject to flooding. The 100-year flood line appears to be within the channel and adjacent right-of-way for the Murrieta Creek Channel, but the actual location of the line will need to be determined by final engineering (see **Figure 7**). If the area is within the 100-year flood elevation, the FIRM map indicates that flooding would be 1 foot or less in elevation. The City's Municipal Code Chapter 15.96 relates to flood hazard area regulations. One of the provisions of the Flood Hazard Area Regulations is that "for all new construction and substantial improvements, fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. A minimum of two openings having a total

net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices; provided that they permit the automatic entry and exit of floodwaters." If the project engineer can demonstrate to the City Engineer that the property is outside of the floodplain, the provisions of Municipal Code Chapter 15.96 will not apply. If the property is demonstrated to be outside of the 100-year floodplain, then it may be prudent to request an amendment to the Flood Insurance Rate Map (FIRM) through a Letter of Map Revision (LOMR); however a map amendment is not required. Either compliance with Chapter 15.96 or evidence that the property is outside of the 100-year floodplain will result in a less than significant impact.

UTILITIES AND SERVICE SYSTEMS

1. Threshold B on page 49 of the IS/MND is amended as follows:

Current Capacity at lift station B-2 is ~~3,600~~ 2,806 gallons per minute.

2. Standard Conditions and Requirements on Page 82 will be amended as follows:

- 1) The sewer collection system shall be privately owned and maintained.
- 2) The water system shall be looped; also show an access and maintenance easement in favor of EVMWD for the full width of Street A.
- 3) Detailed plans and specification will be required during the plan review process.

3.0 MINOR REVISIONS TO THE IS/MND

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ATTACHMENTS

ATTACHMENT A: PUBLIC NOTICES

Ben J. Benoit, Mayor
Bridgette Moore, Mayor Pro Tem
Bob Cashman, Council Member
Timothy Walker Council Member
Marsha Swanson, Council Member



23873 Clinton Keith Rd, Ste 201
Wildomar, CA 92595
951/677-7751 Phone
951/698-1463 Fax
www.CityofWildomar.org

TO: Reviewing Agencies and Other Interested Parties

FROM: Matthew C. Bassi, Planning Director

DATE: March 25, 2015

SUBJECT: Elm Street Tentative Tract Map 33840 Initial Study/Mitigated Negative Declaration (Planning Application No. 08-0154)

The City of Wildomar (City) is the lead agency for the preparation and review of an Initial Study/Mitigated Negative Declaration (IS/MND) for the Elm Street Tentative Tract Map project.


The residential project will subdivide 4.16 acres into 15 parcels and includes a change of zone from the existing zone designation of R-R (Rural Residential) to a proposed zone designation of R-1 (One-Family Dwelling). All 15 parcels are intended for the development of future single-family residential dwelling units. The change of zone designation will make the zoning consistent with the current Medium Density Residential (MDR) General Plan land use designation for the site.

A previous IS/MND for the proposed project was circulated on July 9, 2014 through August 7, 2014. The State Clearinghouse Number (SCH) is 2014071028. Comments received on the previous IS/MND during the public review period have been included and addressed in this updated IS/MND in accordance with CEQA guidelines.

The proposed project site is located in the City of Wildomar, California, at the end of Elm Street between Central Street to the northeast and Gruwell Street to the southwest, with the Murrieta Creek Channel drainage course to the northeast. The Riverside County Assessor's Parcel Number (APN) for the project site is 376-043-027.

At this time, the City is requesting comments on the IS/MND for the proposed project. This notice is being sent to responsible agencies, trustee agencies, and other interested parties in accordance with state CEQA laws along with a copy of the IS/MND on a CD. The public comment period for the IS/MND will begin on **Wednesday, March 25, 2015, and conclude on Thursday, April 23, 2015.** Written comments can be provided to Matthew C. Bassi, Planning Director, City of Wildomar, 23873 Clinton Keith Road, Suite 201, Wildomar, CA 92595. Comments can also be emailed to mbassi@cityofwildomar.org.

Sincerely,


Matthew C. Bassi
Planning Director

Enclosure – IS/MND on CD



NOTICE OF INTENT TO ADOPT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION FOR THE ELM STREET TENTATIVE TRACT MAP PROJECT

An Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the City of Wildomar for the Elm Street Tentative Tract Map project (Planning Application No. 08-0154). The IS/MND is available for public review and can be downloaded from the City of Wildomar Environmental Documents Center webpage at <http://www.cityofwildomar.org/environmental-documents.asp> beginning Wednesday, March 25, 2015. A printed copy of the Elm Street Tentative Tract IS/MND will also be available for review at Wildomar City Hall, Planning Department, 23873 Clinton Keith Road, Suite 201, Wildomar, CA 92595 (8 a.m. to 5 p.m., Monday through Thursday).

The proposed project site is located in the City of Wildomar, California, at the end of Elm Street between Central Street to the northeast and Gruwell Street to the southwest, with the Murrieta Creek Channel drainage course to the northeast. The Riverside County Assessor's Parcel Number (APN) for the project site is 376-043-027.

The proposed project would change the existing zone district from R-R (Rural Residential) to R-1 (One-Family Dwelling). The project will also subdivide 4.16 acres into 15 parcels. All 15 parcels are intended for the development of future single-family residential dwelling units. The change of zone designation will make the zoning consistent with the current Medium Density Residential (MDR) General Plan land use designation for the site.

A previous IS/MND for the proposed project was circulated on July 9, 2014 through August 7, 2014. The State Clearinghouse Number is 2014071028. Comments received on the previous IS/MND during the public review period have been included and addressed in this updated IS/MND in accordance with CEQA guidelines.

In accordance with CEQA Guidelines Sections 15072(a) and (b), this public notice is posted to officially notify the public, public agencies, and responsible and trustee agencies that the required 30-day public review period will commence on **Wednesday, March 25, 2015 and will conclude on Thursday, April 23, 2015.** Any written comments (via email or letter) on the IS/MND must be submitted no later than April 23, 2015 by 5 p.m. The Planning Commission is tentatively scheduled to take action on this project at a regular meeting to be held on June 3, 2015. The City Council is tentatively scheduled to take action on this project at a regular meeting to be held on July 8, 2015. Written comments may be mailed to Matthew C. Bassi, Planning Director, City of Wildomar Planning Department, 23873 Clinton Keith Road, Suite 201, Wildomar, CA 92595. Email comments can be sent to mbassi@cityofwildomar.org.

Posted: March 25, 2015

**NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
FOR THE ELM STREET TENTATIVE TRACT MAP PROJECT**

An Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the City of Wildomar for the Elm Street Tentative Tract Map project (Planning Application No. 08-0154). The IS/MND is available for public review and can be downloaded from the City of Wildomar Environmental Documents Center webpage at <http://www.cityofwildomar.org/environmental-documents.asp> beginning Wednesday, March 25, 2015. A printed copy of the Elm Street Tentative Tract IS/MND is also available for review at Wildomar City Hall, Planning Department, 23873 Clinton Keith Road, Suite 201, Wildomar, CA 92595 (8 a.m. to 5 p.m., Monday through Thursday).

The proposed project site is located in the City of Wildomar, California, at the end of Elm Street between Central Street to the northeast and Gruwell Street to the southwest, with the Murrieta Creek Channel drainage course to the northeast. The Riverside County Assessor's Parcel Number (APN) for the project site is 376-043-027.

The project proposes to change the existing zone designation from R-R (Rural Residential) to R-1 (One-Family Dwelling). The project also proposes to subdivide the 4.16 acre site into 15 parcels for future single family residential development consistent with the existing General Plan land use designation of Medium Density Residential (MDR). The change of zone designation will make the zoning consistent with the current Medium Density Residential (MDR) General Plan land use designation of the site.

A previous IS/MND for the proposed project was circulated on July 9, 2014 through August 7, 2014. The State Clearinghouse Number is 2014071028. Comments received on the previous IS/MND during the public review period have been included and addressed in this updated IS/MND in accordance with CEQA guidelines.

In accordance with CEQA Guidelines Sections 15072(a) and (b), this public notice is posted to officially notify the public, public agencies, and responsible and trustee agencies that the required 30-day public review period will commence on **Wednesday, March 25, 2015 and will conclude on Thursday April 23, 2015.** Any written comments (via email or letter) on the IS/MND must be submitted no later than April 23, 2015 by 5 p.m. The Planning Commission is tentatively scheduled to take action on this project at a regular meeting to be held on June 3, 2015. The City Council is tentatively scheduled to take action on this project at a regular meeting to be held on July 8, 2015. Written comments may be mailed to Matthew C. Bassi, Planning Director, City of Wildomar Planning Department, 23873 Clinton Keith Road, Suite 201, Wildomar, CA 92595. Email comments can be sent to mbassi@cityofwildomar.org.

Published: March 25, 2015

City of Wildomar

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, PO Box 3044, Sacramento, CA 95812-3044
 (916) 445-0613 state.clearinghouse@opr.ca.gov

SCH # **2014071028**

PROJECT TITLE

Elm Street Tentative Tract Map IS/MND (Planning Application No. 08-0154/TM No. 33840)

LEAD AGENCY City of Wildomar		CONTACT PERSON Matthew C. Bassi, Planning Director	
STREET ADDRESS 23873 Clinton Keith Road, Suite 201		PHONE 951/677-7751, Ext. 213	
CITY Wildomar	ZIP CODE 92595	COUNTY Riverside	

PROJECT LOCATION

COUNTY Riverside		CITY/NEAREST COMMUNITY City of Wildomar	
ADDRESS At the end of Elm Street between Central Street to the northeast and Gruwell Street to the southwest, with Murrieta Creek Channel drainage course adjacent to the northeast.		ZIP CODE 92595	TOTAL ACRES 4.16
ASSESSOR'S PARCEL NUMBER 376-043-027	SECTION	TOWNSHIP	RANGE
WITHIN 2 MILES: STATE HIGHWAY NUMBER Interstate 15		AIRPORTS None within 2 miles	SCHOOLS William Collier Elementary (approx. 2 miles to the north) Cal Lutheran HS (approx. 2 miles to the north) Wildomar Elementary (approx. 1/2 mile to the west) Donald Graham Elementary (approx. 2 miles to the west) Davie A. Brown Middle (approx 2 miles to the south)
RAILWAYS None		WATERWAYS Murrieta Creek Channel drainage course to the northeast/adjacent to the project site	

DOCUMENT TYPE

CEQA	<input type="checkbox"/> NOP <input type="checkbox"/> Early Cons <input checked="" type="checkbox"/> Initial Study <input type="checkbox"/> Draft EIR	<input type="checkbox"/> Supplement/Subsequent EIR (Prior SCH No.) _____ <input type="checkbox"/> Other	NEPA	<input type="checkbox"/> NOI <input type="checkbox"/> EA <input type="checkbox"/> Draft EIS <input type="checkbox"/> FONSI	OTHER	<input type="checkbox"/> Joint Document <input type="checkbox"/> Final Document <input type="checkbox"/> Other _____
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LOCAL ACTION TYPE

<input type="checkbox"/> General Plan Update	<input type="checkbox"/> Specific Plan Amendment	<input checked="" type="checkbox"/> Rezone	<input type="checkbox"/> Annexation
<input type="checkbox"/> General Plan Amendment	<input type="checkbox"/> Master Plan	<input type="checkbox"/> Prezone	<input type="checkbox"/> Redevelopment
<input type="checkbox"/> General Plan Element	<input type="checkbox"/> Planned Unit Development	<input type="checkbox"/> Use Permit	<input type="checkbox"/> Coastal Permit
<input type="checkbox"/> Community Plan	<input type="checkbox"/> Site Plan	<input checked="" type="checkbox"/> Land Division (Subdivision, etc.)	<input type="checkbox"/> Conditional Use Permit (CUP)

DEVELOPMENT TYPE

<input checked="" type="checkbox"/> Residential	Units <u>15</u>	Acres <u>4.16</u>	<input type="checkbox"/> Transportation	Type _____
<input type="checkbox"/> Administrative Building	Sq. ft. _____	Acres _____	<input type="checkbox"/> Mining	Mineral _____
<input type="checkbox"/> Shopping/Commercial	Sq. ft. _____	Acres _____	<input type="checkbox"/> Waste Treatment	Type _____
<input type="checkbox"/> Industrial	Sq. ft. _____	Acres _____	<input type="checkbox"/> Hazardous Waste	Type _____
<input type="checkbox"/> Educational	Sq. ft. _____			
<input type="checkbox"/> Other	Sq. ft. _____			
<input type="checkbox"/> Recreational			<input type="checkbox"/> Water Facilities	Type _____ MGD _____
			<input type="checkbox"/> Power	Type _____ Watts _____

FUNDING

Federal \$ _____	State \$ _____	Total \$ _____
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PROJECT ISSUES DISCUSSED IN DOCUMENT

<input checked="" type="checkbox"/> Aesthetic/Visual	<input checked="" type="checkbox"/> Flood Plain/Flooding	<input checked="" type="checkbox"/> Schools/Universities	<input checked="" type="checkbox"/> Water Supply
<input type="checkbox"/> Agricultural Land	<input type="checkbox"/> Forest Land/Fire Hazard	<input type="checkbox"/> Septic Systems	<input checked="" type="checkbox"/> Wetland/Riparian
<input checked="" type="checkbox"/> Air Quality	<input checked="" type="checkbox"/> Geological/Seismic	<input checked="" type="checkbox"/> Soil Erosion/Compaction/Grading	<input checked="" type="checkbox"/> Wildlife
<input checked="" type="checkbox"/> Archaeological/Historical	<input type="checkbox"/> Minerals	<input checked="" type="checkbox"/> Solid Waste	<input checked="" type="checkbox"/> Growth Inducing
<input type="checkbox"/> Coastal Zone	<input checked="" type="checkbox"/> Noise	<input checked="" type="checkbox"/> Toxic/Hazardous	<input checked="" type="checkbox"/> Land Use
<input checked="" type="checkbox"/> Drainage/Absorption	<input checked="" type="checkbox"/> Population/Housing Balance	<input checked="" type="checkbox"/> Traffic/Circulation	<input checked="" type="checkbox"/> Cumulative Effects
<input type="checkbox"/> Economic/Jobs	<input checked="" type="checkbox"/> Public Services/Facilities	<input checked="" type="checkbox"/> Vegetation	<input type="checkbox"/> Other _____
<input type="checkbox"/> Fiscal	<input checked="" type="checkbox"/> Recreation/Parks	<input checked="" type="checkbox"/> Water Quality	

PRESENT LAND USE/ZONING/GENERAL PLAN DESIGNATION: The project site is currently vacant and is designated Medium Density Residential and zoned Rural Residential.

PROJECT DESCRIPTION: The project includes a change of zone from the existing designation of R-R (Rural Residential) to R-1 (One-Family Dwelling). The change of zone designation will make the zoning consistent with the existing General Plan land use designation of Medium Density Residential (MDR). The project also includes a Tentative Tract Map (TTM No. 33840) to subdivide the 4.16-acre parcel into 15 parcels for future single family residential development.

REVIEWING AGENCIES CHECKLIST

- Resources Agency
- Boating & Waterways
- Coastal Conservancy
- Colorado River Board
- Conservation
- Fish and Wildlife
- Forestry & Fire Protection
- Office of Historic Preservation
- Parks and Recreation
- Reclamation Board
- San Francisco Bay Conservation & Development Commission
- Water Resources

Business, Transportation & Housing

- Aeronautics
- California Highway Patrol
- CALTRANS District # 8
- Federal Aviation Authority
- Department of Transportation Planning (headquarters)
- Housing & Community Development
- Food & Agriculture Health & Welfare
- Health Services _____

State & Consumer Services

- General Services
- Environmental Protection Agency**
- Air Resources Board
- California Waste Management Board
- SWRCB: Clean Water Grants
- SWRCB: Delta Unit
- SWRCB: Water Quality
- SWRCB: Water Rights
- Regional WQCB # 8 (San Ana Region)
- Regional WQCB # 9 (San Diego Region)

Youth & Adult Corrections

- Corrections


Independent Commissions & Offices

- Energy Commission
- Native American Heritage Commission
- Public Utilities Commission
- Santa Monica Mountains Conservancy
- State Lands Commission
- Tahoe Regional Planning Agency

PUBLIC REVIEW PERIOD

Starting Date Wednesday, March 25, 2015

Ending Date Thursday, April 23, 2015

Signature 
Matthew C. Bassi, Planning Director
City of Wildomar Planning Department

Consultant:
Consulting Firm: Pacific Municipal Consultants
Address: 6020 Cornerstone Court West, Suite 260
City/State/Zip: San Diego, CA 92128
Contact: Mark Teague, AICP
Phone: (858) 453-3602, ext 15201

Lead Agency:
Matthew C. Bassi, Planning Director
City of Wildomar
23837 Clinton Keith Road, Suite 201
Wildomar, CA 92595
Phone: (951) 677-7751

For SCH Use Only: _____
Date Received at SCH _____
Date Review Starts _____
Date to Agencies _____
Date to SCH _____
Clearance Date _____
Notes:

TENTATIVE TRACT MAP NO. 33840

AMENDMENT NO. 4

IN THE CITY OF WILDOMAR, COUNTY OF RIVERSIDE

APN: 376-043-027

ALL OF BLOCK 17 BEING IN THE TOWN OF WILDOMAR COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, ACCORDING TO THE MAP ON FILE IN BOOK 5, PAGE 294 OF MAPS, RECORDS OF SAN DIEGO COUNTY, CALIFORNIA.

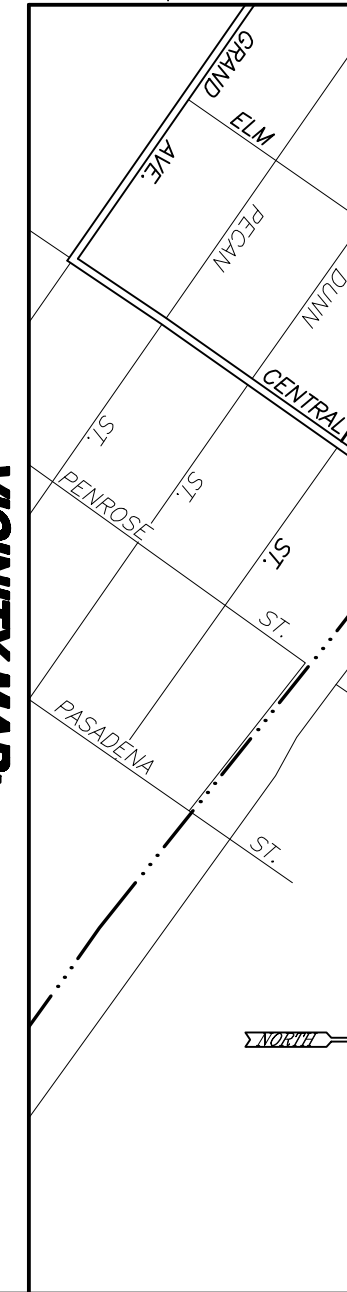
- #### IMPROVEMENT NOTES
- 0.25" ASPHALT CONCRETE OVER 0.50" AGGREGATE BASE PAVEMENT SECTION
 - PAVEMENT SECTION TO MATCH EXISTING
 - TYPE 'C' CURB PER CITY OF WILDOMAR STD. 202
 - TYPE 'A-6" CURB AND GUTTER PER CITY OF WILDOMAR STD. 200
 - CONCRETE SIDEWALK PER CITY OF WILDOMAR STD. 401
 - CROSS CUTTER
 - 10" CURB TRANSITION FROM TYPE 'C' CURB TO TYPE 'A-6" CURB AND GUTTER
 - UNDERSIDEWALK DRAIN PER CITY OF WILDOMAR STD. 309 (MODIFIED TO LOW AT 2% IN REVERSE)
 - CATCH BASIN AND INLET PER CITY OF WILDOMAR STD. 301 WITH GUTTER DEPRESSION CASE 'B'
 - PER CITY OF WILDOMAR STD. 311
 - METAL BEAM GUARDRAIL (WOOD POST WITH WOOD BLOCK) PER CALTRANS STD. A7A1 INSTALLED PER CALTRANS STANDARD.
 - WIDE RASSED TRAFFIC MEDIUM
 - LANDSCAPE PERIMETER WALL PER LANDSCAPE PLANS

- #### EASEMENT NOTES
- ABANDONMENT OF UNKNOWN ALLEYS AND RESERVATION OF EASEMENT FOR EXISTING UTILITIES RECORDED 4/6/78 IN BOOK 1978, PAGE 63718 OF OFFICIAL RECORDS.
 - VACATION OF UNNAMED ALLEY AND RESERVING AND EXERCISING AN EASEMENT FOR ANY PUBLIC UTILITIES RECORDED 2/26/82 IN BOOK 1982, PAGE 342 OF OFFICIAL RECORDS.
 - AN EASEMENT FOR WATER PRELIMINE TO THE ESTIMODE ALLEY MUNICIPAL WATER DISTRICT RECORDED 2/16/99 IN BOOK 2375, PAGE 594 OF OFFICIAL RECORDS.

LOT NUMBER	LOT AREA	ACREAGE
1	11,367	0.259
2	11,367	0.259
3	11,367	0.259
4	11,367	0.259
5	11,367	0.259
6	11,367	0.259
7	11,367	0.259
8	11,367	0.259
9	11,367	0.259
10	11,367	0.259
11	11,367	0.259
12	11,367	0.259
13	11,367	0.259
14	11,367	0.259
15	11,367	0.259
16	11,367	0.259
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24	11,367	0.259
25	11,367	0.259
26	11,367	0.259
27	11,367	0.259
28	11,367	0.259
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37	11,367	0.259
38	11,367	0.259
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41	11,367	0.259
42	11,367	0.259
43	11,367	0.259
44	11,367	0.259
45	11,367	0.259
46	11,367	0.259
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79	11,367	0.259
80	11,367	0.259
81	11,367	0.259
82	11,367	0.259
83	11,367	0.259
84	11,367	0.259
85	11,367	0.259
86	11,367	0.259
87	11,367	0.259
88	11,367	0.259
89	11,367	0.259
90	11,367	0.259
91	11,367	0.259
92	11,367	0.259
93	11,367	0.259
94	11,367	0.259
95	11,367	0.259
96	11,367	0.259
97	11,367	0.259
98	11,367	0.259
99	11,367	0.259
100	11,367	0.259

SEE POWER POLE SPECIFICATIONS

NO.	SEE (IN TAG NO.)	SIZE	FEED CIRCUIT
1	4529972E	2 - 12KV	2 - 12KV
2	4529972E	2 - 12KV	2 - 12KV
3	4529972E	2 - 12KV	2 - 12KV
4	4529972E	2 - 12KV	2 - 12KV
5	4529972E	2 - 12KV	2 - 12KV
6	4529972E	2 - 12KV	2 - 12KV
7	4529972E	2 - 12KV	2 - 12KV
8	4529972E	2 - 12KV	2 - 12KV
9	4529972E	2 - 12KV	2 - 12KV
10	4529972E	2 - 12KV	2 - 12KV
11	4529972E	2 - 12KV	2 - 12KV
12	4529972E	2 - 12KV	2 - 12KV
13	4529972E	2 - 12KV	2 - 12KV
14	4529972E	2 - 12KV	2 - 12KV
15	4529972E	2 - 12KV	2 - 12KV
16	4529972E	2 - 12KV	2 - 12KV
17	4529972E	2 - 12KV	2 - 12KV
18	4529972E	2 - 12KV	2 - 12KV
19	4529972E	2 - 12KV	2 - 12KV
20	4529972E	2 - 12KV	2 - 12KV
21	4529972E	2 - 12KV	2 - 12KV
22	4529972E	2 - 12KV	2 - 12KV
23	4529972E	2 - 12KV	2 - 12KV
24	4529972E	2 - 12KV	2 - 12KV
25	4529972E	2 - 12KV	2 - 12KV
26	4529972E	2 - 12KV	2 - 12KV
27	4529972E	2 - 12KV	2 - 12KV
28	4529972E	2 - 12KV	2 - 12KV
29	4529972E	2 - 12KV	2 - 12KV
30	4529972E	2 - 12KV	2 - 12KV
31	4529972E	2 - 12KV	2 - 12KV
32	4529972E	2 - 12KV	2 - 12KV
33	4529972E	2 - 12KV	2 - 12KV
34	4529972E	2 - 12KV	2 - 12KV
35	4529972E	2 - 12KV	2 - 12KV
36	4529972E	2 - 12KV	2 - 12KV
37	4529972E	2 - 12KV	2 - 12KV
38	4529972E	2 - 12KV	2 - 12KV
39	4529972E	2 - 12KV	2 - 12KV
40	4529972E	2 - 12KV	2 - 12KV



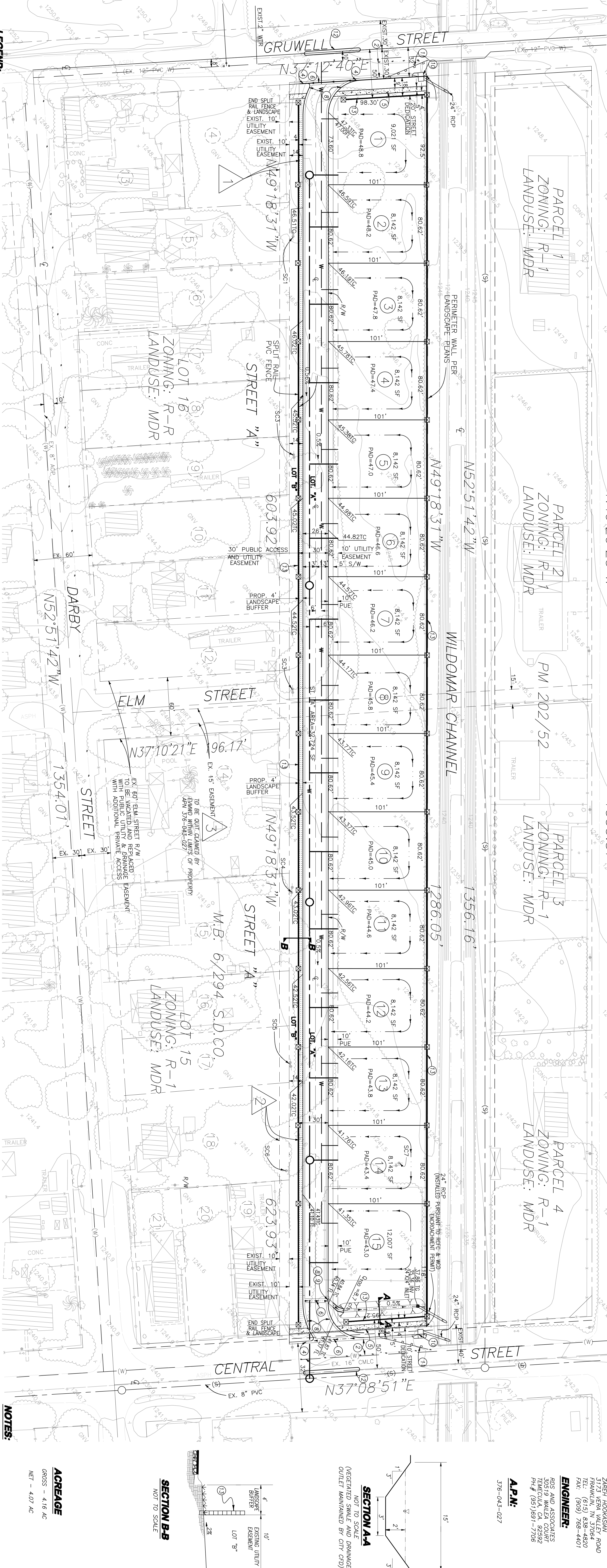
APPLICANT/OWNERS:
 ZAHEN HOOGAKYAN ROAD
 FRANKLIN, TN 37064
 TEL: (615) 838-4820
 FAX: (901) 768-4801

ENGINEER:
 RDS & ASSOCIATES
 30019 WILHIA CL.
 TEMECULA, CA 92592
 PH: (951) 691-7706

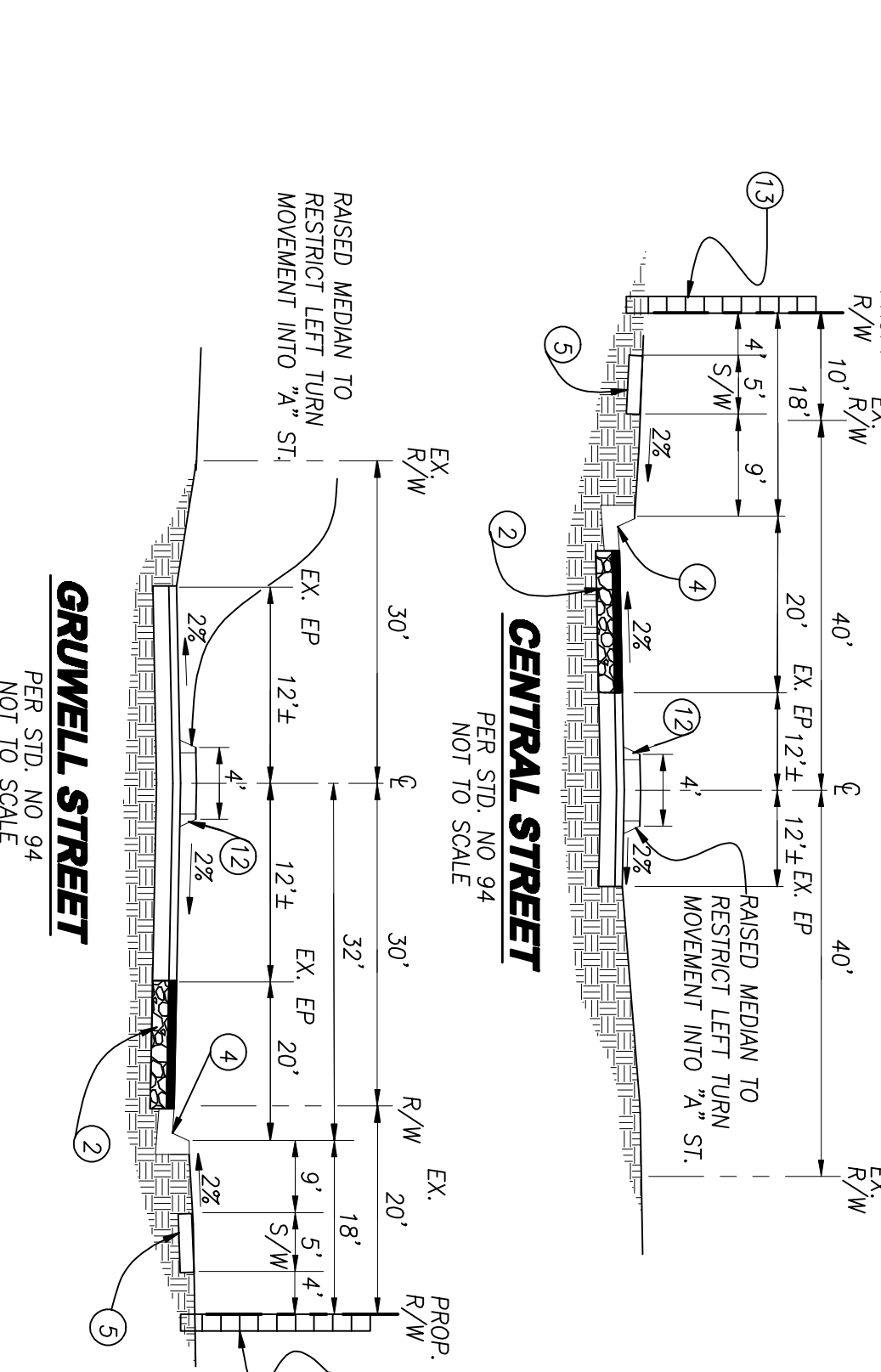
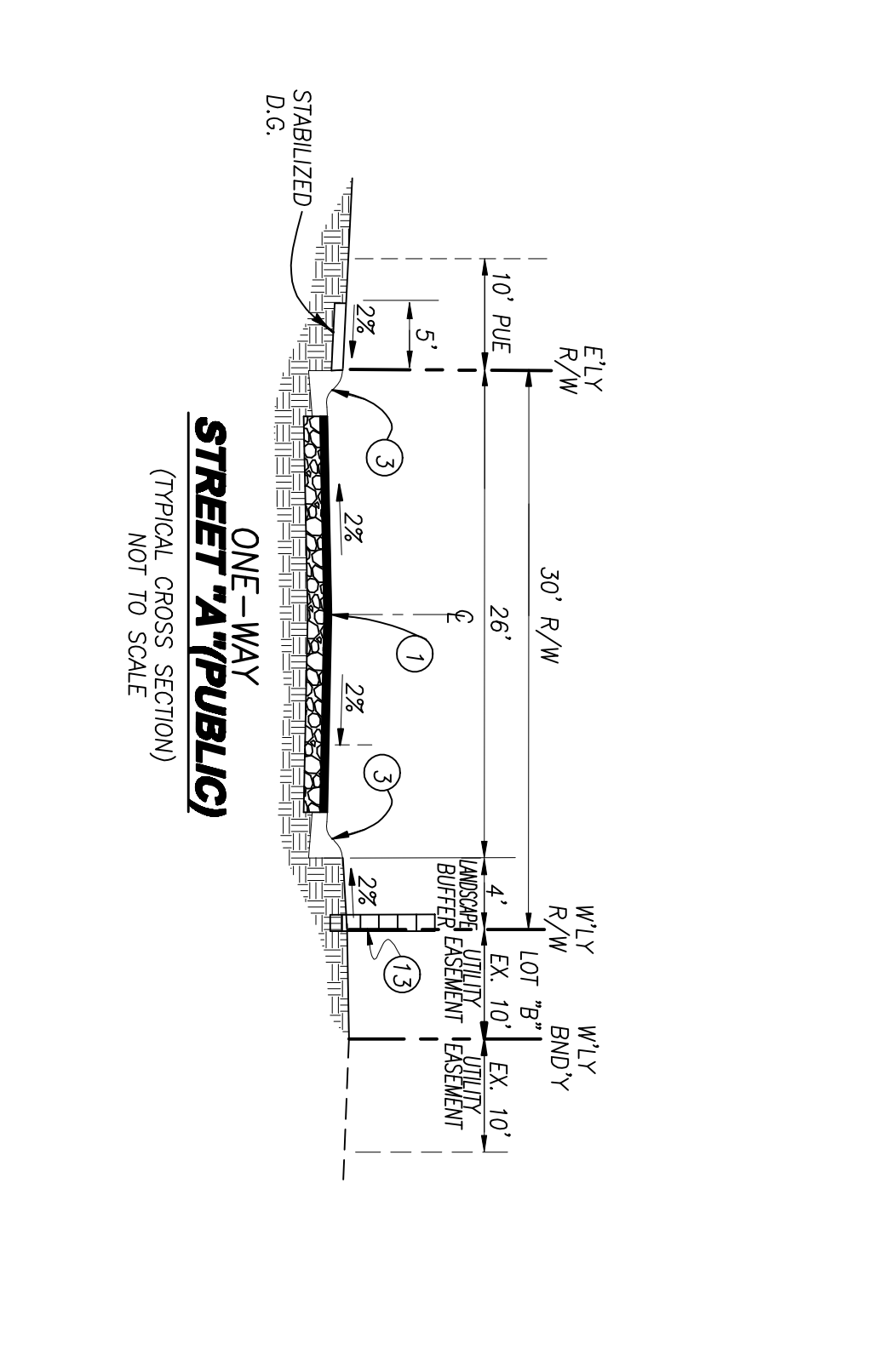
APN:
 376-043-027

SECTION A-A
 NOT TO SCALE
 (VEGETATED SWALE AND DRAINAGE OUTLET MAINTAINED BY CITY (CSD))

SECTION B-B
 NOT TO SCALE
 W/LY BOUNDARY



- #### LEGEND:
- PROPOSED RIGHT OF WAY
 - EXISTING RIGHT OF WAY
 - EXISTING FEATURES
 - PROPOSED PROPERTY LINE
 - EXIST FENCE
 - FLOW LINE
 - LOT NUMBER
 - RIGHT OF WAY
 - C/L = CENTER LINE
 - CONTROL
 - EX. BUILDING
 - FIRE HYDRANT
 - TREES
 - SINGLE TREE
 - PROPOSED PERIMETER WALL
 - AND PULSTERS
 - PROPOSED PVC SPLIT RAIL FENCE



UTILITIES

DATE	REVISIONS
12/03/13	ADDRESS CITY COMMENTS
5/17/14	SHIFT R/W LINE STREET 14' EASTERLY AND TRAIL, REMOVE PERIMETER WALL ALONG WESTERLY BOUNDARY, REPLACE C/D-R-C WITH STANDARD TRAFFIC
11/4/14	ADD ONE WAY PUBLIC STREET, ELIMINATE W/LY TRAIL
3/4/15	ADD MEAN TO RESTRICT LEFT TURN MOVEMENT TO 'A' STREET

LEGAL DESCRIPTION:

ALL OF BLOCK 17 BEING IN THE TOWN OF WILDOMAR COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, ACCORDING TO MAP ON FILE IN BOOK 6, PAGE 294 OF MAPS, RECORDS OF SAN DIEGO COUNTY, CALIFORNIA, TOGETHER WITH ANY RIGHT, TITLE AND INTEREST IN THE SAID BLOCK 17, AS SHOWN ON THE TRACT MAP NO. 33840 OF THE AMENDED 'A' SUBDIVISION THEREOF, TOGETHER AND SAID TRACT MAP NO. 33840, LIVING BETWEEN THE PERFORMER AND SAID COUNTY OF RIVERSIDE, BEING IN THE TOWN OF WILDOMAR, ACCORDING TO MAP ON FILE IN BOOK 6, PAGE 294 OF MAPS, RECORDS OF SAN DIEGO COUNTY, CALIFORNIA, EXCEPTING THEREFROM PARCELS AND INTERESTS 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830