Menifee Planning Commission
Agenda
February 8, 2017

City Council Chambers
29714 Haun Road
Menifee, CA 92586

6:00 p.m. Workshop
7:00 p.m. Regular Meeting

THE PURPOSE OF PLANNING COMMISSION MEETINGS IS TO CONDUCT THE CITY'S BUSINESS
PLEASE SEE OUR DECORUM POLICY NOTES AT THE END OF THIS AGENDA

Workshop (6:00 p.m.)

Joint workshop between the Parks, Recreation and Trails Commission and the Planning Commission for the purpose of conferring on park planning matters.

Regular Meeting (7:00 p.m.)

1. **CALL TO ORDER**
2. **ROLL CALL**
3. **FLAG SALUTE**
4. **SELECTION OF CHAIR AND VICE CHAIR**
   - **Recess for Reorganization**
5. **AGENDA APPROVAL OR MODIFICATION**
6. **PRESENTATIONS**
   None
7. **PUBLIC COMMENTS**
8. **APPROVAL OF MEETING MINUTES**
   - **8.1. Minutes of January 11, 2017**
9. **CONSENT CALENDAR - (COMMENTS ON CONSENT AGENDA TAKEN HERE)**

(All matters on the Consent Calendar are to be approved in one motion unless a Commissioner requests a separate action on a specific item on the Consent Calendar. If an item is removed from the Consent Calendar, it will be discussed individually and acted upon separately.)

None

10. PUBLIC HEARINGS

10.1. Public Hearing for Bradley Road Bridge Over Salt Creek, CIP 13-004 and Adoption of a Mitigated Negative Declaration

- Conduct Public Hearing
- Adopt a Resolution adopting a Mitigated Negative Declaration based on the findings incorporated in the initial study and the conclusion that the project will not have a significant effect on the environment

11. DISCUSSION ITEMS

11.1. Appointments to Menifee Citizens Advisory Committee (MCAC)

- Appoint two (2) representatives from the Planning Commission to serve on the Menifee Citizens Advisory Committee and assist with review of the annual Community Development Block Grant program

11.2. Provide a Planning Commission Interpretation confirming that assisted living or similar facilities are considered a residential use in the Economic Development Corridor Zone (Menifee Municipal Code Chapter 9.28) and would count towards the percentage of residential uses allowed within the zone as specified in Chapter 9.28.090 (E).

12. COMMUNITY DEVELOPMENT DIRECTOR COMMENTS

13. COMMISSIONER REPORTS ON COMMITTEE ACTIVITES

14. ADJOURNMENT

Decorum Policy Notes

Please use a speaker request form when you wish to address the Commissioners.

The Commission anticipates and encourages public participation at its Commission meeting, both on agenda items and during the public comments period. Please use respect by not having your cell phones on, refrain from talking in the audience or outbursts that may be disruptive. While we encourage participation, we ask there be a mutual respect for the proceedings.

Staff Reports

Materials related to an item on this Agenda, including those submitted to the Planning Commission after distribution of the agenda packet, are available for public inspection by contacting Jennifer Allen, Planning Commission Secretary, at (951) 672-6777 during normal business hours.

Compliance with the Americans with Disabilities Act

If you need special assistance to participate in this meeting, you should contact Jennifer Allen, Planning Commission Secretary, at (951) 672-6777. Notification 72 hours prior to the meeting will enable the City to make reasonable arrangements to assure accessibility to this meeting.

CITY OF MENIFEE

SUBJECT:	Joint Workshop - Parks, Recreation & Trails Commission and Planning Commission
MEETING DATE:	February 8, 2017
TO:	Planning Commission
PREPARED BY:	Bruni Reyes, Administrative Analyst
REVIEWED BY:	Robert Lennox, Community Services Department Director
APPROVED BY:	Jeff B. Wyman, Acting City Manager

RECOMMENDED ACTION

Conduct a joint workshop between the Parks, Recreation & Trails Commission and Planning Commission for the purpose of conferring on park planning matters.

BACKGROUND

During its regular meeting of August 18, 2016, the Parks, Recreation and Trails Commission (PRTC) directed staff to return with an amendment to the City's recently updated Quimby Ordinance to delete Section 9.55.115 allowing credit for excess park dedication.

At the January 11, 2017 Planning Commission meeting, Community Services staff presented a proposed amendment to the Menifee Municipal Code Chapter 9.55 (Parkland Dedication or Quimby Fee Requirements for Residential Developments), by deleting Section 9.55.115 which allows developers to receive/bank credit for excess park dedication. After discussion, the Planning Commission denied the proposed amendment, deciding that it would be best to keep the option for developer credits, but were open to adding certain conditions to the section to limit the value of those credits.

Additionally, Planning Commissioners desired an opportunity to meet with the PRTC to hash out park planning conflicts and areas of confusion between the two commissions. Staff was tasked to return to the PRTC to discuss scheduling options for a joint workshop between the two Commissions for the purpose of discussing various park planning matters, including but not limited to:

- Quimby Fee Act Amendments
- Park Definitions
- Minimum Park Size Dedications
- Parks, Trails, Open Space and Recreation Master Plan Facility Shortages
- City-Wide Trails Network

FISCAL IMPACT

None

ATTACHMENTS

1. Draft Quimby Fee Act Resolution
2. PTOSRMP Park Definitions
3. PTOSRMP Facility Needs
4. City-Wide Trail Map

Resolution No. PC17-xxx

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MENIFEE, CALIFORNIA, RECOMMENDING THAT THE CITY COUNCIL AMEND CHAPTER 9.55 (PARKLAND DEDICATION OR QUIMBY FEE REQUIREMENTS FOR RESIDENTIAL DEVELOPMENT REQUIRING A TENTATIVE MAP OR PARCEL MAP) TO THE MENIFEE MUNICIPAL CODE TO DELETE SECTION 9.55.115 WHICH ALLOWS CREDIT FOR EXCESS PARK DEDICATION

WHEREAS, Government Code Section 66477 (also known as the "Quimby Act") authorizes the legislative body of a city to, by ordinance, require the dedication of land or payment of fees in lieu thereof ("Quimby Fees"), or a combination of both, for park and recreational purposes as a condition to the approval of any tentative map; and

WHEREAS, through the adoption of Ordinance No. 2014-160, the City Council of the City of Menifee ("City Council" or "City," as applicable) added Chapter 9.55 to the Menifee Municipal Code to require developers to improve and dedicate land for park and recreational purposes, or pay Quimby Fees, or a combination of both, as a condition to the approval of a residential development project requiring a tentative tract map or parcel map; and

WHEREAS, through the adoption of Ordinance No. 2016-193, the City Council of the City of Menifee ("City Council" or "City," as applicable) added Section 9.55.115 to the Menifee Municipal Code to allow credit for excess park dedication; and

WHEREAS, an ordinance imposing parkland dedication and Quimby Fee requirements pursuant to the Quimby Act must include definite standards for determining the proportion of subdivision to be dedicated and the amount of any Quimby Fees based upon a ratio of residential density (*i.e.*, the number of people expected to reside in the subdivision) to acreage (*i.e.*, the area of the subdivision); and

WHEREAS, if adopted, the proposed Code Amendment (DCA 2016-296) set forth in Exhibit "A," attached hereto, would not impose new parkland dedication and Quimby Fee requirements beyond the requirements that have already been established and imposed through the adoption of Ordinance No. 2014-160 (adding Chapter 9.55 to the Menifee Municipal Code) and City Council Resolution No. 16-514 (establishing the amount of Quimby Fees); and

WHEREAS, if adopted, the proposed Code Amendment (DCA 2016-296) would merely delete Section 9.55.115 to the Menifee Municipal Code which allows a subdivider to receive credit for excess park dedications under certain circumstances; and

WHEREAS, with the proposed Code Amendment (DCA 2016-296), Chapter 9.55 of the Menifee Municipal Code would continue to contain definite standards for determining the proportion of a subdivision to be dedicated for parks and recreational facilities and the amount of any Quimby Fees; and

WHEREAS, pursuant to Section 15378(b)(4) of Title 14 of the California Code of Regulations, the proposed code amendments are not considered a "project" under the California Environmental Quality Act, Public Resources Code Section 21000 et seq (CEQA) because the proposed amendments to the Municipal Code involve the "creation of government funding mechanisms or other government fiscal activities which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment." Even if considered a "project" under CEQA, the proposed code amendments are also exempt from environmental review per Section 15273(a)(4) of Title 14 of the California Code of Regulations because CEQA does not apply to "the establishment, modification, structuring, restructuring, or approval of rates, tolls, fares, or other charges by public agencies which the public agency finds are for the purpose of ... obtaining funds for capital projects, necessary to maintain service within existing service areas"); and

WHEREAS, because the proposed Code Amendment (DCA 2016-296) includes amendments to Title 9 of the Menifee Municipal Code (Planning and Zoning), it has been processed pursuant to Government Code Sections 65853 through 65857; and

WHEREAS, on January 11, 2017, the Planning Commission held a duly noticed public hearing to receive public testimony on the proposed Code Amendment (DCA 2016-296) and to appraise all relevant information pertaining thereto, and after considering all relevant public testimony as well as all materials in the staff report and accompanying documents, the Planning Commission recommended to the City Council approve/reject the proposed Code Amendment (DCA 2016-296) and recommended that the Council find the proposed Code Amendment (DCA 2016-296) does not require further environmental review under CEQA; and

WHEREAS, the Parks, Recreation and Trails Commission also reviewed the proposed Code Amendment (DCA 2016-296) at its regular meeting on September 1, 2016, and after considering all relevant public testimony as well as all materials in the staff report and accompanying documents, the Parks, Recreation and Trails Commission recommended to the Planning Commission and the City Council approval of the proposed Code Amendment (DCA 2016-296); and

NOW, THEREFORE, THE PLANNING COMMISSION OF THE CITY OF MENIFEE DOES ORDAIN AS FOLLOWS:

Section 1. Recitals.

The above recitals are true and correct and incorporated herein.

Section 2. The Planning Commission has read and considered the proposed amendments to Chapter 9.55 of the Menifee Municipal Code (Park and Recreation Mitigation Fees for Residential Development Requiring a Tentative Map or Parcel Map) referred to herein as "Code Amendment (DCA 2016-296)," as set forth in Exhibit "A".

Section 3. Findings.

After considering the proposed Code Amendment (DCA 2016-296), the recommendations of the Parks, Recreation and Trails Commission, staff

recommendations, public testimony and correspondence, and reports thereon, the Planning Commission recommends the City Council make the following findings:

1. The proposed amendments to the Municipal Code are consistent with the Quimby Act (Government Code § 66477) because:

    a. The parkland dedication and Quimby Fee requirements only apply to residential developments that require the approval of a tentative map or parcel map;

    b. With the proposed amendments, Chapter 9.55 of the Municipal Code continues to contain definite standards for determining the proportion of a subdivision to be dedicated for parks and recreational facilities and the amount of any Quimby Fees;

    c. The Open Space and Conservation Element of the City's General Plan provides policies and standards for parks and recreational facilities the dedication and fee requirements will ultimately provide;

    d. Unless the City complies with the findings and public hearing requirements set forth at Government Code Section 66477(a)(3)(B), the land, fees, or combination thereof (excluding excess park and recreational facilities dedicated at the discretion of the subdivider) will only be used for the purpose of developing new or rehabilitating existing park and recreational facilities to serve the residential development for which the dedication and fee requirements are imposed;

    e. There is a reasonable relationship between the amount and location of land to be dedicated and/or fees to be paid and the use of the park and recreational facilities provided by that land and/or those fees by the future inhabitants of the residential development for which the dedication and fee requirements were imposed;

    f. As set forth in more detail in the Open Space and Conservation Element of the City's General Plan, the amount of existing park area in the City exceeds three acres of park area per 1,000 City residents; thus, the Quimby Act authorizes the City to require developers to provide up to five acres of park area (and/or Quimby Fees) per 1,000 subdivision residents, and the parkland dedication and Quimby Fee requirements in the proposed amendments to the Municipal Code do not exceed this limit; and

    g. It continues to be in the public interest, convenience, health, welfare and safety to require five acres of park area (and/or Quimby Fees) per 1,000 subdivision residents be devoted to neighborhood and community parks as a condition of approval of a residential development requiring a tentative tract or parcel map.

2. The proposed amendments to the Municipal Code are consistent with the City's General Plan and, in particular, the Open Space and Conservation

Element, which contemplates the City will adopt an ordinance pursuant to the Quimby Act requiring that developers set aside land, donate conservation easements, or pay fees for park improvements.

3. The City Council of the City of Menifee finds that the proposed Code Amendment by way of DCA 2016-296 is consistent with the requirements of the Menifee Municipal Code regarding the process of amending the Municipal Code.

4. Pursuant to 14 C.C.R. § 15378(b)(4), the proposed code amendments are not considered a "project" under the California Environmental Quality Act, Public Resources Code Section 21000 et seq (CEQA) because the proposed amendments to the Municipal Code involve the "creation of government funding mechanisms or other government fiscal activities which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment." Even if considered a "project" under CEQA, the proposed code amendments are also exempt from environmental review per 14 C.C.R. § 15273(a)(4) because CEQA does not apply to "the establishment, modification, structuring, restructuring, or approval of rates, tolls, fares, or other charges by public agencies which the public agency finds are for the purpose of ... obtaining funds for capital projects, necessary to maintain service within existing service areas"

Section 4. Section 9.55.115 to the Menifee Municipal Code.

The Planning Commission recommends the City Council adopt Development Code Amendment (DCA 2016-296) to delete Section 9.55.115 ("Procedure for Credit of Excess Park Dedication") of Chapter 9.55 ("Parkland Dedication or Quimby Fee Requirements for Residential Development Requiring a Tentative Map or Parcel Map") to the Menifee Municipal Code as set forth in Exhibit "A."

Section 5. Notice of Adoption.

The City Clerk of the City of Menifee shall certify to the adoption of this Resolution.

Section 6. Effective Date.

This Resolution shall become effective upon its adoption.

Section 7. Severability.

If any provision of this Resolution or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications and, to this end, the provisions of this Resolution are declared to be severable.

PASSED, APPROVED AND ADOPTED THIS ___ day of _____, 2017.

_____

Robert P. Karwin, Chair

Attest:

_____

Jennifer Allen, Deputy City Clerk

ATTEST:

_____

Ajit Thind, Assistant City Attorney

EXHIBIT A

[DCA 2016-296]

Proposed additions are underlined.

Chapter 9.55 Parkland Dedication or Quimby Fee Requirements for Residential Development Requiring a Tentative Map or Parcel Map

Sections:

9.55.010 Purpose and Findings
9.55.020 Authority
9.55.030 Definitions
9.55.040 Parkland Dedication Standard
9.55.050 Parkland Dedication and/or Quimby Fee Requirements
9.55.060 Formulas for Calculating Amount of Parkland Dedication and/or Quimby Fees
9.55.070 Public Improvements on Dedicated Parkland
9.55.080 Criteria for Requiring Combination of Parkland Dedication and Quimby Fees
9.55.090 Criteria for requiring Both Dedication and Quimby Fees
9.55.100 Procedure for Making Payment or Dedication
9.55.110 Procedure for Merchant Builders
~~**9.55.115 Procedure for Credit of Excess Park Dedication**~~
9.55.120 Time for Constructing Improvements and Amenities
9.55.130 Developments Annexed to the City
9.55.140 Exception for Commercial and Industrial Developments

9.55.010 Purpose and Findings

A. Purpose

This Chapter is adopted to implement the provisions of the Quimby Act, which authorize a city to require the dedication of land for park or recreation facilities, or payment of fees in-lieu thereof (or a combination of both), incident to and as a condition of approval for a tentative map or parcel map.

The park and recreational facilities for which dedication of land and/or payment of a fee in-lieu thereof is required by this Chapter are in accordance with the Open Space and Conservation Element of the General Plan of the City, and shall supersede any previously adopted plan to the extent of any inconsistency.

The land, fees, or combination thereof that are dedicated pursuant to this Chapter are to be used only for the purposes of developing new or rehabilitating existing neighborhood or community park or recreational facilities to serve the subdivision that prompts the dedication, and the amount and location of land to be dedicated or the fees to be paid will bear a reasonable relationship to the use of the park and recreational facilities by future inhabitants of the subdivisions subject to this Chapter.

B. Findings

The amount of existing park area in the City exceeds three acres of park area per 1,000 City residents. The enactment of this Chapter prevents new residential development from reducing the quality and availability of public services provided to residents of the City by requiring new residential development to contribute to the cost of expanding the availability of park and recreational facilities and amenities in the City.

9.55.020 Authority

This Chapter is enacted pursuant to the authority granted by the Quimby Act.

9.55.030 Definitions

For the purposes of this Chapter, the terms and words shall have the meaning as defined in Chapter 9.118 "Glossary", except that the following words shall have the meanings set forth below:

A. "Average Number of Persons Per Dwelling Unit" shall mean average number of persons per household, based on the most recent data available in the form of the federal census and study on the population density in the City. The most recent Average Number of Persons Per Dwelling Unit may be reflected in a City Council Resolution.

B. "City" shall mean the City of Menifee.

C. "Dwelling unit" shall include each single family dwelling, multifamily dwelling, or each mobile home space designed to contain a mobile home trailer on a semi-permanent or permanent basis. Single-family residential units, multifamily residential units, and mobile home units shall be defined according to the latest decennial U.S. or state department of finance census.

D. "Land Acquisition Cost Per Acre" shall mean the estimated per acre value of vacant residential land costs in the City as determined by the City Council based upon receipt sale records or appraisal. The most recent Land Acquisition Cost Per Acre may be reflected in a City Council Resolution. If the subdivider objects to such a valuation, the subdivider, at its own expense, may obtain an appraisal of the property by a qualified appraiser approved by the City, whose appraisal may be accepted by the City if found reasonable.

E. "Merchant Builder" shall mean an individual, company, partnership, corporation or similar entity that obtains land previously subdivided for the purpose of constructing new residential units upon the subdivided land.

F. "Number of Dwelling Units" shall mean the number of dwelling units as determined by the City based upon the number of units allowed pursuant to the standards of the City's Zoning Code or as otherwise specified by the City on the property included in the subdivision at the time the tentative map or parcel map is filed for approval.

G. "Park Development Agreement" shall mean an agreement entered pursuant to Section 9.55.130 of this Chapter.

H. "Quimby Act" shall mean Section 66477 of the California Government Code, as amended from time to time, or any successor statute.

I. "Quimby Fees" shall mean fees paid as a condition to the approval of a tentative map or parcel map pursuant to this Chapter and the Quimby Act in lieu of dedicating land to the City for park and recreational purposes.

J. "Residential development" shall mean any development that creates new or increases the number of existing dwelling units on a property.

K. "Subdivision Map Act" shall mean Section 66410, et seq. of the California Government Code, as amended from time to time, or any successor statute.

9.55.040 Parkland Dedication Standard

All standards for park dedication shall comply with the Quimby Act, the California Subdivision Map Act, and the Open Space and Conservation Element of the City's General Plan. The dedication of land and/or Quimby Fees for park or recreational purposes shall be at the rate of five (5) acres per 1,000 residents.

9.55.050 Parkland Dedication and/or In-Lieu Fee Requirements

As a condition of approval of any tentative map or parcel map, the City shall require the dedication of land and/or improvements/amenities, or payment of a fee in-lieu thereof, or a combination of both, at the option of the City, for park or recreational purposes to serve the future residents of the subdivided property.

A. This requirement shall apply to all residential subdivisions, except those exempted by the Quimby Act.

B. Except as provided in subsection (C), below, if the proposed subdivision contains fifty (50) parcels or less, the subdivider shall not be required to dedicate any land for park and recreational purposes without his or her consent, but shall pay a fee in accordance with Section 9.55.060(B), below.

C. When a condominium, stock cooperative, or community apartment project exceeds fifty (50) dwelling units, dedication of land may be required notwithstanding that the number of parcels may be less than fifty (50).

D. Notwithstanding the requirement in this Section that fees be used to serve the subdivision for which the fees were paid, fees may be used for the purpose of developing new or rehabilitating existing park or recreational facilities in a neighborhood other than the neighborhood in which the subdivision for which fees were paid as a condition to the approval of a tentative map or parcel map is located, if all of the following conditions are met:

1. The neighborhood in which the fees are to be expended has fewer than three acres of park area per 1,000 members of the neighborhood population.

2. The neighborhood in which the subdivision for which the fees were paid has a park area per 1,000 members of the neighborhood population that meets or exceeds the ratio calculated pursuant to this Chapter.

3. The City Council holds a public hearing before using the fees pursuant to this Chapter, and at that public hearing, makes a finding supported by substantial evidence that it is reasonably foreseeable that future inhabitants of the subdivision for which the fee is imposed will use the proposed park and recreational facilities in the neighborhood where the fees are used.

4. The fees shall be used within the geographic boundaries of the City, so long as a reasonable relationship can be demonstrated between the location of the use of the fees and the subdivision for which the fees were paid.

5. The fees shall be used in a manner consistent with the Open Space and Conservation Element of the City's General Plan and any policy, standard, principle or guideline adopted in accordance therewith.

9.55.060 Formulas for Calculating Amount of Parkland Dedication and/or Quimby Fees

A. Formula for calculating the **"Dedication of Land"**: Where the requirements of this Chapter are complied with solely on the basis of providing parkland, the minimum amount of land measured in acres to be provided shall be based on:

Number of Dwelling Units	X	Average Number of Persons Per Dwelling Unit	X	.005 (5 Acres Per 1,000	=	Number of Acres to be

						Residents)		Dedicated	

Whenever land is dedicated pursuant to this Chapter, the subdivider shall provide the public improvements, as set forth in Section 9.55.070 of this Chapter.

B. Formula for calculating the fee amount "**Quimby Fees**": Where the requirements of this Chapter are solely complied with on the basis of the payment of in-lieu fees, such fees shall be calculated, on a per residential unit basis, as follows:

Number of Dwelling Units	X	Average Number of Persons Per Dwelling Unit	X	.005 (5 Acres Per 1,000 Residents)	X	Land Acquisition Cost Per Acre	=	Total Quimby Fee

The amount of the Quimby Fees per Dwelling Unit may be adopted by Resolution of the City Council. The Council may adopt and/or revise the fee amount as often as on an annual basis.

C. Formula for calculating a **combination of Dedicated Land and Quimby Fees**: Where the requirements of this Chapter are complied with by both the provision of parkland and payment of Quimby Fees, the amount of the Quimby Fees shall be computed by determining the required amount of parkland in accordance with the provisions of subsection (A) and subtracting the amount of parkland actually provided. The remainder shall be converted to a fee in accordance with the provisions of subsection (B).

9.55.070 Public Improvements on Dedicated Parkland

The subdivider shall provide utility and full street improvements consistent with the Circulation Element of the adopted General Plan, including but not limited to curbs, gutters, sidewalks, street paving, sewer, water and drainage improvements. The full cost of such improvements shall be borne by the subdivider and shall not be deducted from or credited against any fees or other amounts due the City under this Chapter or otherwise. The land to be dedicated and improvements to be made pursuant to this Chapter shall be approved by the City.

9.55.080 Criteria for Requiring Combination of Parkland Dedication and Quimby Fees

For subdivisions exceeding fifty (50) parcels, the subdivider shall both dedicate land and pay Quimby Fees on the following basis:

A. *General Plan requirements.* When only a portion of the subdivision is proposed for a future park site(s) in conformance with this Chapter, such portion shall be dedicated to the City for park and recreational purposes pursuant to the dedication standards set forth in Section 9.55.040, and any remaining parkland dedication requirements shall be satisfied through Quimby Fees computed pursuant to Section 9.55.060(C).

B. *Remainder dedications.* When a major portion of a park or recreational site/facility serving the proposed subdivision has already been acquired by the City, and only a portion of additional land is needed from the subdivision to complete the site/facility, such remaining portion shall be dedicated to the City pursuant to the standards set forth in Section 9.55.040, and any remaining parkland dedication requirements shall be satisfied through Quimby Fees computed pursuant to Section 9.55.060(C). Such fees may be used for either the improvement of the existing park and recreational site/facility or for the improvement of other park and recreational sites/facilities serving the subdivision at the sole discretion of the City.

9.55.090 Determination as to Requirement for Fee or Dedication

A. Whether the City accepts land dedication or elects to require payment of Quimby Fees, or a combination of both, shall be determined by consideration of the following:

1. *Reasonable Relationship.* That the amount and location of land to be dedicated or the fees to be paid shall bear a reasonable relationship to the use of the park and recreational facilities by the future inhabitants of the subdivision.

2. *Compatibility.* Compatibility of dedication with the Open Space and Conservation Element of the City's General Plan and any policy, standard, principle or guideline adopted in accordance therewith.

3. *Physical characteristics.* Topography, geology, access and location of land in the development available for dedication.

4. *General suitability.* Suitability for patrol, supervision and maintenance.

5. *Geographic dimensions.* Size and shape of the development and land available for dedication.

6. *Feasibility.* The feasibility of dedication.

7. *Alternative and additional parkland in the vicinity.* Availability of previously acquired park property.

B. The determination of the Planning Commission upon the recommendation of the Parks, Recreation and Trails Commission, as to whether land shall be dedicated or whether Quimby Fees shall be paid, or a combination of both, shall be final and conclusive, unless timely appealed to the City Council pursuant to Section 2.20.150 "Appeal Procedures" of the Menifee Municipal Code.

9.55.100 Procedure for Making Payment or Dedication

A. Application by Subdivider.

At the time of filing a tentative map or parcel map application, the subdivider shall, as part of such filing, state in writing whether it desires to dedicate property for park and recreational purposes, or to pay Quimby Fees, or a combination of both. If the subdivider desires to dedicate land for this purpose, the area shall be designated on the tentative tract map or parcel map as submitted.

B. Action of City.

At the time of the tentative tract map or parcel map approval and in accordance with the criteria set forth in this Chapter, the Quimby Act, the California Subdivision Map Act, the Open Space and Conservation Element of the City's General Plan and any policy, standard, principle or guideline adopted in accordance therewith, the City shall determine as part of such approval, whether to require a dedication of the land within the subdivision, payment of Quimby Fees, or a combination of both. The conditions of approval of any applicable tentative map or a parcel map shall require the dedication of land, the payment of Quimby Fees, or a combination of both for park and recreational purposes to serve the future inhabitants of the subdivision. If the land is to be dedicated, the proposed dedication shall be shown on the approved tentative map or parcel map.

C. Payment of In-Lieu Fees.

Prior to the issuance of a building permit, the City Manager or his/her designee shall determine the amount of land to be dedicated and/or Quimby Fees to be paid by the subdivider. Any fee required under this Chapter shall be paid directly to the City prior to the issuance of the first certificate of occupancy of any dwelling unit in the subdivision. The fees shall be placed in a specially designated fund and are used only for the acquisition and development of new, or improvement and/or rehabilitation of existing, park and recreational facilities. Any fees collected under this Chapter shall be committed within five years after the payment of such fees or the issuance of building permits on one half of the lots created by the subdivision, whichever occurs later. If such fees are not committed, they shall be distributed and paid to the then record owners of the subdivision in the same proportion that the size of their lot bears to the total area of all lots within the subdivision.

D. Dedication of Parkland.

A dedication of parkland shall be made prior to the recordation of any applicable tentative map or parcel map. Where dedication is offered and accepted, such dedication shall be accomplished in accordance with the provisions of the Subdivision Map Act. All land dedicated to the City shall be conveyed in fee simple to the City free and clear of all encumbrances except those which will not interfere with the use of the property for its intended purposes and which the City agrees to accept.

9.55.110 Procedure for Merchant Builders

A. When a proposed subdivision is a part of a major land development project, and the owner of such land proposes to permit development by one or more merchant builders, provisions for park and recreational facilities shall be made by the major landowner through the adoption of a comprehensive plan and not by the individual merchant builders. Where park and recreation facilities have been dedicated by requirements of the City in excess of this Chapter's requirements, the major landowner may, at the discretion of the City, be given one hundred percent (100%) credit for the excess on subsequent projects within the adopted comprehensive plan.

B. For the purpose of this Chapter, a major land development project shall be a land development project exceeding forty (40) acres in size.

C. Where development is proposed for construction in increments, a schedule for providing the park and recreation facilities shall be submitted for consideration by the City. All park facilities shall be developed consistent with any schedule approved by the City.

~~**9.55.115 Procedure for Credit of Excess Park Dedication**~~

~~A. Where park and recreation facilities have been dedicated by requirements of the City in excess of this Chapter's requirements, the subdivider may, at the discretion of the City, be given up to one hundred percent (100%) credit for the excess on subsequent projects within the approved nexus radius to the project site. Whether "banked" park credit may be used for subsequent projects is subject to the following criteria as determined by the City Manager for the City of Menifee or his/her designee, at the recommendation of the Parks, Recreation & Trails Commission:~~

~~1. "Banked" park credit may be applied to development projects within a two (2) mile radius of the center of the originating project site. Exceptions to the two (2) mile radius requirement may be made if an applicant demonstrates the originating project's park dedication (*i.e.*, the park dedication for which credits were "banked") will provide a larger regional benefit that exceeds the needs of the originating project's residents. To be eligible for this exception, an applicant must also demonstrate that the originating project's park dedication will provide a benefit to the residents of the project for which the "banked" park credits will be applied.~~

~~2. "Banked" park credits shall expire at the same time as the subdivision map for originating project for which the credits were "banked."~~

~~3. "Banked" park credit may only be transferred upon proof on conveyance by written agreement in a form acceptable to the City Attorney or his/her designee.~~

~~4. "Banked" park credit may not be exchanged for a cash refund from the City.~~

9.55.120 Time for Constructing Improvements and Amenities

A. A subdivider and the City may enter a Park Development Agreement that provides a schedule for the initiation, planning, design, construction, installation, completion and, where appropriate, dedication of any park and recreational improvements and/or amenities required by this Chapter. A Park Development Agreement shall:

1. Clearly state the intent of the Agreement is to establish a means to assure that park and recreational improvements and/or amenities are provided to the residents of the subdivision as required by this Chapter;

2. Specify the timing of the development of these improvements and/or amenities in relation to the development of residential dwelling units;

3. Provide sufficient surety to guarantee that the improvements and/or amenities are completed and ready for public use within the timeframes specified in the Agreement; and

4. Provide that failure to comply with any deadline for the development of the improvements and/or amenities shall halt the issuance of building permits and suspension of all building inspections for residential dwelling units within the subdivision.

B. In the absence of a Park Development Agreement, all park and recreational improvements and/or amenities required by this Chapter shall be constructed, installed, completed and ready for public use prior to the earlier of

1. The issuance of the first certificate of occupancy for any residential dwelling unit within the subdivision; or

2. The final building inspections for any residential dwelling unit within the subdivision.

9.55.130 Developments Annexed to the City

Where a proposed development lies within an area not currently within the City's corporate boundaries but intended to be annexed into the City by the subdivider, the subdivider shall dedicate land, pay Quimby Fees, or a combination of both, in accordance with the City's General Plan and in accordance with the provisions of this Chapter, and the General Plan shall be amended within 180 days following approval of the annexation.

9.55.140 Exception for Commercial and Industrial Developments

The provisions of this article shall not apply to any industrial or commercial development.

Section TWO: Existing Recreation Resources

2.1 Park Definition

The City's General Plan does not recommend a park classification system. Within the approved and adopted document ***Park Development Design Guidelines, January 2015***, limited park classifications have been developed and published.

For purposes of this Master Plan report, the term "park" is broadly defined. This report will use the term "park" and "recreational facility" interchangeably and, consistent with the General Plan, the terms refer to all recommended City park types described in section 2.2.

Areas not generally considered as "parkland" include: street medians and parkways; natural preserved or conserved open space areas without access or improvements; unimproved land zoned for uses other than recreation; and flood zones.

2.2 Menifee Park Types

Park classifications are generally driven by park use, purpose, and size. The classifications are not grouped by maintenance frequency or the presence of a particular asset. This classification system serves the following purposes:

- These classifications will provide a general guideline for future development options. The combination of descriptors for each park type represents what has generally been successful on a certain sized plot of land located in a certain type of physical environment. These guidelines can help to set community expectations for a given site.
- These classifications may serve as a basis for policies around appropriate programming in different park types.
- These classifications may inform functional planting design standards and other design standards

Recommended classification definitions are:

Pocket/Mini Park (0-2 acres):

These are typically smaller developed urban open space at the very small scale. Usually only a few house lots in size or smaller, pocket parks can be tucked into and scattered throughout the urban fabric where they serve the immediate local population. These parks act as scaled-down neighborhood parks and often offer a variety of amenities including turf, planters, walkways, plazas, play areas for

El Dorado Park: A Mini Park 0.34 Acres in size.

children, and picnic facilities. Pocket Parks do not provide restroom facilities nor on-site parking. Pocket/Mini Parks generally serve three categories:

- Downtown destination parks which are signature parks of interest to the broad community
- Downtown parks where neighborhood involvement in activities and programming is most appropriate
- Small public spaces or beauty spots which are small islands within the urban environment and present opportunities to enhance the City's character and identity.

Neighborhood Park (2.1 -10 acres):

Typically these parks serve the surrounding neighborhood for multiple uses. Park development may include play areas, small fields, benches, picnic tables, and improved paths and should include restroom facilities. Geographic range of users is up to one-half-mile.

Mira Park: A Neighborhood Park 5.0 Acres in size.

Community Park (10.1 – 25 acres):

A Community Park meets the recreational needs of several neighborhoods and may also preserve unique landscapes and open spaces. These parks serve multiple uses and provide recreational facilities and accommodate group activities not provided in neighborhood parks. Community park sites should be accessible by arterial and/ or collector streets. Geographic range of users is up to 3 miles or City-wide if park contains a recreation complex.

Recreation Area/Regional Parks (25.1 – larger)

These parks supplement neighborhood and community parks, serving broader citywide recreation needs. The parks contain various assets, often for active recreation, and are programmed accordingly. Many also have designated natural areas. Restroom facilities and off-street parking are generally provided for users. Geographic range of users is citywide.

Special Use Facility:

This category refers to stand-alone parks or facilities that are designed to serve one particular use such as a golf course or senior center. These parks may serve a secondary or third use, but the primary use is prioritized with regard to design, maintenance, and funding decisions.

Marion V. Ashley Community Center is a Special Use Facility that offers classes and special events to the community.

Natural Area/Greenbelt:

Established for the protection and stewardship of wildlife, habitat, and other natural systems support functions. Some natural areas are accessible for low-impact use. Minimal infrastructure may include access and signage, where it will not adversely impact habitat or natural systems functions. Larger natural areas may have small sections developed to serve a community park function.

Linear Park

Established as an aesthetically-pleasing transportation corridor which includes trails, green streets, and boulevards. Linear parks often provide safe pedestrian routes as well as recreation opportunities. Desired assets include improved path, lighting, and landscaping. Optional assets may include benches, play area, viewpoint, public gathering space, fitness stations/par course and flat grassy area for informal activity.

An additional classification could be considered if the City of Menifee enters into a joint-use agreement with another public agency and funds improvements which allow the city the right to expanded hours of use. This additional classification is:

Joint Use Facilities

These parks supplement community parks, serving broader City-wide recreation needs. The parks contain various assets, often for active recreation, and are programmed accordingly. Restroom facilities and parking are generally provided for users. Geographic range of users is City-wide.

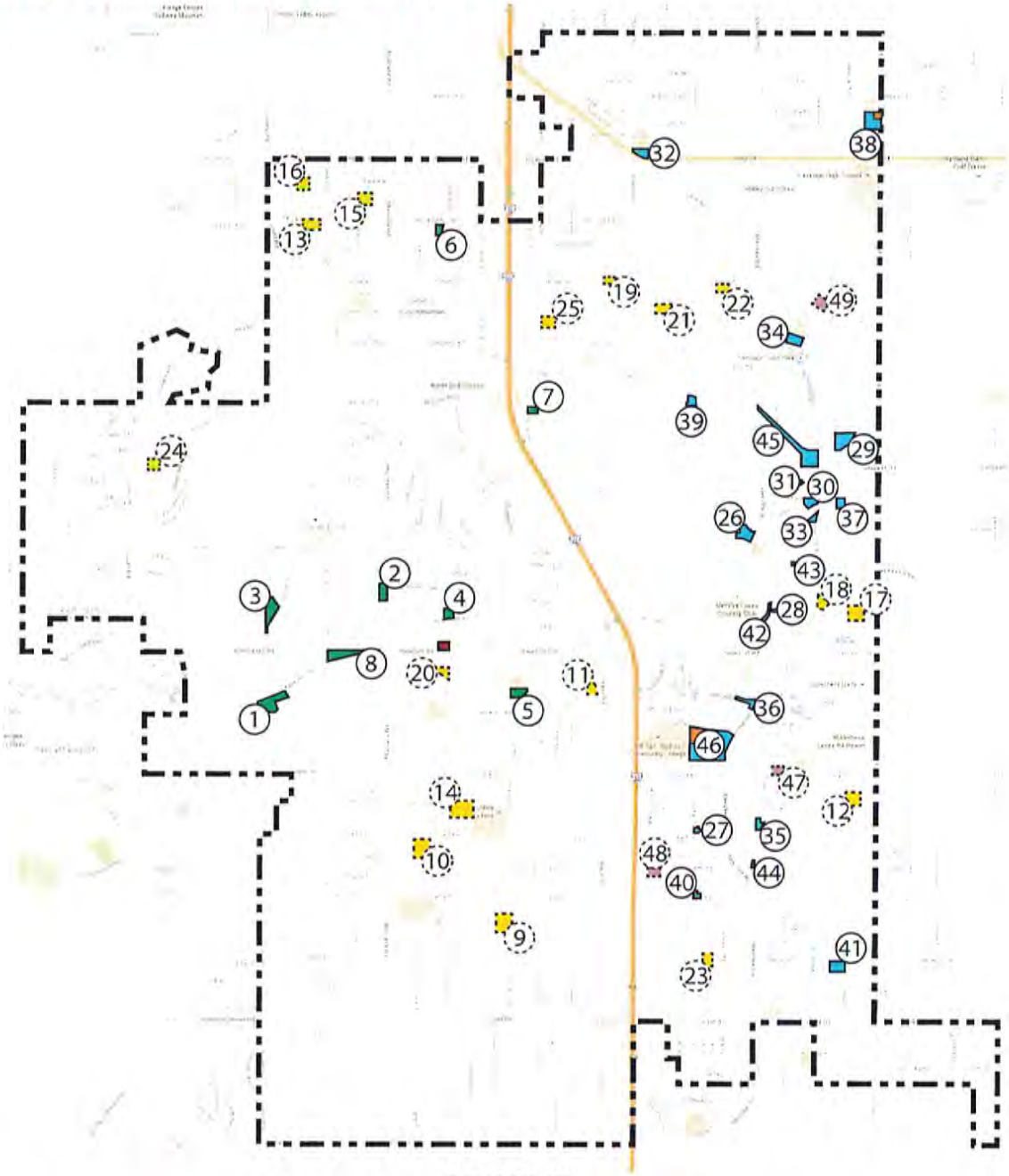
2.3 Existing Recreation Facilities

Unique and diverse recreational opportunities are available throughout the City of Menifee, including numerous facilities for active and passive recreation activities. Figure 2.3-1 is a map showing the location of each existing park and recreation facility operated by either the City of Menifee or Valley-Wide Recreation and Park District. Figure 2.3-2 is a matrix that describes size and amenities of existing public parks and recreation facilities with the City of Menifee.

Current breakdown of acreage for the City of Menifee park and recreation facilities is:

• Pocket	0.00 Acres
• Neighborhood	19.50 Acres
• Community	8.30 Acres
• Recreation Area	11.29 Acres
• Special-Use	1.45 Acres
• Natural Area/Greenbelt	0.00 Acres
• Linear Park	0.00 Acres
• Spirit Park	8.78 Acres
Total Acreage—City of Menifee	***49.32 Acres***

Figure 2.3-1: Menifee Existing Facility Map



LEGEND

(#) CITY PARKS

1. Audie Murphy Ranch Sports Park
2. E. L. Peterson Park
3. La Ladera Park
4. Lazy Creek Park & Rec. Center
5. Lyle Marsh Park
6. Nova Park
7. Rancho Ramona Park
8. Spirit Park

(#) CITY PARKS IN PROGRESS

9. Golden Meadows Parks
10. Hidden Hills Park
11. Central Park
12. Menifee Heights Park
13. Cimmaron Ridge Park
14. Evans Park
15. Sunwood Park (Tr. 31856)
16. Eagle Crest Park (Tr. 34037)
17. Diamond Bros. Park I (Tr. 32101)
18. Diamond Park Bros. II (Tr. 32102)
19. Talvera Park (Tr. 29777)
20. Cottonwood Park (Tr. 28788)
21. CV Communities Park (Tr. 29835)
22. Strata Park (Tr. 31098)
23. Cantalena Park (Tr. 33732)
24. Quail Hill (Tr. 32794)
25. (3) Fleming Ranch Parks (Tr. 36513)

(X) CITY FACILITIES

A. Lazy Creek Park Recreation Center
B. Kay Ceniceros Senior Center

(#) VWRPD PARKS

26. Aldergate Park
27. Autumn Breeze Park
28. Desert Green Park
29. Discovery Park
30. El Dorado Park
31. El Dorado Pocket Park
32. Eller Park
33. Grand Vista Park
34. Heritage Park
35. Hidden Meadows Park
36. La Paloma Park
37. Mahogany Creek Park
38. Marion V. Ashley Park
39. McCall Canyon Park
40. Menifee South Tot Lot
41. Mira Park
42. Pepita Square Park
43. Richmond Park
44. Rolling Hills Park
45. Sunrise Park
46. Wheatfield Park

(#) VWRPD PARKS IN PROGRESS

47. The Lakes
48. Mosaic Park
49. Heritage Lake Park (Tr. 34406)

(X) VWRPD FACILITIES

C. Marion V. Ashley Community & Recreation Center
D. Wheatfield Park Gym & Recreation Center

Figure 2.3-2: Menifee Existing Facility Matrix

CITY OF MENIFEE

EXISTING CITY PARKS & RECREATION FACILITIES

					PARK FACILITIES												SPORTS FACILITIES										
KEY	CITY RECREATION FACILITIES	TYPE	LOCATION	Parkland Acreage	Classrooms	Community Building	Dog Park	Gymnasium	Multi-Purpose Rooms	Parking	Playground / Tot Lot	Picnic Shelters / Gazebos	Picnic Tables	Restroom	Skate Park	Walking/Fitness Trail	Baseball Field	Basketball Court (Full)	Basketball Court (Half)	Horseshoe Pits	Open Field	Pickleball	Softball Field	Soccer Field	Tennis Court	Volleyball (Indoor)	Volleyball (Sand)
CITY PARKS																											
1	Audie Murphy Ranch Sports Park	Community	Newport Road	11.29						68	1	3	20	1	1	1	1L	1						1L			
2	E. L. Peterson Park	Neighborhood	29621 Park City Avenue	4.81			1			30	2	2		1		1		1	2		1						
3	La Ladera Park	Neighborhood	29629 La Ladera Road	8.30						19	1	3	7	1		1		1			1				1		
4	Lazy Creek Park & Rec. Center	Neighborhood	26480 Lazy Creek Road	3.40		1				32	2		7						2		1						1
5	Lyle Marsh Park	Neighborhood	27050 School Park Drive	6.07						OS		2	9								1						
6	Nova Park	Neighborhood	25444 Nova Lane	3.35						OS	1										1						
7	Rancho Ramona Park	Neighborhood	28050 Encanto Drive	1.87						OS	1	3	9					1		1	1						1
8	Spirit Park	Neighborhood	25507 Normandy Road	8.78						OS	2	3	9	1		1		2			2				2		1
VALLEY-WIDE REC. & PARKS DISTRICT																											
9	Aldergate Park	Neighborhood	Aldergate & Menifee	8.10			1			25	1			1			1					2					
10	Autumn Breeze Park	Mini Park	Autumn & Cordero Lanes	1.48						OS	1		6														
11	Desert Green Park	Mini Park	Painted Desert Drive	0.45						OS																	
12	Discovery Park	Community	Calm Herizon Drive & Heritage Lake Drive	7.34						37	1	1	6	1			1		2								
13	El Dorado Park	Neighborhood	Rustic Glen Street & Trailhead Drive	3.12						OS	2	2					1										
14	El Dorado Pocket Park	Mini Park	Longleaf Street & Rustic Glen Street	0.37						OS	1	1															
15	Eller Park	Community	Antelope Road & Highway 74	5.13						35	2	1	6	1		1	1L		2								
16	Grand Vista Park (Richmond Park)	Mini Park	Grand Vista Drive & Promenade Road	0.30						OS			2														
17	Heritage Park	Neighborhood	Heritage Lake Drive & McCall Boulevard	4.82						22	2	2							2		1						
18	Hidden Meadows Park	Neighborhood	Highland Court	2.39						9	1																1
19	La Paloma Park	Neighborhood	Bayport Lane & Menifee Road	4.36						8		1	11	1													
20	Marion V. Ashley Park	Community	25625 Briggs Road	11.36		1				145	1	1				1	2L										
21	McCall Canyon Park	Neighborhood	Almont Way & Crestwood Street	3.03						12	1								2		1						
22	Wheatfield Park	Community	La Piedra Road & Menifee Road	26.87						52	2	1					4, 2L		2	2					2L		1
23	Menifee South Tot Lot	Mini Park	Eickhoff Drive & Feather Creek Drive	1.11						OS	2		5														
24	Mira Park	Neighborhood	Mira Street & Wickerd Road	5.66						OS	1	1					1		2								
25	Pepita Square Park	Mini Park	Camino Pepita Drive	0.54						OS																	
26	Rolling Hills Park	Neighborhood	Pacific Bluff Street	2.46						OS	1	1	2														
27	Sunrise Park	Community	Lindenberger & Simpson Roads	11.19						46	2	1		1		1	2		2								
COMMUNITY BUILDINGS																											
1	Lazy Creek Recreation Center	Facility	26480 Lazy Creek Road	n/a						32				1													
2	Kay Ceniceros Senior Center	Facility	29995 Evans Road	1.45	2				2	80				1													
3	Marion V. Ashley Comm. Center	Facility	25625 Briggs Road	n/a	1			1		28				1				1								1	
4	Wheatfield Park Comm. Center	Facility	La Piedra Road & Menifee Road	n/a				1		52				1													
			TOTALS FOR CITY PARKS AND FACILITIES	**149.40**																							

DEFINITIONS
L = Lighted Field
OS = On Street Parking

Valley-Wide's classification system within the Menifee City limits only includes neighborhood and community parks. The District currently operates three community parks and 16 neighborhood parks with the city limits. Current breakdown of acreage operated by Valley-Wide is:

- Neighborhood 59.44 Acres
- Community 49.42 Acres

- Total Acreage—Valley-Wide 100.08 Acres
- Total Acreage with City limits 149.40152.79 Acres

Figure 3.3-1: Facility Demand Analysis 2015 Levels

Activity	Per Capita Participation Days/Year	Peak Day Demand (Participants)	Turnovers Per Day	Design Standard for Facility	Number of Facilities Demanded*			Facility Need Ratio - City of Menifee
Softball:								
Organized Youth	1.5	335	3.5x	22 players/field	5.4	fields		1/15,700 pop.
Organized Adult	3.4	228	2.7x	28 players/field	3.8	fields		1/22,650 pop.
Baseball:								
Organized Youth	2.9	1,138	3.8x	24 players/field	15.6	fields		1/5,450 pop.
Soccer								
Organized Youth	3.4	1,723	5x	22 players/field	19.6	fields	***	1/4,350 pop.
Tot Lots/Playgrounds	11.6	3,048	6x	20 persons/hour	25.4	areas		1/3,400 pop.
Swimming (Public Pool)								
Recreational**	8.7	1,120	3x	25 sq ft/swimmer	1.5	pools		1/56,200 pop.
Walking/Jogging/								
Running-Public Trails	42.3	2,108	1x	90 persons/mile	23.4	miles		1/3,650 pop.
Bicycling-Public Trails	24.0	5,419	5x	30 bicycles/mile	36.1	miles		1/2,350 pop.

*Demand for ball fields includes an adjustment to allow for resting of fields.
**One Pool = 25 meters x 25 yards, or 6,150 square feet.
***Demand is based on response from Menifee residents who paticipate in youth soccer based on the telephone survey. One league does not play their games in Menifee as will be described in the needs analysis exhibit.

The actual facility requirement, however, is less than the aggregate of peak day demand to allow for daily turnover in the use of recreation facilities. Peak day demand was modified as shown in Figure 3.3-1 by the anticipated turnover and capacity for each type of facility. These estimates of daily turnover and capacity on peak day usage periods are derived from studies conducted by the Bureau of Outdoor Recreation, U.S. Department of the Interior regarding optimum recreation carrying capacity as well as from sports group surveys, discussions with City staff and other park studies in which the Consultants have been involved. For sports leagues operating within the City of Menifee, allowance is made to calculate demand from the entire league, regardless of where the players are living. The calculations in Figure 3.3-1 are based on the current (2015) population level in the City of Menifee of 85,310. Included in the Figure is an estimate of the number or size of facilities required to accommodate peak day demand in the context of the peak day design standards discussed above.

Similar calculations were carried out to determine the demand levels in 2035, when the City reaches the projected population of 119,400. These calculations are shown in Figure 3.3-2. Adjustments were made to some of the participation rates for the 2035 projection based on the trends in the demographic profile of the City. It is anticipated that there will be a fairly stable percentage of youth under 14 years, a somewhat growing population in the 20-55 year age cohorts, slower than average growth for residents in the 55 and over age group, and a more diverse ethnic mix. The adjustments are based on the same data base which was used to estimate the current year participation rates – the cross-tabulations of telephone survey data regarding participation rates and demographic measures.

Figure 3.3-2: Facility Demand Analysis 2035 Levels

Activity	Per Capita Participation Days/Year	Peak Day Demand (Participants)	Turnovers Per Day	Design Standard for Facility	Number of Facilities Demanded*			Facility Need Ratio - City of Menifee
Softball:								
Organized Youth	1.6	500	3.5x	22 players/field	8.1	fields		1/14,700 pop.
Organized Adult	3.4	319	2.7x	28 players/field	5.3	fields		1/22,650 pop.
Baseball:								
Organized Youth	2.9	1,593	3.8x	24 players/field	21.8	fields		1/5,450 pop.
Soccer								
Organized Youth	3.6	2,553	5x	22 players/field	29.0	fields	***	1/4,100 pop.
Tot Lots/Playgrounds	12.2	4,486	6x	20 persons/hour	37.4	areas		1/3,200 pop.
Swimming (Public Pool) Recreational**	9.1	1,640	3x	25 sq ft/swimmer	2.2	pools		1/53,750 pop.
Walking/Jogging/ Running-Public Trails	42.3	2,951	1x	90 persons/mile	32.8	miles		1/3,650 pop.
Bicycling-Public Trails	25.0	7,900	5x	30 bicycles/mile	52.7	miles		1/2,250 pop.

*Demand for ball fields includes an adjustment to allow for resting of fields.
**One Pool = 25 meters x 25 yards, or 6,150 square feet.
***Demand is based on response from all Menifee residents who participate in youth soccer based on the telephone survey. One league does not play their games in Menifee as will be described in the needs analysis exhibit.

The relationship of the current need for facilities in Menifee to the current population level is the basis for the "facility need ratio" or the measure of the level of population in Menifee that creates the demand for one facility or one unit of measure such as miles or acres. This ratio for each of the types of facilities analyzed is also presented in Figures 3.3-1 and 3.3-2 and is calculated by dividing the total population by the number of facilities demanded. This will be the basis for the needs analysis presented in the following section. Comparisons of Menifee's current "facility-need-ratios" to those found in selected other cities in California are presented in Figure 3.3-3 in order to add perspective to the analysis.

Figure 3.3-3: Comparison of City of Menifee Need Ratios to Other Areas

Facility	Facility Need Ratio - City of Menifee	Facility Need Ratio - City of Ontario	Facility Need Ratio - City of Santa Clarita	Facility Need Ratio - City of Pasadena	Facility Need Ratio - City of San Juan Cap.	Facility Need Ratio - City of Chino Hills	Facility Need Ratio - City of Temecula	Facility Need Ratio - City of Dana Point	Facility Need Ratio - City of Laguna Niguel	Facility Need Ratio - City of Riverside	Facility Need Ratio - City of Diamond Bar
Softball Fields:											
Org. Youth	1/15,700 pop.	1/24,450	1/15,850	1/31,500	1/12,150	1/13,850	1/7,300	1/9,500	1/9,200	1/11,200	1/12,700
Org. Adult	1/22,650 pop.	1/26,800	N.A.	1/67,700	N.A.	1/14,900	1/5,500	1/19,250	1/24,350	1/18,600	1/16,800
Baseball Fields:											
Organized/Youth	1/5,450 pop.	1/8,500	1/20,900	1/19,400	1/6,050	1/5,150	1/4,500	1/9,550	1/2,950	1/9,600	1/6,300
Soccer Fields											
Organized Youth	1/4,350 pop.	1/14,050	1/6,250	1/9,650	1/2,150	1/3,450	1/2,600	1/4,400	1/3,050	1/8,800	1/3,400
Tot Lots/Playgrounds	1/3,400 pop.	1/2,200	1/5,000	1/2,150	1/2,250	1/2,150	1/1,350	1/2,600	1/2,300	1/3,300	1/5,800
Swimming Pools											
Recreational	1/56,200 pop.	1/52,000	1/39,750	1/34,450	N.A.	1/27,800	1/45,550	1/25,065	1/56,750	1/40,750	1/65,550
Walking/Jogging (mi.)	1/3,650 pop.	1/3,350	1/3,700	1/2,000	1/2,550	N.A.	1/13,900	N.A.	N.A.	1/5,000	1/8,750
Bicycling Paths (mi.)	1/2,350 pop.	1/2,800	1/3,400	1/2,500	N.A.	N.A.	1/610	N.A.	1/3,600	1/4,050	1/4,200

Facility Needs Analysis

Methodology

The level of population in Menifee that creates the demand for facilities is derived from the telephone survey data as described in the previous section. This "facility need ratio" is shown again in Figure 3.3-4. The current facility needs are determined by multiplying the current population by the "facility needs ratio." These needs, in terms of the number or size of facilities demanded, are then compared with the total of existing City, School District, and other facilities located outside of the City, that are currently used by the Menifee sports leagues, to determine whether the existing inventory of facilities is adequate in terms of demand conditions. In order to focus on the adequacy of the facilities owned to meet the needs of the residents, the column reflecting the Surplus or Deficit of City owned facilities has been highlighted.

Figure 3.3-4: Facility Needs Analysis 2015 Levels

Facility	Facility Need Ratio - City of Menifee	2015 Needs	Existing City Facilities	City Surplus/ Deficit(-)	School Facilities Avail.[1]	Other Facilities Avail.[3]	Total Facilities Avail.	Total Surplus/ Deficit(-)
Softball Fields:								
Organized Youth	1/15,700 pop.	5.4	0	-5.4	0	5	5	-0.4
Organized Adult	1/33,700 pop.	3.8	2	-1.8	0	0	2	-1.8
Baseball Fields:								
Organized Youth	1/5,450 pop.	15.6	11	-4.6	0	3	14	-1.6
Soccer Fields								
Organized Youth	1/4,350 pop.	19.6	0	-19.6	13	0 [4]	13	-6.6
Tot Lots/Playgrounds	1/3,400 pop.	25.4	29	3.6	0	0	29	3.6
Swimming Pools (Public)								
Recreational[2]	1/56,200 pop.	1.5	0	-1.5	0	0 [5]	0	-1.5
Walking/Jogging Paths (mi.)	1/3,650 pop.	23.4	0 [6]	-23.4	0	0	0	-23.4
Bicycling Paths (mi.)	1/2,350 pop.	36.1	0 [6]	-36.1	0	0	0	-36.1

Note: All sports fields shown in the supply are fields actually being used for games by organized sports leagues to match the demand as defined in the demand analysis.

[1] School facilities other than ballfields/courts are counted at 50 percent to allow for time not available to the public.

[2] One Pool = 25 meters x 25 yards, or 6,150 square feet.

[3] These facilities are located outside of Menifee, but are used for games by Menifee leagues.

[4] Menifee Youth Soccer League plays on fields in Diamond Valley Sports Park, Aberhill Park, Winchester Park and Moreno Valley Community Park as there are no fields available for them in Menifee. Demand includes these players, but no information is available regarding how many fields they use outside of Menifee (included in deficit). There is a new soccer field in the City which is not shown above, but which this league will be utilizing in the Fall 2015.

[5] The closest aquatic facility is in Diamond Valley Lake Park.

[6] There is no inventory of trails currently available pending the City's developing this inventory.

As an example of the analytical process, the needs ratio for organized youth baseball fields for games in Menifee is one field for every 5,450 residents (as shown in Figure 3.3-4). Based on the 2015 population of Menifee, the required number of fields is an estimated 15.6. The existing inventory of fields within the City is 11 leaving a deficit of 4.6 fields, if the inventory of organized youth softball fields for games in Menifee were to match the peak day requirement as defined. The youth baseball league uses fields outside of the City to meet its current needs. Even counting the fields they use outside of the City, the analysis shows a current deficit of 1.6 fields. This is primarily due to the fact that they currently have to share fields with other leagues.

Facility Requirements

The needs analysis presented in Figure 3.3-4 indicates existing deficits in several of the types of facilities that were analyzed. The facilities showing deficits of 0.5 facility or greater, in addition to youth baseball game fields, are adult softball game fields (1.8), youth soccer game fields (6.6), swimming pools (1.5 pools), (walking/jogging paths (23.4 miles), and bicycling paths (36.1 miles). It should be noted that the City has not completed an inventory of the existing walking/jogging paths and bicycle paths, so these deficits are only assuming there are currently no public paths and can be adjusted once an inventory is available. Also the deficit in soccer fields does not count fields being used outside of Menifee by one of the leagues, which would be playing in Menifee if fields were available.

Figure 3.3-5: Facility Needs Analysis 2035 Levels

Facility	Facility Need Ratio - City of Menifee	Buildout Needs	Existing City Facilities	City Surplus/ Deficit(-)	School Facilities Avail.[1]	Other Facilities Avail.[3]	Total Facilities Avail.	Total Surplus/ Deficit(-)
Softball Fields:								
Organized Youth	1/15,700 pop.	8.1	0	-8.1	0	5	5	-3.1
Organized Adult	1/22,650 pop.	5.3	2	-3.3	0	0	2	-3.3
Baseball Fields:								
Organized Youth	1/5,450 pop.	21.8	11	-10.8	0	3	14	-7.8
Soccer Fields								
Organized Youth	1/4,350 pop.	29.0	1	-28.0	13	0 [4]	14	-15.0
Tot Lots/Playgrounds	1/3,400 pop.	37.4	29	-8.4	0	0	29	-8.4
Swimming Pools (Public) Recreational[2]	1/56,200 pop.	2.2	0	-2.2	0	0 [5]	0	-2.2
Walking/Jogging Paths (mi.)	1/3,650 pop.	32.8	0 [6]	-32.8	0	0	0	-32.8
Bicycling Paths (mi.)	1/2,350 pop.	52.7	0 [6]	-52.7	0	0	0	-52.7

Note: All sports fields shown in the supply are fields actually being used for games by organized sports leagues to match the demand as defined in the demand analysis.

[1] School facilities other than ballfields/courts are counted at 50 percent to allow for time not available to the public.

[2] One Pool = 25 meters x 25 yards, or 6,150 square feet.

[3] These facilities are located outside of Menifee, but are used for games by Menifee leagues.

[4] Menifee Youth Soccer League plays on fields in Diamond Valley Sports Park, Aberhill Park, Winchester Park and Moreno Valley Community Park as there are no fields available for them in Menifee. Demand includes these players, but no information is available regarding how many fields they use outside of Menifee (included in deficit).

[5] The closest aquatic facility is in Diamond Valley Lake Park.

[6] There is no inventory of trails currently available pending the City's developing this inventory.

The need for facilities was projected to 2035 and these projections together with the current supply of facilities (no adjustments were made for any planned facilities, with the exception of one City soccer field which was just recently completed) are presented in Figure 3.3-5. The deficits in the facilities in the projection year include youth softball game fields (3.1 fields), adult softball game fields (3.3 fields), youth baseball game fields (7.8 fields), youth soccer game fields (15.0 fields), tot lots/ playgrounds (8.4 facilities), swimming pools (2.2 pools), walking/jogging paths (32.8 miles), and bicycling paths (52.7 miles).

Figure 3.3-6: Change in Demand for Recreation Facilities, 2015 to 2035

Facility	Number of Facilities Demanded* 2015	2035	Change in Surplus/Deficit (-) 2015-2035**
Softball Fields:			
Organized Youth	5.4 fields	8.1 fields	-2.7 fields
Organized Adult	3.8 fields	5.3 fields	-1.5 fields
Baseball Fields:			
Organized Youth	15.6 fields	21.8 fields	-6.2 fields
Soccer Fields			
Organized Youth	19.6 fields	29.0 fields	-9.4 fields
Tot Lots/Playgrounds	25.4 areas	37.4 areas	-12.0 areas
Swimming Pools (Public)			
Recreational	1.5 pools	2.2 pools	-0.7 pools
Walking/Jogging Paths (mi.)	23.4 miles	32.8 miles	-9.4 miles
Bicycling Paths (mi.)	36.1 miles	52.7 miles	-16.5 miles

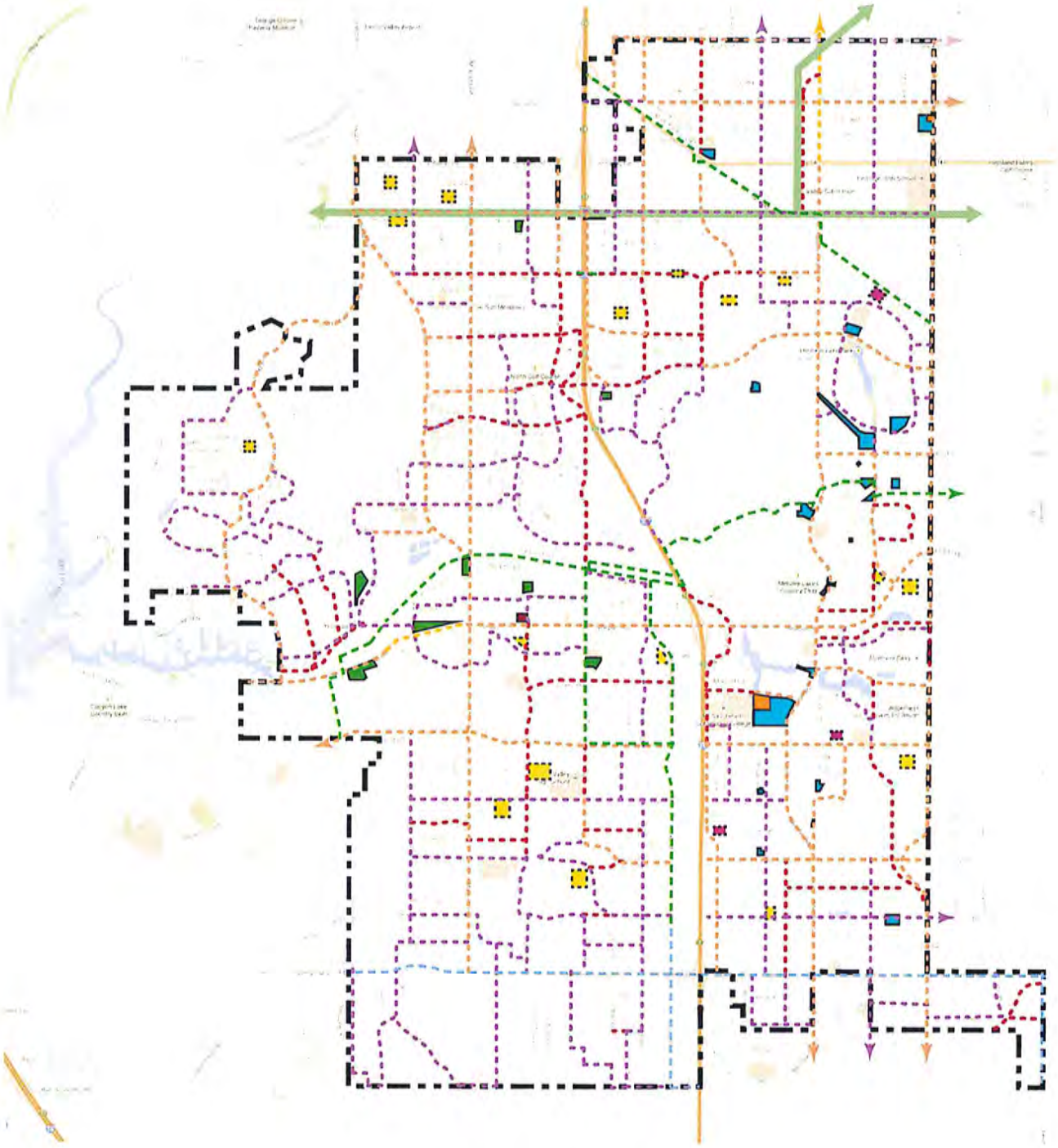
* Demand for ball fields is adjusted by approximately 20 percent to allow for resting of fields.
**Demand resulting from growth and changing demographics. Does not include allowance for any deficits or surpluses existing in 2015.

Figure 3.3-6 summarizes the change in demand between 2015 and 2035 or the demand resulting solely from the growth expected to occur during this period. This Figure describes the number or size of facilities by type that will be required just to accommodate the future growth in the City of Menifee. The existing 2015 surplus or deficit in facilities is combined with the growth projections in Figure 3.3-7 to provide the cumulative estimate of the additional number or size of facilities by type that will be required in the City of Menifee between 2015 and 2035.

Figure 3.3-7: Cumulative Surplus / Deficit Analysis

	2015 Facility Surplus/ Deficit (-)	Change in Surplus/ Deficit (-) 2015-2035	Cumulative 2035 Facility Surplus/ Deficit (-)
Softball Fields:			
Organized Youth	-0.4 fields	-2.7 fields	-3.1 fields
Organized Adult	-1.8 fields	-1.5 fields	-3.3 fields
Baseball Fields:			
Organized Youth	-1.6 fields	-6.2 fields	-7.8 fields
Soccer Fields			
Organized Youth	-6.6 fields	-9.4 fields	-17.0 fields*
Tot Lots/Playgrounds	3.6 areas	-12.0 areas	-8.4 areas
Swimming Pools (Public)			
Recreational	-1.5 pools	-0.7 pools	-2.2 pools
Walking/Jogging Paths (mi.)	-23.4 miles	-9.4 miles	-32.8 miles
Bicycling Paths (mi.)	-36.1 miles	-16.5 miles	-52.7 miles

*Supply includes one new soccer field in the City of Menifee which was not included in the 2015 needs analysis.



LEGEND

TRAILS

- Regional Trail - Class I
  (Includes C4 Subregional Route - Off-Road Bike Trail Class 1, C4 Community Off-Road Bike Trail, and Landscape Standards Regional Trail)
- Regional Bike Lane - Class II
  (Includes C4 Subregional - On-Street Bike Lane Class II)
- Community Bike Lane - Class II
  (Includes C4 Community On-Street NEV/Bike Lanes Class II, and Community On-Street Bike Lane, Class II)
- Community Bike Lane - Class III
  (Includes C4 Class III Bike Routes)
- Community Trail - Hiking, Biking & Equestrian
  (Includes C4 Community Hiking/Biking Trail Opportunity

TRAIL OPPORTUNITIES

- Public Utility Corridor

PARKS & FACILITIES

- City Parks
- City Facilities
- City Parks in Progress
- VWRPD Parks
- VWRPD Facilities
- VWRPD Parks in Progress

Menifee Planning Commission
Meeting Minutes
January 11, 2017

1. CALL TO ORDER

Chair Karwin called the regular meeting to order at 7:00 p.m.

2. ROLL CALL

Present: Chairman Robert P. Karwin, Vice Chairman Earl Phillips, Commissioner Mark Doty, Commissioner Randy Madrid, Commissioner Chris Thomas, Acting City Manager Jeff Wyman, Assistant City Attorney Ajit Thind, Planning Manager Lisa Gordon, Associate Planner Tamara Harrison, Principal Engineer Yolanda Macalalad, Deputy City Clerk Jennifer Allen, and thirteen (13) members of the public.

3. FLAG SALUTE

4. AGENDA APPROVAL OR MODIFICATION

None

5. PRESENTATIONS

None

6. PUBLIC COMMENTS

None

7. APPROVAL OF MEETING MINUTES

7.1. Minutes of December 14, 2016

The Meeting Minutes of December 14, 2016 were approved on a motion by Vice Chair Phillips, seconded by Commissioner Doty and passed as follows:

Ayes: Doty, Karwin, Madrid, Phillips, Thomas
Noes: None
Abstain: None

8. CONSENT CALENDAR

8.1. Extension of Time No. 2016-101 for Tract 33738

Vice Chair Phillips pulled Extension of Time No. 2016-101 for discussion.

Vice Chair Phillips stated that a separate line item should be created for the annexation into the Citywide Community Facilities District (CFD) on page four (4) of the staff report. Acting City Manager Wyman agreed to make the revision to the staff report.

Vice Chair Phillips stated that the residential lot size should be revised in Condition of Approval No. 10, to 7,200 square feet to meet current standards. Acting City Manager Wyman stated the project was approved by the County and is before the Commission for an Extension of Time. Assistant City Attorney Thind stated the Specific Plan may have specific development standards and this Planning Area (PA) allows for a residential lot size of 5,000 square feet, therefore it is consistent with the Specific Plan.

Vice Chair Phillips moved approval of the Consent Calendar approving a Resolution approving Extension of Time No. 2016-101 for the First One-Year Extension for Tentative Tract Map No. 33738 including the amendment made to the staff report on page four (4). Commissioner Thomas seconded the motion and the motion passed as follows:
Ayes: Doty, Karwin, Madrid, Phillips, Thomas
Noes: None
Absent: None

9. PUBLIC HEARINGS

9.1. Public Hearing for Extension of Time No. 2016-102 for Plot Plan No. 22628 – Located at north of Highway 74, east of Malone Avenue and west of Briggs Road – Marketplace at Harvest Glen

Associate Planner Harrison presented the staff report noting the location and project description. Ms. Harrison provided background on the life of the project noting that if the Commission approves the extension the project will expire on April 21, 2019. Associate Planner Harrison reported on the revised conditions provided to the Commission.

The Commission asked about ownership of the adjacent properties, asked for clarification on the notice of public hearing map, and inquired about the absent Resolution numbers in the staff reports. Associate Planner Harrison provided clarification on the project location and stated she is not certain who owns the adjacent parcels. Acting City Manager Wyman stated that the City Clerk's Office will assign Resolution numbers following approval of the item so the numbers are in sequential order.

Chair Karwin called for the applicant to speak.

Mike Naggar, applicant, stated that he is available for questions.

The Commission inquired about the production of the project. Mr. Naggar provided background history of the project that brought it to its current state.

Chair Karwin opened the public hearing at 7:19 p.m. The Clerk verified the legal publication and noted the correspondence received from Mr. Naggar.

Chair Karwin called for public testimony and there was none.

Chair Karwin closed the public hearing at 7:20 p.m.

Vice Chair Phillips made a motion to approve a Resolution approving Extension of Time No. 2016-102 for the extension of Plot Plan No. 22628. Commissioner Madrid seconded the motion and the motion passed as follows:
Ayes: Doty, Karwin, Madrid, Phillips, Thomas
Noes: None
Absent: None

9.2. Public Hearing for Plot Plan No. 2016-252 – Located at 26925 Newport Road - Monument Sign and Administrative Relief for Arco AM/PM

Acting City Manager Wyman stated Associate Planner Harrison will provide the presentation for the item.

Associate Planner Harrison presented the staff report noting the location, site plan, proposed signage, and project description. Ms. Harrison explained that the proposed monument sign exceeds the number of freestanding signs allowed, therefore the applicant is seeking administrative relief. She stated that the property owner shall enter into a relocation agreement for the location of the monument sign as it is currently being proposed within the ultimate right of way for Newport Road.

The Commission inquired about the landscaping requirements due to the ultimate right of way improvements, costs to property owners associated with acquisition of the land or relocation of the sign, and if the pole sign will need to be relocated during the right of way improvements. Associate Planner Harrison stated the landscaping will need to be sufficient along Newport Road and will be worked out in the relocation agreement. Assistant Attorney Thind stated that landscaping requirements are difficult to determine at this point, however landscaping will be required. Acting City Manager Wyman stated there are no relocation costs and costs for the right of way will be determined when and if there is any future development. Mr. Wyman stated that the relocation agreement is only for the monument sign, the pole sign is not being considered in the agreement.

Chair Karwin called for the applicant to speak.

Ed Zadeh, applicant, thanked staff for their work on the project and stated he's available for questions.

The Commission inquired about the request for the monument sign and the pole sign location in relation to the potential right of way widening. Mr. Zadeh stated

that due to the development of the project west of his property, the monument sign will help guide the drivers to the Arco AM/PM entrance. He stated he's not certain if the pole sign will need to be relocated when the right of way widening occurs.

Associate Planner Harrison briefly explained the updated conditions of approval for the project.

Chair Karwin asked the applicant if he agrees with the updated conditions of approval. Mr. Zadeh stated he agrees with the language.

Commissioner Thomas suggested that the applicant add some type of enhancement to the pole sign, possibly stone or landscaping to make it blend with the new proposed monument sign.

Chair Karwin opened the public hearing at 7:34 p.m. The Clerk verified the legal publication and noted no correspondence was received.

Chair Karwin called for public testimony and there was none.

Chair Karwin closed the public hearing at 7:35 p.m.

The Commission discussed the signage and the ultimate right of way.

Commissioner Thomas made a motion to adopt a Resolution approving Plot Plan No. 2016-252 including the administrative relief for number of total signs allowed and number of signs allowed on one street frontage, also including the updated conditions of approval. The motion was seconded by Commissioner Doty and passed as follows:
Ayes: Doty, Karwin, Madrid, Phillips, Thomas
Noes: None
Absent: None

9.3. Public Hearing for Tentative Tract Map No. 2016-038 (TR37102) – Located on the northwest corner of intersection of Ridgemoor Road and Valley Blvd.

Chair Karwin stated that the Commission received correspondence from Dwight Oates in opposition of the project.

Acting City Manager Wyman stated Associate Planner Harrison will provide the presentation for the item.

Associate Planner Harrison presented the staff report noting the location, land use, zoning, and project description. Ms. Harrison stated the project includes the approval of rain gardens in the front of each lot for water quality purposes and to satisfy the requirements of Riverside County's NPDES Storm Water Permit. She stated that a thirteen (13) foot combination block retaining wall will be located at the rear of Lots 17-21 along Valley Blvd.

The Commission inquired about the landscaping along the wall on Valley Blvd, the rain garden filtration system, the height of the wall on Valley Blvd and Mr. Oats comments in the correspondence. Associate Planner Harrison stated the wall will

be required to be landscaped in an effort to lessen the impact of the thirteen (13) foot height. Principal Engineer Macalalad explained filtration process for how the rain gardens collect storm water runoff and infiltrate back into the ground water using the earth as a natural filter. Associate Planner Harrison stated that the normal wall standard is six (6) feet, however, in order to maintain minimum lot size and sound attenuation, it requires the wall to be a maximum of thirteen (13) feet. Principal Engineer Macalalad stated that the project was required to provide a geotechnical study to determine if anything in the soil needs to be addressed.

Chair Karwin called for the applicant to speak.

Jeremy Krout, applicant's representative, stated the project is consistent with the General Plan and noted the changes that have occurred since the project was approved by Riverside County in 1999. Mr. Krout stated that the thirteen (13) foot wall is partially mitigated by the large setback from the street and landscaping. He stated that the geotechnical analysis has been prepared for the site and he addressed the correspondence from Mr. Oats' regarding the muddy bog.

Joe Castaneda, engineering consultant, gave an overview of the drainage improvements for the project that will address the excess water on the site.

Vice Chair Phillips questioned the stockpiles of soil on the site that contain construction debris. He stated that the soil has been brought in and not analyzed in the Mitigated Negative Declaration (MND). Vice Chair Phillips also stated that the definition of Salt Creek is not correct; it is not a concrete channel. He noted that the Area Plan and the Salt Creek Drainage Plan specifically defines the area as part of the natural water course. He expressed his concerns regarding leaching that could potentially come out of the foreign soil and drain into the storm drain and flow into Salt Creek.

Mr. Krout stated that a Phase I Environmental Site Assessment was prepared and the result was there were no hazardous materials on the site. He stated that the site requires grading which will remove the construction debris. Mr. Krout referenced pages 39 and 40 of the MND that details the results of the analysis.

The Commission inquired further about the stockpiles on the site and the origin of their existence.

Mr. Krout stated they don't have knowledge of where the stockpiles came from. He stated that the soil was analyzed and results show that there is no concern.

Principal Engineer Macalalad stated the Phase I study should include the history of site.

Assistant City Attorney Thind stated that the Commission could continue the item to address the concerns raised more specifically regarding the Mitigated Negative Declaration (MND).

Mr. Castaneda stated a condition of approval could be added for the soil testing prior to grading, a condition that requires the debris be removed during the construction phase and they could install silt fencing around the stockpiles in the interim. He stated the type of testing is unknown until they work with the geotechnical engineer.

Mr. Krout stated that they would agree to test the soil prior to a building or grading permit, whichever is standard for the City, and provide the results to the City.

Associate Planner Harrison stated that it is standard to require a focused Phase II test prior to grading.

Vice Chair Phillips asked if the applicant would be amenable to amending the definition of Salt Creek. Mr. Krout agreed to make the revision to the Salt Creek definition.

Chair Karwin opened the public hearing at 8:26 p.m. The Clerk verified the legal publication and noted no further correspondence was received.

Chair Karwin called for public testimony.

Suzanne Goodrich, property owner abutting the proposed project, thanked Vice Chair Phillips for his insightful questions to the applicant. Ms. Goodrich asked if the proposed project will include single story or two story homes and asked if the development will be level with her neighborhood. Commissioner Doty referenced the plan and stated Ms. Goodrich's property will sit seven (7) feet above the proposed development.

Chair Karwin closed the public hearing at 8:29 p.m.

The Commission expressed their concerns with the unknown origin of the stockpiles and suggested that a focused Phase II study be prepared on the stockpiles.

Associate Planner Harrison stated that Phase I analysis does have mention of one (1) construction debris pile. Vice Chair Phillips referenced pictures he took of more than one (1) stockpile that consists of several materials. He suggested the Mitigated Negative Declaration (MND) be revised to include an analysis of the stockpiles and revised to correct the definition of Salt Creek.

The Commission discussed the Mitigated Negative Declaration (MND) analysis, the construction debris on the site, the definition for Salt Creek, and language for a focused Phase II assessment.

Associate Planner Harrison read the standard language that would apply to the focused Phase II Environmental Assessment.

Mr. Krout stated that they are amenable to a focused Phase II analysis or equivalent regarding the stockpiles of imported dirt on the site and the revised definition of Salt Creek to strike "concrete channel" and insert, "a natural watercourse".

Chair Karwin referenced the correspondence submitted by Mr. Oats' regarding power being pulled from the power grid at Ridgemoor. Mr. Krout stated that Southern California Edison has provided a will serve letter notifying them they have a sufficient amount of electricity for the site.

Chair Karwin made a motion to adopt a Resolution recommending the City Council Adopt a Mitigated Negative Declaration including the revision to the definition for Salt Creek and the focused Phase II analysis for the stockpiles, Vice Chair Phillips seconded the motion. The motion passed as follows:
Ayes: Doty, Karwin, Madrid, Phillips, Thomas
Noes: None
Absent: None

Commissioner Thomas made a motion to adopt a Resolution recommending City Council approval of Tentative Tract Map No. 2016-038 including the revision to the definition for Salt Creek and the focused Phase II analysis for the stockpiles, Vice Chair Phillips seconded the motion. The motion passed as follows:
Ayes: Doty, Karwin, Madrid, Phillips, Thomas
Noes: None
Absent: None

9.4. Public Hearing for an Amendment to Menifee Municipal Code Chapter 9.55, Pertaining to Quimby and Mitigation Fees

Acting City Manager stated Community Services Director Robert Lennox will provide the presentation for the item.

Community Services Director Lennox provided a brief history of the item. Mr. Lennox stated that during the September 1, 2016 meeting, the Parks, Recreation, and Trails Commission PRTC voted unanimously to remove Section 9.55.115, banking credit for excess park dedication, from Chapter 9.55 in the Municipal Code. He reported on the Parks, Recreation, and Trails Commission's findings for voting to remove Section 9.55.115.

Chair Karwin opened the public hearing at 8:41 p.m. The Clerk verified the legal publication and noted no correspondence was received.

Tom Giedroyce, Parks, Recreation, and Trails Commissioner, stated that the PRTC voted unanimously to remove Section 9.55.115. Mr. Giedroyce gave an overview of the Parks, Recreation, and Trails Commission's thought process for recommending removal of the Section.

Chair Karwin asked if a specific project raised a concern for the Parks, Recreation, and Trails Commission to bring the item back for discussion. Mr. Giedroyce stated the PRTC had no specific project in mind, they just thought it may be a potential pitfall.

Chair Karwin closed the public hearing at 8:50 p.m.

The Commission discussed the two (2) mile radius requirement for banked park credit, encouraging developers to build larger parks rather than small parks, typical overage of banked credits, credits for usable park land, and the

percentage of developers that pay a Quimby fee. Community Services Director Lennox clarified that the two (2) mile radius is between parks, not the development. Mr. Lennox stated that the Parks Master Plan proposes to encourage larger facilities rather than small ones and staff strives to bring in larger parks. He stated that approximately 30-40 percent of developers pay a Quimby fee because they have not provided enough park land.

Commissioner Doty suggested a minimum of two (2) acres banked allowed in one (1) acre increments. Community Services Director Lennox stated the minimum requirement of two (2) acres would still provide the incentive that staff intended and will ensure the City is getting usable land. He stated the goal is not to accept parks less than five (5) acres from developers.

The Commission discussed what would be an appropriate number of minimum acres allowed to bank credits.

Assistant City Attorney Thind stated that the options available to the Planning Commission is to delete the Section that allows developers to receive/bank credit for excess park dedication or deny the recommendation thereby leaving Section 9.55.115 in the Ordinance. Mr. Thind stated that amending the Section is not one of the options available to the Commission.

Discussion between the Commission and Assistant City Attorney Thind continued regarding the correct action to take for a motion.

Commissioner Doty made a motion to deny the recommendation to the City Council to amend Municipal Code Chapter 9.55 by deleting Section 9.55.115, Vice Chair Phillips seconded the motion. The motion passed as follows:
Ayes: Doty, Karwin, Madrid, Phillips, Thomas
Noes: None
Absent: None

The Planning Commission inquired about a possible joint workshop with the Park, Recreation, and Trails Commission to review and discuss amending Chapter 9.55. Assistant City Attorney Thind stated staff will look into the option of scheduling a joint workshop.

10. DISCUSSION ITEMS

None

11. COMMUNITY DEVELOPMENT DIRECTOR COMMENTS

Acting City Manager Wyman reported on the construction projects and Capital Improvement Projects (CIP) in the works.

12. COMMISSIONER REPORTS ON COMMITTEE ACTIVITES

Chair Karwin asked if new appointees will need to be appointed to the Menifee Citizens Advisory Committee. Acting City Manager Wyman stated he will look in to the scheduling for the new appointees.

13. FUTURE AGENDA REQUESTS FROM COMMISSIONERS

Chair Karwin requested an item be brought before the Commission regarding a report or analysis that addresses the origin of any imported soil on project sites and if the origin can't be determined, then a focused Phase II Assessment will be required. Vice Chair Phillips seconded the request.

14. ADJOURNMENT

Chair Karwin adjourned the meeting at 9:06 p.m.

_____

Jennifer Allen, Deputy City Clerk

CITY OF MENIFEE

SUBJECT:	Bradley Road Bridge over Salt Creek, CIP 13-004 and Adoption of a Mitigated Negative Declaration
MEETING DATE:	February 8, 2017
TO:	Planning Commission
PREPARED BY:	Carlos E. Geronimo, Senior Civil Engineer
REVIEWED BY:	Lisa Gordon, Planning Manager
APPROVED BY:	Jeff Wyman, Interim Development Director
APPLICANT:	City of Menifee, Department of Public Works / Capital Improvement Projects

RECOMMENDED ACTION

1. Conduct Public Hearing
2. Adopt Resolution No. PC 17-____ adopting a Mitigated Negative Declaration, based on the findings incorporated in the initial study and the conclusion that the project will not have a significant effect on the environment.

DISCUSSION

Project Description

The City of Menifee is proposing to construct a new overcrossing at Bradley Road over Salt Creek Channel. The objective of the proposed project will permanently address the flooding issues that force this major thoroughfare to close often during the rainy season.

Bradley Road crosses Salt Creek in a north-to-south direction, generally at equal elevation to Salt Creek. Due to this design, Bradley Road is prone to flooding during rain events, which has historically presented hazards to motorists and resulted in the closure of the roadway. The City of Menifee is proposing to replace the low-flow crossing with an all-weather crossing (bridge), effectively raising the roadway out of the floodplain. The proposed bridge would span approximately 335 feet across Salt Creek and would be approximately 64 feet wide. The bridge would have a 12-foot median, two 12-foot travel lanes (one in each direction), 8-foot shoulders on both sides (which serve as Neighborhood Electric Vehicle [NEV]/Class II bicycle lanes), and 5-foot pedestrian sidewalks on both sides with tubular hand railings. The bridge would consist of a three-span cast-in-place post-tensioned concrete box girders supported by two intermediate piers consisting of three columns each (six columns total), and two open ended

abutments. The two bridge abutments would be constructed north of the Rio Vista Drive intersection and south of the Potomac Drive intersection. The existing dual pipe culvert would be removed. The bridge would be raised approximately 12 feet above Salt Creek at the bridge's highest point. Shielded, downward facing lighting would be installed along the length of the bridge.

Project Location

The Bradley Road Bridge Project (proposed project) is located within the City of Menifee, County of Riverside, California. This segment of Bradley Road is located between Potomac Drive to the north and Rio Vista Drive to the south, though the limits of work would extend beyond these streets in order to match the future bridge elevation.

Public Notice and Review

The City has prepared the Initial Study/ Mitigated Negative Declaration (IS/MND) in conformance with Section 15070(a) of the State of California CEQA Guidelines. The purpose of the IS/MND is to identify any potentially significant impacts associated with the proposed project and incorporate mitigation measures into the project design as necessary to reduce or eliminate any such potentially significant impacts . The City has worked with other agencies such as Riverside County Flood Control and Water Conservation District (RCFCD&WCD), local Native American tribes (Pechanga Band of Luiseno Indians, Soboba Band of Luiseno Indians, Agua Caliente Band of Cahuilla Indians and Rincon Band of Luiseno Indians), and other agencies.

The IS/MND was circulated for public review from December 12, 2016 to January 11, 2017. The document was made available for review at the City of Menifee City Hall Front Counter, Paloma Valley Library, and Sun City Library. The document was also made available on the City's website online. Notices regarding the document availability were published in the Press Enterprise and PE online (the Press Enterprise website) on December 12, 2016 and were mailed to residents within a 500 feet radius from the project limits.

A total of three comment letters/emails were received during the availability period for the IS/MND. The letters/emails received are from: State Clearinghouse and Planning Unit, RCFCD&WCD and Earl W. Phillips. Copies of the letters/emails along with responses, are provided in the Final MND and attached herewith.

Findings

Findings for the MND are included in the Draft Resolution (Attachment A).

ATTACHMENTS

A. Resolution PC 2017-____ Adopting the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program
B. Final Mitigated Negative Declaration
C. Exhibits
D. Comments on IS/MND and Responses
E. Public Hearing Notice

ATTACHMENT A

RESOLUTION No. PC 17-

Resolution No. PC 17-____

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MENIFEE, CALIFORNIA ADOPTING A MITIGATED NEGATIVE DECLARATION FOR THE BRADLEY ROAD BRIDGE PROJECT, CIP 13-004

Whereas, on September 2, 2015 the applicant, City of Menifee, entered into an agreement with NV5 for the design of plans and preparation of environmental documents for the construction of a Bridge on Bradley Road over Salt Creek Channel (the "Project").

Whereas, pursuant to the requirements of the California Environmental Quality Act (CEQA), an Initial Study ("IS") and Mitigated Negative Declaration ("MND") have been prepared to analyze and mitigate the Project's potentially significant environmental impacts; and

Whereas, the draft IS/MND was publically circulated for the required thirty-(30)-day public review period between December 12, 2016 and January 11, 2017, which was publicly noticed by a publication in a newspaper of general circulation, notice to owners within 500 feet of the Project site boundaries, related agencies and government agencies; and

Whereas, three comments from public agencies and general public on the IS/MND were received during the public review period; and

Whereas, on February 8, 2017, the Planning Commission held the open public hearing on the Project, considered all public testimony as well as all materials in the staff report and accompanying documents; and,

Whereas, the City has complied with CEQA and the IS/MND is an accurate and objective statement that has fully analyzed all of the Project's potential impacts and fully complies with CEQA and the CEQA Guidelines, and represents the independent judgment of the City; and

Whereas, no substantial evidence supporting a fair argument that the Project may result in a significant impact has been received by the City after circulation of the IS/MND, and therefore the preparation of an environmental impact report is not required;

Whereas, after its public circulation, the IS/MND has not been substantially revised, as defined by CEQA Guidelines Section 15073.5, and therefore does not require re-circulation.

NOW, THEREFORE, the Planning Commission of the City of Menifee resolves as follows:

1. The Planning Commission finds on the basis of the evidence presented and the whole record before it, including the Initial Study and the MND, and any comments received, that there is no substantial evidence supporting a fair argument that the Project, as mitigated, may have a significant effect on the environment.

2. The Planning Commission finds, based on the evidence presented and the whole record before it, including the Initial Study and the MND, and any comments received, in its own independent judgment, that the Project, after the

implementation of the mitigation measures recommended in the MND and imposed by Exhibit 1 hereto, will not result in any significant impacts on the environment.

3. The Mitigation Monitoring Plan (Environmental Record Report), which a copy of which is attached hereto as Exhibit "1" and incorporated herein by reference, will assure compliance with the mitigation measures during Project implementation.

4. The Planning Commission further finds that the MND reflects the Planning Commission's independent judgment and analysis.

5. The MND, all documents referenced in the MND, and the record of proceedings on which the Planning Commission's decision is based are located at City of Menifee City Hall at 29714 Haun Road, Menifee, CA 92586 and the custodian of record of proceedings is the City of Menifee City Clerk.

6. The City of Menifee Planning Commission adopts an MND for the Project including but not limited to the Mitigation and Monitoring Plan as attached to the MND.

PASSED, APPROVED AND ADOPTED this the 8th day of February, 2017.

_____
Robert P. Karwin, Chairman

Attest:

_____
Jennifer Allen, Deputy City Clerk

Approved as to form:

_____
Ajit Thind, Assistant City Attorney

EXHIBIT 1

MITIGATION MONITORING PLAN

(ENVIRONMENTAL RECORD REPORT)

MITIGATION MONITORING AND REPORTING PROGRAM

The California Public Resources Code, Section 21081.6, requires that a lead or responsible agency adopt a mitigation monitoring and reporting plan when approving or carrying out a project when a Mitigated Negative Declaration identifies measures to reduce potential environmental impacts. As lead agency for the project, the City of Menifee is responsible for adoption and implementation of the mitigation monitoring and reporting program.

Mitigation Measure	Time Frame of Mitigation				Monitoring Reporting Agency	Time Frame for Verification Frequency to		Date of Completion	Date of Verification
	Planning	*Pre-Construction*	*During Construction*	*Post-Construction*		*Monitor*	*Report*		
Biological Resources									
MM-BIO-1 All vegetation removal and ground disturbance activities should be planned outside the nesting season for raptors (February 1 to August ~~15~~31) and outside the peak nesting season for birds (March 1 to August ~~15~~31) if practicable. If vegetation removal would occur during those time periods, a pre-construction survey for active nests shall be conducted by a qualified biologist no more than 1 week prior to the onset of ground disturbance activities. If active nests are found on the site, disturbance or removal of the nest shall be avoided until the young have fledged and the nest is no longer active. Depending on the species, site conditions, and the proposed construction activities near the active nest, a buffer distance may be prescribed, as determined by a qualified biologist, to the satisfaction of the City of Menifee Community Development Department.	X	X	X		City of Menifee				

Mitigation Measure	Time Frame of Mitigation				Monitoring Reporting Agency	Time Frame for Verification Frequency to		Date of Completion	Date of Verification
	Planning	*Pre-Construction*	*During Construction*	*Post-Construction*		*Monitor*	*Report*		
MM-BIO-2a After completion of project construction, to mitigate for the temporary disturbance of 0.8 acre of waters of the U.S./state, all temporarily disturbed riverine resources shall be restored in place to pre-construction contours and conditions following construction. The City shall work with the RCA, ACOE, RWQCB, and CDFW to develop a native hydroseed mix that shall be applied to the temporarily disturbed areas and monitored for a period of 12 months to confirm germination., to the satisfaction of the City of Menifee Community Development Department.	X			X	City of Menifee				
MM-BIO-2b Mitigation for direct, permanent impacts to 0.2 acre of non-wetland waters of the U.S. /state shall accomplished at a 3:1 ratio through the provision of a one-time fee for 0.6 acre of credits at an approved off site mitigation bank and/or in-lieu fee program to adequately compensate for no net loss of waters of the U.S./State. At this time, the City is considering the purchase of riverine re-establishment credits from the Riverside-Corona Resource Conservation District (RCRCD) In-Lieu Fee Project Site (ILF Project), located adjacent to the main stem of the Santa Ana River, west of the Hamner Avenue Bridge over the Santa Ana River, near Norco/Eastvale, Riverside County, California. In the event this option is not available, the City shall coordinate and work closely with the RCA, ACOE, RWQCB, and CDFW to identify an appropriate alternative.	X			X	City of Menifee				
MM-BIO-3 To minimize potential indirect impacts to jurisdictional waters, the following shall be implemented during construction to the satisfaction of the City of Menifee Community Development Department: Best management practices shall be implemented to avoid indirect impacts to jurisdictional waters, including: a. Vehicles and equipment shall not be operated in ponded or flowing water		X	X		City of Menifee				

Mitigation Measure	Time Frame of Mitigation				Monitoring Reporting Agency	Time Frame for Verification Frequency to		Date of Completion	Date of Verification
	Planning	*Pre-Construction*	*During Construction*	*Post-Construction*		*Monitor*	*Report*		
except as described in the permits. b. Water containing mud, silt, or other pollutants from grading or other activities shall not be allowed to enter jurisdictional waters or be placed in locations that may be subjected to high storm flows. c. Spoil sites shall not be located within locations that may be subject to high storm flows, where spoils might be washed back into drainages. d. Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil, or other petroleum products, or any other substances that could be hazardous to vegetation or wildlife resources, resulting from project-related activities, shall be prevented from contaminating the soil and/or entering avoided jurisdictional waters. e. No equipment maintenance shall occur within jurisdictional waters and no petroleum products or other pollutants from the equipment shall be allowed to enter these areas or enter any off-site state-jurisdictional waters under any flow.									
Cultural Resources									
MM-CUL-1 If during ground disturbance activities, unique cultural resources are discovered that were not assessed by the archaeological report(s) and/or environmental assessment conducted prior to project approval, the following procedures shall be followed. Unique cultural resources are defined, for this condition only, as being multiple artifacts in close association with each other, but may include fewer artifacts if the area of the find is determined to be of significance due to its sacred or cultural importance as determined in consultation with the Native American Tribe(s). i. All ground disturbance activities within 100 feet of the discovered cultural resources shall be halted until a meeting is convened		X	X	X	City of Menifee				

Mitigation Measure	Time Frame of Mitigation				Monitoring Reporting Agency	Time Frame for Verification Frequency to		Date of Completion	Date of Verification
	Planning	*Pre-Construction*	*During Construction*	*Post-Construction*		*Monitor*	*Report*		
between the developer, the archaeologist, the tribal representative(s) and the Community Development Director to discuss the significance of the find. ii. At the meeting, the significance of the discoveries shall be discussed and after consultation with the tribal representative(s) and the archaeologist, a decision shall be made, with the concurrence of the Community Development Director, as to the appropriate mitigation (documentation, recovery, avoidance, etc.) for the cultural resources. iii. Grading of further ground disturbance shall not resume within the area of the discovery until an agreement has been reached by all parties as to the appropriate mitigation. iv. Treatment and avoidance of the newly discovered resources shall be consistent with the Cultural Resources Treatment and Monitoring Agreements entered into with the appropriate tribes. This may include avoidance of the cultural resources through project design, in-place preservation of cultural resources located in native soils and/or re-burial on the Project property so they are not subject to further disturbance in perpetuity. v. Pursuant to Calif. Pub. Res. Code § 21083.2(b) avoidance is the preferred method of preservation for archaeological resources and cultural resources. If the landowner and the Tribe(s) cannot agree on the significance or the mitigation for the archaeological or cultural resources, these issues will be presented to the City Community Development Director for decision. The City Community Development Director shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological									

	Mitigation Measure	Time Frame of Mitigation				Monitoring Reporting Agency	Time Frame for Verification Frequency to		Date of Completion	Date of Verification
		Planning	*Pre-Construction*	*During Construction*	*Post-Construction*		*Monitor*	*Report*		
	resources, recommendations of the project archeologist and shall take into account the cultural and religious principles and practices of the Tribe. Notwithstanding any other rights available under the law, the decision of the City Community Development Director shall be appealable to the City Planning Commission and/or City Council.									
	Noise									
MM-NOI-1	The following measures shall be incorporated into construction plans prior to the start of construction, to the satisfaction of the City of Menifee Community Development Department: 1. All noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with mufflers; air-inlet silencers where appropriate; and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specifications. Mobile or fixed "package" equipment (e.g., arc welders, air compressors) shall be equipped with shrouds and noise-control features that are readily available for that type of equipment. 2. Electrically powered equipment shall be used instead of pneumatic or internal-combustion-powered equipment, where feasible. 3. Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors. 4. The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.			X		City of Menifee				

ATTACHMENT B

BRADLEY ROAD BRIDGE PROJECT

FINAL MITIGATED NEGATIVE DECLARATION

(ISMND)

BRADLEY ROAD BRIDGE FINAL MITIGATED NEGATIVE DECLARATION

CITY OF MENIFEE
29714 Haun Road
Menifee, California 92586
Contact: Carlos Geronimo, PE

FEBRUARY 2017

FINAL

Bradley Road Bridge
Mitigated Negative Declaration

Prepared for:

City of Menifee
29714 Haun Road
Menifee, California 92586
Contact: Carlos Geronimo, PE

NV5
15092 Avenue of Science, Suite 200
San Diego, California 92128
Contact: Jack L. Abcarius, PE

Prepared by:

DUDEK
605 Third Street
Encinitas, California 92024
Contact: Shawn Shamlou, AICP

FEBRUARY 2017

Printed on 30% post-consumer recycled material.

Comment Letter A

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

City of Menifee
JAN 17 2017
Received

January 11, 2017

Carlos E. Geronimo
City of Menifee
29714 Haun Road
Menifee, CA 92586

Subject: Bradley Road Bridge
SCH#: 2016121033

Dear Carlos E. Geronimo:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. The review period closed on January 10, 2017, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. A-1

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH#	**2016121033**
Project Title	Bradley Road Bridge
Lead Agency	Menifee, City of
Type	**MND** Mitigated Negative Declaration
Description	The city is proposing to replace this low-flow crossing with an all-weather crossing (bridge), effectively raising the roadway out of the floodplain. The total area of potential disturbance is approximately 4.39 acres. The limits of work include temporary siting and disturbance areas. Construction is estimated to begin in March 2017 and last approximately 18 months.

Lead Agency Contact

Name	Carlos E. Geronimo		
Agency	City of Menifee		
Phone	951-723-3722	*Fax*	
email			
Address	29714 Haun Road		
City	Menifee	*State* CA	*Zip* 92586

Project Location

County	Riverside		
City	Menifee		
Region			
Lat / Long	33° 41' 33.0" N / 117° 11' 18.9" W		
Cross Streets	Bradley Rd, Potomac Dr, Rio Vista Dr		
Parcel No.			
Township	*Range*	*Section*	*Base*

Proximity to:

Highways	215
Airports	
Railways	
Waterways	Salt Creek
Schools	Chester W. Morrison, Evans Ranch, Ridgemore, Paloma Valley
Land Use	Public ROW, recreation

Project Issues	Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Coastal Zone; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Growth Inducing; Landuse; Cumulative Effects; Other Issues
Reviewing Agencies	Resources Agency; Department of Fish and Wildlife, Region 6; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 8; Regional Water Quality Control Board, Region 8; Air Resources Board, Transportation Projects; Native American Heritage Commission

Date Received 12/12/2016 *Start of Review* 12/12/2016 *End of Review* 01/10/2017

Response to Comment Letter A

State Clearinghouse
Scott Morgan
Director
January 11, 2017

A-1 This letter acknowledges that the City has complied with the public review requirements for the Bradley Road Mitigated Negative Declaration (MND) pursuant to the California Environmental Quality Act (CEQA).

INTENTIONALLY LEFT BLANK

Comment Letter B

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05 Jan 2017

CDR Earl W. Phillips, Jr., USNR (Ret), REHS

Mr. Carlos Geronimo, PE
Senior Civil Engineer, City of Menifee
29714 Haun Road
Menifee CA 92586

BRADLEY BRIDGE MITIGATED NEGATIVE DECLARATION COMMENTS

Preface

My views and comments as expressed herein are based on my research, and experience as a Registered Environmental Health Specialist (California) with over 25 years' experience (civilian & military) in environmental compliance and environmental project management.

I recognize the topics of concern in the Draft Mitigated Negative Declaration (draft) are broad and complex to the degree that any one of a wide range of responses may be appropriate. Therefore, some views and comments submitted herein may not include all possible responses to the mitigated negative declaration proposal.

My comments and suggestions are not to be construed as "show-stoppers" for approval of the MND, but to indicate possible vulnerabilities that may be addressed or challenged by local activists and other citizens.

No attempt therefore, is being made to imply or construe that the responses herein represent a complete and total final assessment of the draft. The comments submitted herein are to be construed as suggestions and recommendations for the evaluator's consideration. B-1

Caveat

The recommendations provided herein are intended to provide clarity and ease of understanding the material presented. These recommendations are not to be construed as criticism, attack, or otherwise impugning the efforts of the preparers of the document. The recommendations represent the author's views only.

Sincerely,

Earl W. Phillips, Jr., REHS

Registered Environmental Health Specialist
EARL W. PHILLIPS
No. 6994
Exp. 12/17
STATE OF CALIFORNIA

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ENVIRONMENTAL ADVISOR
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Summary of Observations and Findings

1. The description of Salt Creek as a flood control channel is only partially accurate. Salt Creek is a USGS recognized "blue line" watercourse with its own flood plains. The watercourse was modified into distinct flood control channels, from its headwaters in proximity of the Santa Rosa Mountains down to the vicinity of the city's water reclamation/desal facility, where it resumes its natural course to the Canyon Lake portion of the Railroad Canyon Reservoir. B-2

2. The Biological Resources (Appendix B) Wildlife compendium fails to mention several species of migratory fowl (Canada Geese, Mallard Ducks) who seasonally occupy various sites in the watercourse, along with a variety of water fowl (herons, egrets, ducks, coots, etc) which have been observed in the vicinity of the Bradley Bridge watercourse. The occurrence of these species adds a uniqueness to the Salt Creek wildlife aesthetic that is not mentioned in the regulations. B-3

3. The nature of the project requires a significant disturbance of the watercourse in the vicinity of Bradley Road which would indicate a regulatory review of the effects of hydromodification per SWRCB guidance. Generally this requirement is addressed in the SWPPP, or the city's MS4 permit. This should be mentioned in the MND. B-4

4. The MND contains material not specifically relevant to the project, (i.e., a discussion of SCAQMD meetings). There seems to be an overload of unnecessary and redundant boiler plate in some sections. B-5

5. It should be considered that merely citing regulations alone does not ensure compliance. The statement(s) that compliance with state and local regs will ensure a CEQA condition will be met has no credibility without plan(s) of action with action steps to achieve the MND conclusion. These plans must be referenced in the MND to indicate how the condition will be met. B-6

6. The document needs to include a glossary of acronyms and terms to assist laypersons and non-technical reviewers in relating these acronyms and terms to common usage. B-7

7. There is an artist's conception of the constructed bridge. Add the artist's concept to the document preferably on the cover page, in front of the document, and in the Maps Section of Section 4, References and List of Preparers B-8

8. Add a "Maps Section" in Section 4 as Section 4.3 B-9

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GENERAL COMMENTS AND RECOMMENDATIONS

Section 1.1.1. Purpose and Need.

This document should have an "Executive Summary" which summarizes the contents. There should be a paragraph that explains the appendices, located within each appendix that provides details about the models, charts, graphs, et al contents. B-10

1. The description of Salt Creek is inaccurate. Salt Creek is a seasonal watercourse, defined by the USGS as a "blue Line" watercourse, originating in the vicinity of the Santa Rosa Mountains (part of the San Jacinto Mountains) and ending in the Canyon lake portion of the Railroad Canyon reservoir. B-11
2. Salt Creek has its own flood plains, which removes it from the section 1.1.1 definition as a flood control channel (County of Riverside General Plan-Sun City Area Plan, page 9, Unique Features, *Salt Creek*), (City of Menifee General Plan EIR, Section 5.9.1 Environmental Setting, Regional Drainage, Local Surface Waters and Drainage, p 5.9.1) and (The Riverside County Flood Control and Water Conservation District, Master Drainage Plan) B-12
3. According to the Salt Creek Master Drainage Plan, most of the flood plain's local vulnerabilities were modified into flood control channels, with sections left open where feasible. The channel reverts to its natural state in south west Menifee, ending in the Canyon Lake section of Railroad Canyon Reservoir. B-13
4. Syntax: Syntax errors, confusing language, and "fuzzy assumptions" are throughout the document. B-14
   - Section 1.2, sentence 2: replace "an MND" with "a MND". The convention is that "an" precedes a vowel while "a" precedes a consonant.
5. Section 1.1.3.3. The existing title "Operation" [p3] should be changed to "Operation and Maintenance (O&M)" to conform to the actual life cycle of the project.

   Revise sentence 3 of ¶ 1 to read, "O & M "along with routine and specific maintenance, will include work in the watercourse channel (debris removal, erosion control, graffiti removal, etc) as well as paving, striping, pothole and patching repairs and general cleanliness of the bridge itself." B-15
6. Section 1.2 California Environmental Quality Act Compliance. While CEQA is the overall governing reg, there are other state and local regs that add additional requirements in support of, and in supplementing CEQA Guidance. These should be mentioned in a paragraph (SWRCB, SCAQMD, etc) B-16

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7. Page 10. The signature in the signature block is illegible. The Responsible City Representative who is making the determination needs to add his/her name in print along with their title and signature. B-17

8. Page 13, ¶ 2. The location of the 12-mile long Salt Creek needs to be more specific. Recommend revising sentence 5 to read, "Bradley Road in vicinity of the proposed project does not have any landscaping." B-18

9. Section 3.2 should be revised to read "Not Applicable", The project site is not in the vicinity of, nor will it affect agriculture or forestry resources. B-19

10. Section 3.3 Air Quality, (p 17 – p19 (top of Table 2). Paragraphs 2-8 should be eliminated from the discussion since all this "boiler plate" verbiage does not pertain specifically to the project or its possible impact. These paragraphs (through to item c, page 23, should be revised to mention just the envisioned impacts, the standards, and whether or not there would/will be any impacts. B-20

11. Item "c", p 23. Eliminate the non-project specific boiler plate. No one cares about the SCAB's reputation, only that it is the "agency governing the standards". Revise the item to read what the SCAB standards are and how they apply (if any) to the specific project. B-21

12. Item "d", p 24. Eliminate the excuse for the SCAQMD (sentence 3) not providing lookup tables. It is not necessary as this agency has generated the standards presented in table 4. B-22

13. Item "e", p 25. Eliminate ¶ 3. It has no bearing on the project. B-23

14. Section 3.4, p 26. Biological resources. Eliminate paragraph 2 under "Survey Summary". The survey stated that "no burrowing owls were found based on the site surveys for probable habitats. Since there were no suitable habitats the focused survey was not conducted. This is covered in ¶ 3. B-24

15. Item "a", p 29. Special-Status Plants. Revise the entire section, to keep this category relevant to the item "a" concern, i.e., 1. Describe the MSHCP standards, applicability to the proposed project site, and the findings. B-25

16. Item "a", p 30. Special Status Wildlife. Omit references to the Burrowing owl as they were already mentioned.

    Describe the site, with a [sidebar] due diligence discussion about the egrets, Canada Geese, herons, and other migratory waterfowl that routinely populate the channel. These characteristic birds have been the source of pleasure to a number of bird watching residents. While egrets and other observed waterfowl may not be in the "special status wildlife" category, their occupation of the channel has been noticed by the residents. B-26

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Add the observation, "These birds enjoy a "special status" because they are highly visible and unique to the Salt Creek ecosystem and therefore need to be included in the MND discussion." This recommendation expands on ¶ 3 discussions. B-26 Cont.

17. Mitigation Measures, Item "b", P 31. The definition of "edge effects", (¶ 3) is not accurate. The MND definition is more appropriate to "construction boundary impacts" rather than to ecological edge effects.

    The ecological definition of "edge effects" includes disturbances which may divide or change the natural boundaries of an ecosystem. In the case of this project, no ecosystem boundaries will be divided or changed, or overly disturbed because the project consists of building a bridge, with as little disturbance of the Salt Creek ecosystem as practicable. B-27

    Revise ¶ 3 to read, "Standard construction best management practices (BMPs) including a SWPPP will be implemented to minimize/mitigate construction-related impacts to the local ecosystem.

18. Item "c", p 32. Less Than Significant with Mitigation Incorporated. Add "in proximity to the project site" to sentence 1. Salt Creek has more than one vulnerable flood plain area and more than one active low-flow channel in the watercourse within the city's jurisdiction. B-28

19. Item "c", ¶ 3, p32. Less Than Significant with Mitigation Incorporated. Replace "indirect edge effects" with "construction boundary impacts". Refer to item 17 above. B-29

20. Item "c", ¶ 3, p32. Remove the reference to "onsite or adjacent jurisdictional waters", and replace with "jurisdictional waters". This eliminates the confusion that two conditions apply. The proposed project crosses one defined jurisdictional (Federal & State) water. B-30

21. Mitigation Measures, p33. MM-BIO-2b. Recommend this measure be removed or strongly contested. The imposition of a 'fee' for a project that (1) is not in proximity to the site, and (2) will not incur a net-loss to current flow conditions does not make any sense. (Opinion) This is a little more than a bureaucratic bribe since it does not provide a benefit to the city or the hydro ecology in or near the city's jurisdiction. B-31

22. Item "d", p 34, ¶ 4. Revise sentence 2 to read The project site has limited potential to support nesting resident and migratory birds, though significant impacts may occur. B-32

23. Topic "Additional Survey Requirements (MSHCP Section 6.3.2) ",p37, ¶ 1. Revise sentence 3 to read, "based on this survey", the project is consistent with the MSHCP Additional Survey Requirements. B-33

24. Native American Coordination. ¶ 2, p39. The last sentence in ¶ 2 should end with a colon as this sentence transitions to an itemization of summary statements. Recommend the paragraphs referred to under this item (¶ ¶ 3-6) be numbered or itemized. B-34

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25. Item "a", p 40. Question, "*Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5*"?

    Insert the complete citation, "CEQA § 15064.5" which is more accurate. The MND contains numerous regulatory citations. Even though the MND is under CEQA, the more appropriate format would be to use the complete regulatory title in the citation. (An exclusion would apply if the current format is caveated as being abbreviated to denote the referenced citation.) B-35

    ❖ Pls note: This recommendation applies throughout the MND document.

26. Item "a" Less Than Significant Impact, ¶ 2. Change "environment" to "environmental" in sentence 2. B-36
    - Revise sentence 5 in ¶ 1 to read, "Although the project site is not associated with an Alquist-Priolo earthquake fault zone, the proposed project would be designed and built to the latest seismic requirements which would minimize adverse effects from strong seismic activity ".

27. Topic: Existing Setting, p 47. Insert the topic title "Local or Micro Conditions" between ¶ 2 and ¶ 3, to indicate a subject matter transition from global climate issues to local climate issues. B-37

28. Topic: Existing Setting, p47. Revise ¶ 3 to address determining the actual emissions and the existing guidance applicable to address the findings. The fluff of what the governing agencies did or did not do has no bearing on the local conditions and what measures. The MND speaks to the conditions, and what needs to be done to address those conditions using specific and applicable regulatory guidance. B-38

29. Revise ¶ 4, p48, to eliminate agency actions as the project is concerned with the guidance produced by the agencies. B-39

30. Topic: status of proposed SCAQMD Thresholds, p48-50. Eliminate this topic in its entirety. It has no bearing on the project, the emissions at the project, or the MND's intent. Revise the discussion pertaining to table 7 and construe it as the best available guidance to be used in meeting the MND criteria. B-40

31. Item "b", p 51, Less than Significant Impact. Eliminate ¶ 1. It has no bearing on the project nor does it address the CEQA criteria for mitigating the conditions known or projected to exist for the project. B-41

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OPINION

The fluff of agency interactions, such as who did what and who proposed what, does not pertain to or address the project's evaluating criteria. A discussion of what the CEQA check list query asks should be definitively responded to using the best available guidance to mitigate the condition addressed by the query. B-42

32. Item "a", p 53. Replace the text "sensitive environments" with "sensitive receptors", in sentence 3 (of paragraph) the latter being more inclusive and specific in discussing environmental impacts. B-43

33. Item "b", p 53. Less than Significant Impact. Revise this paragraph to specifically address the CEQA query. B-44

OPINION

Citing regulations does not ensure compliance will take place. Regulations contain guidance and mandates, not actions. Statement(s) that compliance with state and local regs will ensure a CEQA condition will be met has no credibility without plan(s) of action with action steps to achieve the MND conclusion. These plans must be referenced in the MND to indicate how the queried condition will be met. B-45

- Revise item "b", p 53 (recommendation #33) to read, "The project will include plans of action and action steps that address issues regarding hazardous materials".

34. Item "d", p 58. Revise sentence 2, ¶ 1, to read, "The elevation of Bradley Road (bridge construction) above the water course would alleviate road closure due to flooding events". This is a more accurate description of the project's objective. B-46

35. Appendix 3: Include Canada geese, egrets, herons, and other migratory waterfowl as wildlife "species of interest" to the Salt Creek Ecosystem. This should be a separate paragraph discussed in the appendix. B-47

36. Add a Glossary of acronyms, phrases, and terminology to assist the reader(s) in reading the document. B-48

37. Add a paragraph explaining the topics in each of the appendices to clarify and inform the readers of what the appendix contains, how the data was derived and used, and the intended focus of the appendix. B-49

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REFERENCES

1. City of Menifee. City of Menifee General Plan, Section 5, Environmental Analysis.
2. USGS: Geological Maps of Murrieta, Romoland, San Jacinto Mountains, Winchester, and Hemet
3. Riverside County Flood Control and Water Conservation District. Salt Creek Master Drainage Plan
4. Geology of California's Imperial Valley, Chapter 18: The San Andreas Fault System
5. Southern California Coastal Water Research Project. Hydromodification Assessment and Management in California.
6. Google Earth. Bradley Road, Menifee CA. Photographs were modified to address task requirements on behalf of City Councilman Greg August.
7. August, Greg. City of Menifee City Council Member. Artist's Conceptual Drawings of the Bradley Road Bridge.
8. County of Riverside General Plan. Sun City/Menifee Area Plan

B-50

NOTE

1. References cited are in addition to those mentioned in the Draft Mitigated Negative Declaration.

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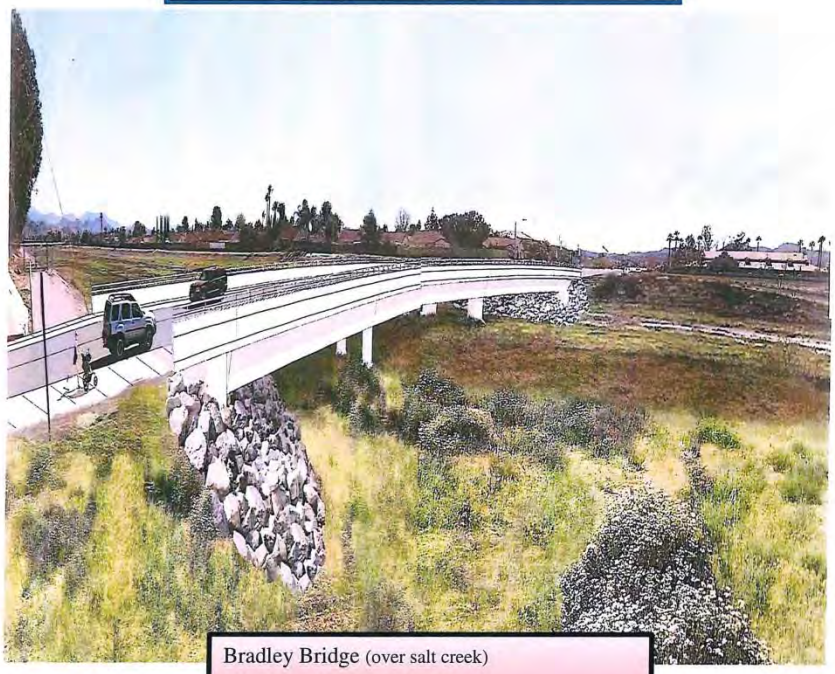
Appendix 1 Artist conception of the Bradley Bridge and Photographs of the Proposed Project



Bradley Bridge (over salt creek)

Artist conception

Page 1

B-50
Cont.

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Bradley Bridge (over salt creek)

Page 2

B-50
Cont.

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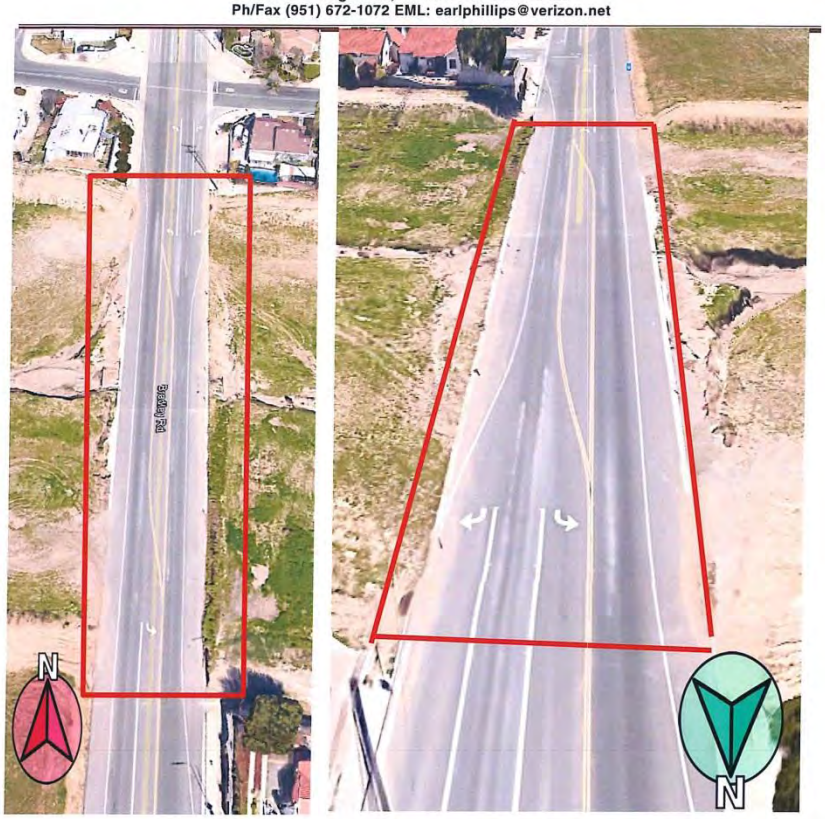

Existing Views of the proposed Bradley Bridge location

Page 3 of 3

B-50 Cont.

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Response to Comment Letter B

Earl W. Phillips, Jr., REHS
January 5, 2017

B-1 The City appreciates the commenter for providing comments on the Draft MND. This comment is introductory in nature and specific issues related to the adequacy of the environmental analysis in the MND is provided later in the letter.

B-2 It is true that Salt Creek is a blue-line stream which has been designed with steep, engineered channel banks and, in many areas, is a maintained floodplain. Salt Creek was originally channelized and engineered to retain flows up to a 100-year storm event and reduce flooding, although, due to the lack of periodic maintenance and continuous sediment transport over the years, there are some areas along the creek that are no longer capable of maintaining the 100-year flows within the banks. In response to this comment, Section 1.1.1, Purpose and Need, has been revised to include additional characterization of Salt Creek as suggested by the commenter.

The City has made revisions and clarifications to the MND. These revisions to the MND are presented in ~~strikeout~~-underline format. To the extent these changes and additions to the MND provide new information that may clarify or amplify information already found in the MND, and do not raise important new issues about significant effects on the environment, such changes are not considered a substantial revision as the term is used in Section 15073.5 of the CEQA Guidelines.

B-3 Comment noted and appreciated. The wildlife compendium represents a list of wildlife species observed during the October 2015 and August 2016 surveys and is not intended to include species that may frequent the site during other times of the year. In general, there are understandable limitations to the general wildlife surveys conducted for the project primarily due to seasonal and daytime-only constraints. Many early spring and summer migrants that may use habitats in the study area would not have been observed because the surveys were conducted were done in October 2015 and August 2016. Further, surveys were conducted during the daytime to maximize visibility for the detection of plants and most animals. Birds represent the largest component of the vertebrate fauna, and because most are active in the daytime, diurnal surveys maximize the number of observations of this group. In contrast, daytime surveys usually result in few observations of mammals, reptiles, and amphibians, many of which may be more active at night. Nighttime surveys were not warranted because no high sensitivity species (e.g., state- and/or federally listed) potentially occurring in the study area are nocturnal. The general wildlife surveys were conducted according to commonly accepted, standard scientific practices and procedures.

B-4 Please refer to Section 3.9, Hydrology and Water Quality, of the MND for a discussion of potential hydrology impacts as well as related items such as State Water Resources Control Board (SCRWB) compliance and the requirement for a Stormwater Pollution Prevention Plan (SWPPP).

B-5 Comment noted and appreciated. The Draft MND provides background information relevant to understanding analysis as necessary in order to provide sufficient context to the reader.

B-6 The City is required to comply with all applicable laws, regulations, ordinances, and plans as they relate to the proposed project. Such details regarding compliance are provided where applicable. The City will condition the project to comply with applicable laws and regulations to ensure compliance. Additionally, a Mitigation, Monitoring, and Reporting Program is included as Appendix E to the MND to ensure compliance with all required mitigation measures.

B-7 The City understands that the MND uses numerous acronyms and terms. It should be noted that all acronyms are spelled out at first usage. Additionally, the MND was available electronically, allowing for ease of searching for acronyms throughout the document.

B-8 The City appreciates the commenter's input regarding artistic renderings of the proposed project. In response to this comment, a cover page with artistic renderings has been incorporated into the MND.

B-9 Comment noted and appreciated. The location of the figures provided in the Draft MND is indicated in the Table of Contents near the beginning of the document.

B-10 Comment noted and appreciated. According to Section 15071 of the CEQA Guidelines, an executive summary is not a required component of an MND. Please note that a brief summary of impacts is provided in Section 2 of the Draft MND.

B-11 Comment noted and appreciated. Please refer to Response to Comment B-2.

B-12 Please refer to Response to Comment B-2.

B-13 Please refer to Response to Comment B-2.

B-14 Comment noted and appreciated. In response to this comment, all instances of "a MND" in Section 1.2, California Environmental Quality Act Compliance, of the MND have been revised to state "an MND." It should be noted that this revision is contrary to the comment; "an MND" is grammatically correct due to the pronunciation of "MND" beginning with a vowel sound.

The City has made revisions and clarifications to the MND. These revisions to the MND are presented in ~~strikeout~~-underline format. To the extent these changes and additions to the MND provide new information that may clarify or amplify information already found in the MND, and do not raise important new issues about significant effects on the environment, such changes are not considered a substantial revision as the term is used in Section 15073.5 of the CEQA Guidelines.

B-15 In response to this comment, the operational and maintenance characteristics in Section 1.1.3.3 of the MND have been revised to include additional suggested maintenance activities.

The City has made revisions and clarifications to the MND. These revisions to the MND are presented in ~~strikeout~~-underline format. To the extent these changes and additions to the MND provide new information that may clarify or amplify information already found in the MND, and do not raise important new issues about significant effects on the environment, such changes are not considered a substantial revision as the term is used in Section 15073.5 of the CEQA Guidelines.

B-16 Section 1.2, California Environmental Quality Act Compliance, discusses the project's compliance with CEQA, as is the intent of the subsection. Any other applicable laws, regulations, ordinances, and plans are described throughout the analysis as necessary to provide context to the reader.

B-17 Comment noted and appreciated. The information regarding the City staff member responsible for the MND will be included in the public record and submittal package.

B-18 The specific location for the suggested revision is unclear, therefore, no revision has been made. Please note that Section 1.1.2, Project Location and Setting, along with Figures 1-3, provide specific details regarding the project's location in relation to Salt Creek.

B-19 Comment noted and appreciated. The City is required to provide sufficient evidence for the disclosure of a "No Impact" conclusion to agricultural and forestry resources. Therefore, the discussion provided in Section 3.2, Agricultural and Forestry Resources, of the Draft MND remains unchanged.

B-20 Comment noted and appreciated. Please refer to Response to Comment B-5. The discussion presented in the Draft MND provides all information necessary to substantiate the significance conclusions of the environmental analysis and provide sufficient context to the reader.

B-21 Comment noted and appreciated. Please refer to Response to Comment B-20.

B-22 Comment noted and appreciated. Please refer to Response to Comment B-20.

B-23 Comment noted and appreciated. Please refer to Response to Comment B-20.

B-24 Comment noted and appreciated. Please refer to Response to Comment B-20.

B-25 Section 3.4, Biological Resources, Threshold A, correctly provides analysis relevant to the potential impacts to any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

B-26 Comment noted and appreciated. Egrets, Canada geese, and herons, while potentially enjoyed by the public, are not special-status wildlife as defined under CEQA. Endangered, rare, or threatened species, as defined in CEQA Guideline 15380(b) (14 CCR 15000 et seq.), are referred to as "special-status species" and include (1) endangered or threatened species recognized in the context of the California Endangered Species Act and the federal Endangered Species Act; (2) California Species of Special Concern and Watch List species, as designated by the CDFW; (3) mammals and birds that are Fully Protected species, as described in Fish and Game Code, Sections 4700 and 3511; (4) Birds of Conservation Concern, as designated by the USFWS; and (5) wildlife species that are "covered" under the Western Riverside County MSHCP.

It would be incorrect to categorize these species as "special-status" in the MND as they are not afforded special-status protection under state and federal law. The protection of these species from project-related impacts would occur under the Migratory Bird Treaty Act, which protects nesting bird populations from construction-related impacts (please refer to mitigation measure MM-BIO-1).

B-27 Comment noted and appreciated. The definition of edge effects presented in the Draft MND is consistent with the Final Western Riverside County Multiple Species Habitat Conservation Plan (MHSCP), which defines an edge effect as a change in the "conditions or species composition within an otherwise uniform habitat as one approaches a boundary with a different habitat." Edge effects at the boundary between natural lands and human-occupied lands ("urban edge effects") arise due to human-related intrusions or construction-related impacts such as lighting, noise, invasive species, exotic predators (dogs, cats, and opossums), hunting, trapping, off-road activities, dumping, construction-related dust and other forms of recreation and disturbance. The City acknowledges that the only possible edge effect, in the absence of Best Management Practices (BMPs), would be construction-related dust as crews establish a temporary work area to construct the bridge in the creek floodplain. Construction-related dust can adversely affect plant species not just on-site in the impact footprint but in off-site areas that aren't directly impacted by the project.

B-28 Comment noted and appreciated. The impact analysis and recommended mitigation is intended to address the portion of Salt Creek within the project site that is directly impacted by the project. To state that the project has been designed to avoid direct, permanent impacts to the main, active low-flow channel and a majority of the active floodplain "in proximity to the project site" would be an incorrect representation of the impacts.

B-29 Comment noted and appreciated. Please refer to Response to Comment B-27.

B-30 Comment noted and appreciated. The distinction between on-site and off-site jurisdictional waters is necessary to demonstrate that indirect effects to off-site, as well as on-site, habitats outside of the work area would not be significantly impacted by the project. This distinction is retained in the Draft MND to show that the project would not adversely contribute to the degradation of jurisdictional waters both on-site and off-site.

B-31 Comment noted and appreciated. Mitigation Banks and In-Lieu Fee Programs are generally the preferred mitigation option (by the U.S. Army Corps of Engineers) because they tend to consolidate financial and technical resources and they involve much more intensive strategic planning, design, and scientific expertise to ensure success. Additionally, mitigation banks and in-lieu fee programs help consolidate small, fragmented wetland mitigation projects into large contiguous sites that have much higher wildlife habitat values with a well-funded management source and resource agency oversight and regulation. The City is mitigating for temporary and permanent impacts through a combination of on-site restoration and the off-site purchase of credits at a 3:1 ratio. The increased ratio is intended to compensate for not only temporal loss but for the distance between the impact site and the in-lieu fee site.

B-32 Comment noted and appreciated. The existing text sufficiently describes and discloses potential impacts to nesting and migratory birds.

B-33 Comment noted and appreciated. The existing text sufficiently describes and discloses compliance with the MSHCP.

B-34 In response to this comment, the formatting of text regarding Native American outreach and coordination has been revised.

The City has made revisions and clarifications to the MND. These revisions to the MND are presented in ~~strikeout~~-<u>underline</u> format. To the extent these changes and additions to the MND provide new information that may clarify or amplify information already found in the MND, and do not raise important new issues about

significant effects on the environment, such changes are not considered a substantial revision as the term is used in Section 15073.5 of the CEQA Guidelines.

B-35 The text of Threshold A of Section 3.5, Cultural Resources, of the MND is directly quoted from Appendix G of the CEQA Guidelines. The City appreciates the suggested revision regarding regulatory citations throughout the MND.

B-36 In response to this comment, the grammatical error and characterization of seismic activity has been revised.

The City has made revisions and clarifications to the MND. These revisions to the MND are presented in ~~strikeout~~-underline format. To the extent these changes and additions to the MND provide new information that may clarify or amplify information already found in the MND, and do not raise important new issues about significant effects on the environment, such changes are not considered a substantial revision as the term is used in Section 15073.5 of the CEQA Guidelines.

B-37 In response to this comment, the suggested subheading has been inserted into the discussion regarding climate background in Section 3.7, Greenhouse Gas Emissions, of the MND.

The City has made revisions and clarifications to the MND. These revisions to the MND are presented in ~~strikeout~~-underline format. To the extent these changes and additions to the MND provide new information that may clarify or amplify information already found in the MND, and do not raise important new issues about significant effects on the environment, such changes are not considered a substantial revision as the term is used in Section 15073.5 of the CEQA Guidelines.

B-38 Comment noted and appreciated. Please refer to Response to Comment B-20.

B-39 Comment noted and appreciated. Please refer to Response to Comment B-20.

B-40 Comment noted and appreciated. Please refer to Response to Comment B-20.

B-41 Comment noted and appreciated. Please refer to Response to Comment B-20.

B-42 Comment noted and appreciated. Please refer to Response to Comment B-20.

B-43 Comment noted and appreciated. The existing text in the Draft MND adequately characterizes and captures the extent of potential impacts.

B-44 Comment noted and appreciated. The existing text in the MND adequately answers the threshold question as it relates to reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

B-45 Please refer to Response to Comment B-6. The existing analysis presented in the MND under Section 3.8, Hazards and Hazardous Material, Threshold B, includes sufficient discussion regarding hazardous material safety and requirements during construction. Please note that the discussion refers the reader to Section 3.8, Hazards and Hazardous Material, Threshold A, which includes information regarding what type of plans and protocols required during construction of the proposed project.

B-46 In response to this comment, Section 3.9, Hydrology and Water Quality, Threshold D, of the MND has been revised.

The City has made revisions and clarifications to the MND. These revisions to the MND are presented in ~~strikeout~~-underline format. To the extent these changes and additions to the MND provide new information that may clarify or amplify information already found in the MND, and do not raise important new issues about significant effects on the environment, such changes are not considered a substantial revision as the term is used in Section 15073.5 of the CEQA Guidelines.

B-47 Comment noted and appreciated. Refer to Response to Comment B-3.

B-48 Comment noted and appreciated. Refer to Response to Comment B-7.

B-49 Comment noted and appreciated. The titles of each technical report provided as an appendix to the Draft MND clearly describe the contents of each report. Additionally, for each section of analysis that utilizes an appendix to support the analysis provides information necessary, including contents and methodology, from each appendix. Additionally, each appendix was made available for review during public review of the Draft MND.

B-50 Comment noted and appreciated. Please refer to Response to Comment B-8.

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Comment Letter C

JASON E. UHLEY
General Manager-Chief Engineer

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www.rcflood.org

RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT

January 10, 2017

EMAILED THIS DATE TO: cgeronimo@cityofmenifee.us

Mr. Carlos E. Geronimo, PE
City of Menifee
29714 Haun Road
Menifee, CA 92586

Dear Mr. Geronimo:

Re: Notice of Intent to Adopt a Mitigated Negative Declaration for the Bradley Road Bridge over Salt Creek Project

This letter is written in response to the Notice of Intent to Adopt a Mitigated Negative Declaration (MND) for the Bradley Road Bridge over Salt Creek Project (project). The proposed project consists of the construction of an all-weather crossing over Salt Creek in order to raise the roadway out of the floodplain. The bridge would have a 12-foot median, two 12-foot travel lanes (one in each direction), 8-foot shoulders on both sides and 5-foot pedestrian sidewalks with tubular hand railings on both sides. The existing dual pipe culvert would be removed as part of the project. At its highest point, the bridge would be raised approximately 12 feet above Salt Creek. Based on our review of the documents that were provided, the District has the following comments: C-1

1. Please be advised that any work that involves District rights of way, easements, or facilities will require an encroachment permit from the District. As part of the encroachment permit process, the applicant will be required to submit a series of documents including, but not limited to: C-2

   a. CEQA Compliance: As proposed, the project would affect existing facilities within the District's right of way. As such, the District is considered to be a Responsible Agency. Upon completion of the final environmental document, please submit a copy of the approved document to the District for consideration. Please be sure to include all appendices that were used to support the conclusions found in the environmental document.

   b. Regulatory Permits: As stated in the MND, impacts to waters will require regulatory permits (404, 401, 1602) to be obtained. Prior to issuance of the encroachment permit the District will need proof of applicable regulatory permits or documentation that these permits are not required to be submitted for review. The District will need to verify that the permits cover temporary construction impacts as well as permanent impacts. Regulatory permits may be submitted as part of your submittal for an encroachment permit. Please be sure to include plans and exhibits that indicate the specific location of where temporary and permanent impacts will occur. C-3

   c. Nesting Bird Plan: Impacts to nesting birds are proposed to be reduced by requiring a nesting bird survey to be conducted by a qualified biologist within 30 days of the initiation of project construction if ground disturbance will occur between February 1st and August 31st. If a nesting bird survey is conducted, please submit a copy of the results to the District. C-4

Mr. Carlos E. Geronimo -2- January 10, 2017
Re: Notice of Intent to Adopt a
Mitigated Negative Declaration for the
Bradley Road Bridge over
Salt Creek Project

To obtain further information on encroachment permits, contact Amy McNeill of the Encroachment Permit Section at 951.955.1266. C-4 Cont.

2. The Initial Study (IS) states that a habitat assessment was conducted and no suitable habitat for burrowing owls was found. As a result, no focused surveys were conducted and no further action was recommended in the IS. Please be advised that burrowing owls are known to be present throughout Salt Creek Channel. Due to their high rate of mobility, owls may begin to inhabit the project site before construction commences. Therefore, it may be necessary to conduct additional pre-construction surveys to ensure the site is still clear of burrowing owls before work is allowed within the District's right of way. C-5

3. Mitigation Measure BIO-2a discusses mitigation for temporary disturbances within Salt Creek Channel. Specifically, the measure commits the City to restoring riverine resources to pre-construction contours and conditions and development of a native hydroseed mix to be applied to temporarily disturbed areas. The measure commits the City to restoring those areas that are temporarily disturbed to the City's satisfaction. Please note that all plans for mitigation within the District's right of way should be coordinated with and approved by the District. Please contact Kamyar Ghods of the District's Operations Engineering Section to further discuss mitigation options. C-6

4. The Bradley Road crossing of Salt Creek Channel is located on Flood Insurance Rate Map 06065C-2055H in a Zone AE floodplain. Please be advised that modifications to the existing bridge may require a Conditional Letter of Map Revision and a Letter of Map Revision to be prepared to show the associated changes to the floodplain that may be caused as a result of the bridge reconstruction. C-7

Thank you for the opportunity to review the MND. Please forward any subsequent environmental documents regarding the project to my attention at this office. Please refer any questions regarding this letter to Kevin Cunningham at 951.955.1526 or me at 951.955.8581. C-8

Very truly yours,

KRIS FLANIGAN
Engineering Project Manager

ec: Amy McNeill

KCC:mcv
P8\210125

Response to Comment Letter C

Riverside County Flood Control and Water Conservation District
Kris Flanigan
Engineering Project Manager
January 10, 2017

C-1 Comment noted. This comment is introductory in nature and does not raise specific issues related to the adequacy of the environmental analysis in the Draft MND.

C-2 Comment noted. The City will provide all necessary documents for the encroachment permit application process to the Riverside county Flood Control and Water Conservation District (District) prior to any work within the District's right-of-way.

C-3 Please refer to Response to Comment C-2.

C-4 Please refer to Response to Comment C-2. In response to this comment, mitigation measure MM-BIO-1 has been revised to extend nesting bird season from August 15th to August 31st.

The City has made revisions and clarifications to the MND. These revisions to the Final MND are presented in ~~strikeout~~ underline format. To the extent these changes and additions to the MND provide new information that may clarify or amplify information already found in the MND, and do not raise important new issues about significant effects on the environment, such changes are not considered a substantial revision as the term is used in Section 15073.5 of the CEQA Guidelines.

C-5 Please refer to Response to Comment C-2. The City will require a pre-construction survey for burrowing owls prior to the start of work within the District's right-of-way.

C-6 Please refer to Response to Comment C-2.

C-7 The City will provide all necessary documents for any required revisions to applicable Flood Insurance Rate Maps for which the project is located in coordination with the Federal Emergency Management Agency (FEMA).

C-8 Comment noted. This comment concludes the letter and does not raise specific issues related to the adequacy of the environmental analysis in the MND.

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1 INTRODUCTION

1.1 Project Overview

1.1.1 Purpose and Need

Salt Creek is a wide, shallow, east-to-west flood control channel that directly discharges into Canyon Lake, an artificial freshwater lake located in the community of Canyon Lake off site and downstream of the proposed Bradley Road Bridge Project (project). Additionally, Salt Creek is a blue-line stream which has been designed with steep, engineered channel banks and, in many areas, is a maintained floodplain. Salt Creek was originally channelized and engineered to retain flows up to a 100-year storm event and reduce flooding, although, due to the lack of periodic maintenance and continuous sediment transport over the years, there are some areas along the creek that are no longer capable of maintaining the 100-year flows within the banks. Bradley Road crosses Salt Creek in a north-to-south direction, generally at equal elevation to Salt Creek. Due to this design, Bradley Road is prone to flooding during rain events, which has historically presented hazards to motorists and resulted in the closure of the roadway. The City of Menifee (City) is proposing to replace this low-flow crossing with an all-weather crossing (bridge), effectively raising the roadway out of the floodplain.

1.1.2 Project Location and Setting

The proposed project is located within the City of Menifee, County of Riverside, California, as shown on Figure 1, Regional Map, and Figure 2, Vicinity Map. This segment of Bradley Road is located between Potomac Drive to the north and Rio Vista Drive to the south, though the limits of work would extend beyond these streets, as shown on Figure 3, Project Site.

The project site is surrounded by residential land uses at the northern and southern ends. A vacant lot to the southwest is designated for residential land uses (City of Menifee 2013). A Riverside Transit Agency (RTA) bus stop is located on Bradley Road at Rio Vista Drive. As described previously, the main segment of Bradley Road associated with the project is bordered to the east and west by Salt Creek (designated as Open Space – Recreation) (City of Menifee 2013).

According to the City's General Plan Roadway Network (Exhibit C-3 of the General Plan), this portion of Bradley Road is designated as "Secondary (4 Lanes, Undivided)" (City of Menifee 2013). As currently built, Bradley Road is a two-lane roadway (one lane in each direction) with a painted median and dedicated left and right turn lanes at Potomac Road and Rio Vista Drive. Bradley Road is graded and paved to a width that would accommodate a four-lane roadway; however, the existing striping separates the travel lane from the shoulder, creating one travel lane

in each direction (parking is prohibited). An existing dual 30-inch concrete pipe culvert is located near the center of Salt Creek and is intended to funnel drainage under Bradley Road.

The project would be located entirely within the public right-of-way (ROW) for Bradley Road, Potomac Drive, and Rio Vista Drive. Construction would require encroachment into Salt Creek.

1.1.3 Project Description

1.1.3.1 Bradley Bridge

The proposed bridge would span approximately 335 feet across Salt Creek and would be approximately 64 feet wide, as shown on Figure 4, Conceptual Bridge Design. The bridge would have a 12-foot median, two 12-foot travel lanes (one in each direction), 8-foot shoulders on both sides (which serve as Neighborhood Electric Vehicle (NEV)/Class II bicycle lanes), and 5-foot pedestrian sidewalks on both sides with tubular hand railings. The bridge would consist of a three-span cast-in-place post-tensioned concrete box girders supported by two intermediate piers consisting of three columns each (six columns total), and two open ended abutments. The two bridge abutments would be constructed north of the Rio Vista Drive intersection and south of the Potomac Drive intersection. The existing dual pipe culvert would be removed. The bridge would be raised approximately 12 feet above Salt Creek at the bridge's highest point. Shielded, downward facing lighting would be installed along the length of the bridge.

Improvements to Bradley Road to the north and south of the proposed bridge would entail grade changes to ramp up/down to the proposed bridge abutments.

1.1.3.2 Construction

The total area of potential disturbance is approximately 4.39 acres, as shown on Figure 3. The limits of work include temporary siting and disturbance areas. For the purposes of analysis, it should be noted the total area of permanent impact (consisting of the bridge and roadway improvements to the north/south of the bridge) would be approximately 3.0 acres.

Construction is estimated to begin in March 2017 and last approximately 18 months. Grading would require approximately 3,500 cubic yards of cut and 8,000 cubic yards of fill. The potential construction phases and equipment is outlined in Table 1. During construction, Bradley Road would be shut down within the project limits; traffic would be detoured away.

Table 1
Estimated Construction Phasing

Construction Phase and Duration	Potential Equipment
Grubbing/Land Clearing, 5 days	1 crawler tractor, 2 excavators
Grading/Excavation, 4 months	2 or 3 loaders, 2 compactors, road grader, trucks
Bridge Construction, 9 months	Cranes, bidwell machine, drills, vibrators, saws, air compressors, trucks (pick up, flat bed), concrete trucks
Drainage/Utilities/Subgrade, 5 months	Road grader, loader, backhoe, skid steer, saws, air compressors, trucks, nail guns
Paving, 10 days	Paving machine, 2 steel drum rollers, rubber tire roller, sweeper, trucks

1.1.3.3 Operation and Maintenance

Upon completion of construction of the bridge, operation of this segment of Bradley Road would resume as it exists currently. The capacity of roadway at this segment would remain unchanged. Operations would be limited to ~~occasional~~ routine maintenance that would consist of paving, ~~and~~ restriping, pothole and patching repairs, debris removal, erosion control, graffiti removal, and general cleaning, -as necessary.

1.1.4 Discretionary Actions

The City of Menifee will use this MND in consideration of the project. Additionally, the following discretionary items from the City of Menifee would be required:

- Grading Permit
- Encroachment Permit

Discretionary items from other agencies include the following:

- U.S. Army Corps of Engineers – Section 404 Nationwide Permits 14 and 33
- Regional Water Quality Control Board – Section 401 Water Quality Certification
- California Department of Fish and Wildlife – Section 1602 Lake and Streambed Alteration Agreement
- Riverside County Flood Control and Water Conservation District – Encroachment Permit

1.2 California Environmental Quality Act Compliance

The City is the lead agency responsible for the review and approval of the proposed project. It has made the determination that an MND is the appropriate environmental document to be

prepared in compliance with CEQA. As provided for by CEQA Section 21064.5, an MND may be prepared for a project subject to CEQA when an Initial Study has identified potentially significant effects on the environment, but (1) revisions in the project plans or proposals made by, or agreed to by, the applicant before the proposed Negative Declaration and Initial Study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur; and (2) there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment.

The City has prepared an MND in conformance with Section 15070(a) of the State of California CEQA Guidelines. The purpose of the MND and the Initial Study Checklist/Environmental Evaluation is to determine any potentially significant impacts associated with the proposed project and incorporate mitigation measures into the project design as necessary to reduce or eliminate the potentially significant effects of the project.

1.3 Public Review Process

The Draft MND is available for a 30-day public review period (14 CCR 15105). The public review period will begin on December 12, 2016. Written comments regarding the adequacy of the Draft MND must be received by January 11, 2017. Comments should be addressed, emailed, or faxed to:

Carlos E. Geronimo, Senior Civil Engineer
29714 Haun Road
Menifee, California 92586
cgeronimo@cityofmenifee.us

The City shall prepare written responses to comments on environmental issues received during the noticed public review period. Written comments received by the City will be included in the public record.

Copies of the Draft MND and supporting materials are available online www.cityofmenifee.us and at the City offices at the address provided previously. Copies of the Draft MND are also available at the following locations:

- Paloma Valley Library – 31375 Bradley Road, Menifee, California 92584
- Sun City Library – 26982 Cherry Hills, Menifee, California 92586

2 SUMMARY OF FINDINGS

2.1 Environmental Factors Potentially Affected

As discussed in Chapter 3, Initial Study Checklist, the proposed project would have no impact or less-than-significant impacts on the following: aesthetics, agriculture and forestry resources, air quality, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, transportation and traffic, and utilities and service systems. Also, as discussed in Chapter 3, with incorporation of mitigation measures, all potentially significant effects to biological resources, cultural resources, and noise would be reduced to a less-than-significant level.

2.2 Environmental Determination

The City prepared an MND, which determined that the proposed project would have a potentially significant effect on the environment. Specific mitigation measures have been identified in Chapter 3 of this MND. The proposed project, as revised, now avoids or mitigates the potentially significant environmental effects previously identified, and the preparation of an environmental impact report is therefore not necessary.

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3 INITIAL STUDY CHECKLIST

1. Project title:

Bradley Road Bridge

2. Lead agency name and address:

City of Menifee
29714 Haun Road
Menifee, California 92586

3. Contact person and phone number:

Carlos Geronimo, PE, Senior Civil Engineer, 951.723.3722

4. Project location:

The Bradley Road Bridge Project (proposed project) is located within the City of Menifee, County of Riverside, California, as shown in Figure 1, Regional Map, and Figure 2, Vicinity Map. This segment of Bradley Road is located between Potomac Drive to the north and Rio Vista Drive to the south, though the limits of work would extend beyond these streets, as shown on Figure 3, Project Site.

5. Project sponsor's name and address:

Same as Lead Agency

6. General plan designation:

Public right-of-way (ROW) and Recreation (OS-R).

7. Zoning:

Public right-of-way and Watercourse, Watershed and Conservation (W-1)

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

The City is proposing to replace this low-flow crossing with an all-weather crossing (bridge), effectively raising the roadway out of the floodplain. The total area of potential

disturbance is approximately 4.39 acres, as shown on Figure 3. The limits of work include temporary siting and disturbance areas. Construction is estimated to begin in March 2017 and last approximately 18 months.

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

The project site is surrounded by residential land uses at the northern and southern ends. A vacant lot to the southwest is designated for residential land uses. A Riverside Transit Agency (RTA) bus stop is located on Bradley Road at Rio Vista Drive.

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

- U.S. Army Corps of Engineers - Section 404 Nationwide Permits 14 and 33
- Regional Water Quality Control Board – Section 401 Water Quality Certification
- California Department of Fish and Wildlife – Section 1602 Lake and Streambed Alteration Agreement
- Riverside County Flood Control and Water Conservation District – Encroachment Permit

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

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

DETERMINATION: (To be completed by the Lead Agency)

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 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 ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

NOVEMBER 21, 2016
Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less-Than-Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a. Earlier Analysis Used. Identify and state where they are available for review.
    b. Impacts Adequately Addressed. Identify which effects from the previously mentioned checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures that were incorporated or

refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
   a. The significance criteria or threshold, if any, used to evaluate each question; and
   b. The mitigation measure identified, if any, to reduce the impact to less than significance.

3.1 Aesthetics

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
I. AESTHETICS – Would the project**:**				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

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

Less-Than-Significant Impact. The City's General Plan Open Space and Conservation Element does not identify scenic vistas within the City limits (City of Menifee 2013). The project and its immediate vicinity are located in a generally flat area of the City, which may be visible from hillsides to the northwest and northeast. The project would replace and existing roadway with a bridge in its place. At distance, the project would

not result in substantial visual changes when viewed from nearby higher elevations. Since the project would not be visible from a designated scenic vista, impacts would be less than significant.

b) Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less-Than-Significant Impact. The nearest highway, Interstate 215 (I-215), located approximately 0.8 mile to the east, is not designated as a state scenic highway, but is considered eligible (Caltrans 2011; City of Menifee 2013). The City has designated the I-215 corridor as a scenic corridor and Newport Road (approximately 0.5 miles to the south of the project site) as an Enhanced Landscape Corridor (City of Menifee 2013). Due to the distance from I-215 and low profile of the proposed bridge, the project would not affect any scenic quality of the I-215 corridor. Additionally, the project would not adversely affect existing or planned landscape enhancements of Newport Road to the south. Therefore, impacts would be less than significant.

c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Less-Than-Significant Impact. The area within the vicinity of the proposed project is generally characterized by single-family detached residential land uses and Salt Creek, which is a wide, shallow, east-to-west flood control channel. The single-family houses consist of 1–2 story structures with similar pitched shingle roofs, chimneys, attached garages, and front yards. Views of these single-family residences from Bradley Road tend to be limited to roofs due to backyard fences/walls and tall ornamental vegetation. The single-family residences to the south of Salt Creek appear newer than those to the north.

Salt Creek is wide, flat, and offers no visually distinct features such as rock outcroppings or major vegetation. Salt Creek is typically dry, with the exception of rain events. It also acts as a visual boundary between residential land uses to the north and south. Overhead powerlines travel along the northern boundary of Salt Creek. With the exception of some vegetation associated with the nearby residential land uses and at the northern and southern ends of the project site, Bradley Road does not have any landscaping. Other nearby land uses to the south include an assisted living center, a church, commercial buildings, and a vacant lot. All buildings in the vicinity exhibit similar overall architectural features of roofing, exterior finishes, and height.

Overall, the project site and nearby land uses, while may have some degree of visual cohesiveness in basic architectural style, lack distinctive or significant visual resources such as mature, scenic trees, rock outcroppings, or landmark structures.

The proposed project would introduce a low-profile bridge (approximately 12 feet above Salt Creek at the highest point) to replace Bradley Road as it is currently built within the existing ROW. All permanent impacts would be limited to the roadway itself, while temporary impacts would extend beyond during construction (refer to Section 3.4, Biological Resources). The proposed bridge would not be constructed in a style that directly conflicts with the surrounding visual character in terms of architecture, color, height, and form. Roadway capacity would not change, similar to the existing condition.

While the proposed project would introduce a bridge with associated abutments, support, and railing, it would be replacing existing roadway infrastructure, maintaining similar overall visual character of the existing roadway. Therefore, the proposed project would have less-than-significant impacts to visual character.

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less-Than-Significant Impact. Construction would occur during permitted hours between 6:30 a.m. and 7:00 p.m. per the City's Municipal Code (City of Menifee 2016). Any lighting required would be temporary and would not occur during nighttime, with exceptions of emergencies. Street lighting would be installed along the bridge. Proposed lighting would comply with applicable sections of Chapter 6.01: Dark Sky; Light Pollution of the city's Municipal Code (City of Menifee 2016). Lighting would be shielded and direct downward towards the roadway, away from Salt Creek. No potential sources of glare are proposed. Therefore, impacts would be less than significant.

3.2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. According to the Farmland Mapping and Monitoring Program (FMMP) map for Riverside County Important Farmland 2012, Sheet 1 of 3, the project site is classified as "Urban and Built Up Land" and "Other Land" (DOC 2015a). The vacant land to the southwest of the project site is classified as "Farmland of Local Importance" by the FMMP, as well as by the City's General Plan, Open Space and Conservation Element

(City of Menifee 2013). However, this land is zoned and designated for residential use by the City's zoning and land use maps (City of Menifee 2008; 2013). The project would be located entirely within the public ROW for Bradley Road, Potomac Drive, and Rio Vista Drive. Construction would require encroachment into Salt Creek. The project would not affect the vacant lot to the southwest or result in the conversion of farmland to non-agricultural use. No impact would occur.

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

No Impact. Refer to Response 3.2(a). The project would occur entirely within previously developed public ROW and temporarily encroach upon Salt Creek. It would not conflict with any zoning for agricultural use or Williamson Act contract. No impact would occur.

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

No Impact. Refer to Response 3.2(a). The project would occur entirely within previously developed public ROW and temporarily encroach upon Salt Creek, none of which is zoned as forest land. No impact would occur.

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

No Impact. Refer to Responses 3.2(a) and 3.2(c). The project site is not zoned for or designated for forest land; it does not contain forest land. Therefore, no impact would occur.

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. Refer to Responses 3.2(a) and 3.2(c). The project would occur entirely within previously developed public ROW and temporarily encroach upon Salt Creek, none of which is zoned or designated as farmland or forest land. None of the surrounding land in the vicinity of the project site is zoned for such uses. No impact would occur.

3.3 Air Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less-Than-Significant Impact. The project site is located within the South Coast Air Basin (SCAB), which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and is within the jurisdictional boundaries of the South Coast Air Quality Management District (SCAQMD).

The SCAQMD administers the Air Quality Management Plan (AQMP) for the SCAB, which is a comprehensive document outlining an air pollution control program for attaining all California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). The latest version of the SCAQMD's AQMP is the Final 2012 AQMP (SCAQMD 2013), which was adopted by SCAQMD in December 2012 and finalized in February 2013. The 2012 Final AQMP is designed to meet applicable federal and state requirements for ozone (O_3) and particulate matter with an aerodynamic diameter equal to or less than 2.5 microns (fine particulate matter; $PM_{2.5}$). The 2012 AQMP was approved by the California Air Resources Board (CARB) on January 25, 2013, and the portions of the AQMP that address the O_3 NAAQS were approved by the United States Environmental Protection Agency (EPA) on September 3,

2014. The Final 2012 AQMP demonstrates attainment of the federal 24-hour $PM_{2.5}$ standard by 2014 in the SCAB through adoption of all feasible measures. The 2012 AQMP also updates the EPA-approved 8-hour O_3 control plan with new measures designed to reduce reliance on the Clean Air Act Section 182(e)(5) long-term measures for oxides of nitrogen (NO_x) and volatile organic compound (VOC) reductions. Notably, the SCAQMD is currently in the process of developing the 2016 AQMP, which will incorporate the latest planning and growth assumptions, the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and updated emissions inventories.

The purpose of a consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air quality plans, and thus, if it would interfere with the region's ability to comply with federal and state air quality standards. SCAQMD recommends that environmental documents should discuss the project's consistency with the current AQMP (Final 2012 AQMP), including consistency with a local government's general plan.

There are two key indicators of consistency with the AQMP:

- Whether the project would result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of the ambient air quality standards or interim emission reductions in the AQMP.
- Whether the project would exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

To address the criterion regarding the project's potential to result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of the ambient air quality standards or interim emission reductions in the AQMP, an air quality modeling analysis that identified the project's impact on air quality was performed. Results of this analysis are included in Appendix A. The California Emissions Estimator Model (CalEEMod) Version 2013.2.2 was used to model emissions for the project and analyzed for significance for Response 3.3(b). The proposed project would generate minimal air pollutant emissions during short-term construction activities as discussed in Response 3.3(b). Operational impacts associated with the project would be confined to bridge maintenance, which would be minimal.

In general, projects are considered consistent with, and would not conflict with or obstruct implementation of, the AQMP if the growth in socioeconomic factors is consistent with the underlying regional plans used to develop the AQMP. The 2012

AQMP reduction and control measures, which are outlined to mitigate emissions, are based on existing and projected land use and development. Demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) were developed by the SCAG for its 2012 Regional Transportation Plan based on general plans for cities and counties in the SCAB. The 2012 AQMP relies on the land use and population projections provided in SCAG 2012 Regional Growth Forecast, which is generally consistent with the local plans; therefore, the 2012 AQMP is generally consistent with local government plans.

To address the criterion regarding the project's potential to exceed the assumptions in the AQMP or increments based on the year of project buildout and phase, the project's land use designations and potential to generate population growth is assessed. As discussed in Section 1.1.2, Project Location and Setting, the project site is designated by the General Plan Roadway Network Map as Secondary (4 Lanes, Undivided, identified as, and is located entirely within the public right-of-way (ROW) for Bradley Road, Potomac Drive, and Rio Vista Drive. Accordingly, the project's land uses, as described in Sections 1.1.3, are consistent with the general plan roadway network designations. In addition, the proposed roadway construction project is not anticipated to result in population growth or additional long-term employment.

Overall, impacts relating to the proposed project's potential to conflict with or obstruct implementation of the applicable AQMP would be less than significant.

b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less-Than-Significant Impact. An analysis was conducted to determine whether construction and operation of the project may result in emissions of criteria air pollutants from mobile, area, and energy sources that may cause exceedances of federal and state ambient air quality standards or contribute to existing nonattainment of ambient air quality standards. The following discussion identifies potential short- and long-term impacts that would result from implementation of the project and concludes that impacts would be less than significant.

Construction of the project would result in a temporary addition of pollutants to the local airshed caused by soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment, as well as from off-site trucks hauling demolition debris and excavated earth materials and from construction workers traveling to and from the site. See Appendix A, CalEEMod Outputs – Section 3.0, Construction Detail, Trips, and Vehicle Miles Traveled (VMT). Construction emissions can vary substantially from day to day,

depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions. Therefore, an increment of day-to-day variability exists.

Pollutant emissions associated with construction activity were quantified using CalEEMod. Default values provided by the program were used where detailed project information was not available. A detailed depiction of the construction schedule—including information regarding phasing, equipment used during each phase, haul trucks, vendor trucks, and worker vehicles—is contained in the CalEEMod outputs, as provided in Appendix A.

Implementation of the project would generate construction-related air pollutant emissions from entrained dust, equipment and vehicle exhaust emissions, architectural coatings, and demolition of the existing roadway. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. The project would be required to comply with SCAQMD Rule 403 to control dust emissions generated during the roadway demolition, bridge construction, and grading activities. Standard construction practices required under Rule 403 would be employed to reduce fugitive dust emissions, including watering of the active sites approximately three times daily depending on weather conditions. Internal combustion engines used by construction equipment and haul trucks, vendor trucks, and worker vehicles would result in emissions of VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$. The application of architectural coatings, such as exterior application/interior paint and other finishes, would also produce VOC emissions, and the project shall comply with SCAQMD Rule 1113, which proscribes the sale or application of high-VOC-content architectural coatings.

It is anticipated that construction of the proposed project would occur from approximately March 2017 to September 2018. For purposes of estimating proposed project emissions, and based on information provided by the Applicant, it is assumed that construction activity would occur continuously.

The analysis contained herein is based on the following assumptions (duration of phases is approximate):

- Site preparation (clearing and grubbing): 5 days
- Grading/Excavation: 89 days (4 months)
- Building construction: 196 days (9 months)
- Utilities/Trenching/Subgrade: 110 days (5 months)
- Paving: 10 days

The construction equipment mix and number of workers for the air emissions modeling of the proposed project are shown in Table 2, Construction Equipment and Workers, as provided in Appendix A, in the CalEEMod Outputs, under Construction Detail – Off-Road Equipment. For this analysis, it was assumed that heavy construction equipment would be used 5 days a week (22 days per month). To estimate motor vehicle emissions generated by worker vehicles (i.e., light-duty trucks and automobiles), it was assumed that each worker would generate two one-way trips.

Table 2
Construction Equipment and Workers

Construction Phase	Average Daily Workers	Equipment	
		Type	*Quantity*
Grubbing/Land Clearing	10	Tractors/Loaders/Backhoes	4
		Rubber Tired Dozers	3
Grading/Excavation	16	Plate Compactor	2
		Graders	1
		Tractors/Loaders/Backhoes	3
Bridge Construction	16	Cranes	2
		Bore/Drill Rig	1
		Concrete and Mortar Mixer	1
		Concrete Saws	2
		Generator Set	1
Paving	14	Pavers	1
		Paving Equipment	1
		Rollers	3
		Sweepers/Scrubbers	1
Utilities/Trenching/Subgrade	12	Air Compressors	2
		Concrete/Industrial Saws	2
		Skid Steer Loader	1
		Tractors/Loaders/Backhoes	2

In addition to construction equipment operation and worker trips, emissions from hauling (i.e., dump trucks) and vendor trucks (i.e., delivery trucks) were estimated. Haul trucks hauling waste off site were assumed to travel 20 miles (CalEEMod default) one-way to a nearby appropriately permitted landfill. Haul truck trips were assumed to primarily be required during the grubbing/land-clearing phase and grading/excavation phase. Vendor trucks transporting concrete, steel, and other building materials were assumed during the bridge construction phase. Detailed construction assumptions, including estimated daily worker and vendor trips and total estimated haul truck trips, are provided in Appendix A.

Table 3 presents the estimated maximum daily construction emissions generated during construction of the proposed project. The values shown are the maximum summer or winter daily emissions results from CalEEMod. These estimates reflect compliance with SCAQMD standard dust control measures (Rule 403), resulting in a 61% reduction of on-site fugitive dust. Details of the emission calculations are provided in Appendix A, under 2.1, Overall Construction (Maximum Daily Emissions).

Table 3
Estimated Maximum Daily Construction Emissions – Proposed Project

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	(pounds per day)					
2017	4.90	51.84	40,27	0.05	10.03	6.47
2018	3.45	27.29	22.79	0.05	2.06	1.65
Maximum Daily	**4.90**	**51.84**	**40.27**	**.05**	**10.03**	**6.47**
Pollutant Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Threshold exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: SCAQMD Air Quality Significance Thresholds, 1993, 2015.
Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter.
See Appendix A for detailed results.
The values shown are the maximum summer or winter daily emissions results from CalEEMod.
These estimates reflect control of fugitive dust required by Rule 403.

As shown in Table 3, daily construction emissions would not exceed the SCAQMD significance thresholds for VOC, NO_x, CO, sulfur oxides (SO_x), PM_{10}, or $PM_{2.5}$ during construction in all construction years. Therefore, construction impacts of the proposed project would be less than significant.

In addition, the project must adhere to SCAQMD Rules during construction-related activities: 401 (Visible Emissions) and 431.2 (Sulfur Content of Liquid Fuels). These measures, which were not included in the quantitative model, would further assist in minimizing less-than-significant project-generated fugitive dust emissions and combustion pollutants.

As explained in Section 1.1.3.3, Operation, upon completion of construction of the bridge, operation of this segment of Bradley Road would resume as it exists currently and the capacity of roadway at this segment would remain unchanged. Operational activities would be limited to occasional maintenance that would consist of paving and restriping as necessary. Potential temporary paving and restriping maintenance would require less intense activities (e.g., fewer pieces of equipment, less vehicle trips, shorter duration) and associated less emissions than analyzed in the project's construction emissions

assessment, as shown in Table 3. Maintenance would not result in a substantial source of long-term operational emissions and the project will not require additional employees to maintain the bridge; therefore, there will be no additional routine vehicular traffic or associated mobile source emissions. Based on these considerations, air quality impacts associated with maintenance activities would be less than significant.

c) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less-Than-Significant Impact. In considering cumulative impacts from the project, the assessment must specifically evaluate a project's contribution to the cumulative increase in pollutants for which the SCAB is designated as nonattainment for the NAAQS or CAAQS. A project would be considered to have a significant cumulative impact if the project's contribution accounts for a significant proportion of the cumulative total emissions (i.e., it represents a "cumulatively considerable contribution" to the cumulative air quality impact). If a project's emissions would exceed the SCAQMD significance thresholds, it would be considered to have a cumulatively considerable contribution to nonattainment status in the SCAB. If a project does not exceed thresholds and is determined to have less-than-significant project-specific impacts, it may still contribute to a significant cumulative impact on air quality. In this case, the basis for analyzing the project's cumulative considerable contribution is the project's potential to exceed SCAQMD thresholds and its consistency with the most recent AQMP.

The SCAB is a nonattainment area for O_3, PM_{10}, and $PM_{2.5}$ under the NAAQS and/or CAAQS. The nonattainment status in the SCAB is the result of cumulative emissions from motor vehicles, off-road equipment, commercial and industrial facilities, and other emission sources. Projects that emit these pollutants or their precursors (e.g., VOC and NO_x for O_3,) potentially contribute to poor air quality.

Implementation of the project would generate emissions of VOCs, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ associated with construction and operations. However, as indicated in Table 3 short-term construction emissions associated with the proposed project would not exceed SCAQMD significance thresholds. In addition, the project is not anticipated to entail routine operational activities. Furthermore, as discussed in Response 3.3(a), the project would not conflict with the SCAQMD 2012 AQMP, which addresses the cumulative emissions in the SCAB. Accordingly, the project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants or their precursors (e.g., VOC and NO_x for O_3,). Thus, this impact would be less than significant.

d) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less-Than-Significant Impact. Localized project impacts associated with construction and operational emissions of criteria pollutants and toxic air contaminants (TACs) are assessed in the following text.

Localized Significance Threshold Analysis

Sensitive receptors (residences and schools) that would potentially be affected by construction activity in the project area are residences located approximately 10 feet from the proposed construction boundary, and other single-family residential units around the periphery, or within 25 meters (82 feet) of the project site. The SCAQMD localized significance threshold (LST) values for Source-Receptor Area (SRA) 24 (Perris Valley), where the project is located in were used. Because the SCAQMD does not provide lookup tables for 4.39 acres, the LST values for two and five acres within Source–Receptor Area 24 with a receptor distance of 25 meters (the shortest distance provided by the SCAQMD) were interpolated to generate LSTs for 4.39 acres.[1] Construction activities associated with the project would result in temporary sources of on-site fugitive dust and construction equipment emissions. Off-site emissions from haul trucks, vendor trucks, and worker vehicle trips are not included in the LST analysis because these emissions will not occur within this receptor distance. The maximum daily on-site construction emissions generated during construction of the proposed project, which are rounded to the nearest whole number, are presented in Table 4 and compared to the SCAQMD localized significance criteria for SRA 24 to determine whether project-generated on-site construction emissions would result in potential LST impacts.

Table 4
Construction Localized Significance Thresholds Analysis

Pollutant	Project Construction (pounds per day)	LST Criteria (pounds per day)	Exceeds LST?
NO_2	52	250	No
CO	39	1,436	No
PM_{10}	10	12	No
$PM_{2.5}$	6	7	No

Source: SCAQMD 2008a.
Notes: LST = localized significance threshold; NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter

[1] Although receptors would be about 10 feet from the project boundary, the SCAQMD recommends that projects with boundaries closer than 25 meters to the nearest receptors should use the LSTs for receptors located at 25 meters (SCAQMD 2008a).

These estimates reflect control of fugitive dust required by Rule 403.
To determine the LST criteria for the project, the LSTs for a 4.39-acre site (interpolated value using the 2- and 5-acre site LSTs) with sensitive receptors located within a 25-meter distance from construction activity were used. Maximum on-site emissions were estimated to occur during the grubbing/land clearing phase in the 2016.

As shown in Table 4, proposed construction activities would not generate emissions in excess of site-specific LSTs; therefore, site-specific project construction impacts would be less than significant.

e) Would the project create objectionable odors affecting a substantial number of people?

Less-Than-Significant Impact. Odors are a form of air pollution that is most obvious to the public and can present problems for both the source and surrounding community. Although offensive odors seldom cause physical harm, they can be annoying and cause concern. Construction and operation of the project would not create objectionable odors affecting a substantial number of people.

Odors would be potentially be generated from vehicles and equipment exhaust emissions during construction of the project. Odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment. Such odors are temporary and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be less than significant.

Land uses and industrial operations typically associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The bridge construction project would not result in the creation of a land use that is commonly associated with odors. Therefore, project operations would result in an odor impact that would be less than significant.

3.4 Biological Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Fish and Game or U.S. Fish and Wildlife Service?				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

This section is based on the Biological Resources Report (biology report) prepared by Dudek in August 2016. The biology report is included as Appendix B to this MND. Detailed background and methodologies regarding the biological resources analysis are found in Appendix B.

Survey Summary

A general biological survey, delineation of jurisdictional waters, vegetation mapping, and burrowing owl habitat assessment of the project site was conducted by Dudek Biologist Tricia Wotipka on October 22, 2015. A general biological survey update was conducted on August 12, 2016.

A portion of the project site is located within a Narrow Endemic Plant Species Survey Area (NEPSSA) for the following species: Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis*), California Orcutt grass (*Orcuttia californica*), and Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*). However, the NEPSSA is located within developed portions

of the project site, and therefore are not suitable for rare plants. No focused plant surveys were conducted due to lack of suitable habitat.

Burrowing owl habitat includes, but is not limited to, native and non-native grassland, interstitial grassland within shrub lands, shrublands with low-density shrub cover, golf courses, drainage ditches, earthen berms, unpaved airfields, pastureland, dairies, fallow fields, and agricultural use areas. They also often use constructed structures, including earthen berms; cement culverts; cement, asphalt, rock, or wood debris piles; or openings beneath cement or asphalt pavement. Burrowing owls are often found within, under, or in close proximity to built structures.

Dudek conducted a habitat assessment for burrowing owl surveys on October 22, 2015 in accordance with the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* (County of Riverside 2006). Due to the lack of suitable habitat, no focused surveys were conducted.

Salt Creek is an east-to-west trending managed, maintained flood control channel confined by unvegetated, earthen levees to the north and south and managed by the Riverside County Flood Control District (RCFCD). A jurisdictional delineation of waters of the United States, including wetlands, under the jurisdiction of the ACOE, CDFW, and California Regional Water Quality Control Board (RWQCB) was conducted in the study area by Dudek Biologist Tricia Wotipka on October 22, 2015.

Existing Biological Conditions and Survey Results

Vegetation Communities and Land Cover

The project site is characterized by four land covers: developed, disturbed, open channel, and ruderal (Figure 5). These land covers are summarized in Table 5. The developed land refers to Bradley Road, Potomac Drive, and Rio Vista Drive. The disturbed areas refer to land that is not developed yet lack vegetation and generally are the result of severe or repeated mechanical perturbation. The levees are mapped as disturbed and are void of vegetation. Open channel refers to the main, active low-flow channels within the Salt Creek floodplain. Areas mapped as open channel are characterized by dry, unvegetated, cobble-lined streambeds.

The project site is dominated by ruderal vegetation and the majority of the site is mapped as ruderal. The Salt Creek floodplain and areas between the levees are mapped as ruderal. On site, common ruderal species include narrowleaf plantain (*Plantago lanceolata*), Cuman ragweed (*Ambrosia psilostachya*), Russian thistle (*Salsola tragus*), bermudagrass (*Cynodon dactylon*), bristly ox-tongue (*Helminthotheca echioides*), crowndaisy (*Glebionis coronaria*), and redstem stork's bill (*Erodium cicutarium*).

Table 5
Existing Land Covers in the Project Site

Vegetation Community or Land Cover	Existing Acreage
Developed	2.8
Disturbed	0.4
Open Channel	0.1
Ruderal	1.1
Grand Total	**4.4**

Plants and Wildlife Observed

The majority of the project site has been frequently maintained and disturbed, and as a result, supports limited plant diversity and richness. In total, 17 vascular plant species, consisting of 9 native species (53%) and 8 non-native species (47%), were recorded on site during surveys. A full list of plant species observed is provided in Appendix B.

The site supports limited habitat diversity since it is primarily characterized by developed, disturbed, and ruderal land covers. Consequently, the wildlife diversity and richness on the project site is also limited. No special-status species were detected. The following eight wildlife species were detected: house finch (*Haemorhous mexicanus*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), red-tailed hawk (*Buteo jamaicensis*), house sparrow (*Passer domesticus*), mourning dove (*Zenaida macroura*), common buckeye (*Junonia coenia*), and brush rabbit (*Sylvilagus bachmani*); a list of these species is also provided in Appendix B.

Special-Status Plants and Wildlife

No federally or state-listed plant species or other special-status plant species were observed during the site visit. As described previously, a portion of the project site is located within the NEPSSA 3 for the following species: Munz's onion, San Diego ambrosia, many-stemmed dudleya, spreading navarretia, California Orcutt grass, and Wright's trichocoronis. However, the project site is primarily developed or disturbed, or consists of ruderal species, and therefore, is not suitable for any of these plants.

No special-status wildlife species were observed during focused surveys. The potential for special-status wildlife occurring on the project site was assessed based on habitat associations and disturbance conditions. The project site is within a MSHCP burrowing owl survey area. A burrowing owl habitat assessment was conducted in October 2015; all burrows and/or structures on site were inspected for burrowing owl sign or suitability. The project site did not

have any burrowing owl sign or suitable burrows; therefore, focused surveys for burrowing owl were not conducted.

Jurisdictional Wetlands and Waters

There are no federal jurisdictional wetlands of the United States (U.S.), as regulated by the ACOE under CWA, within the project site. A portion of the project site is located within the active floodplain of Salt Creek (Figure 5). The main, active low-flow channel ranges in width from 3 feet to 5 feet and is mapped as open channel with a sandy bottom intermixed with small river cobble. The active floodplain boundary, where water overtops the main, active low-flow channel during larger rain events, is approximately 500 feet wide, on average, and extends from the toe of the southern levee to the toe of the north levee. The main, active low-flow channel supported clearly discernible channel morphology (i.e., clear bed and bank) with evidence of channel incision, shelving, drainage patterns, and drift lines. Areas delineated as active floodplain (0.9 acre) and low-flow open channel (0.1 acre) total 1.0 acre and are considered waters of the U.S. and state subject to regulation by the ACOE, CDFW, and RWQCB.

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant with Mitigation Incorporated.

Special-Status Plants

The MSHCP identifies special-status plant species survey areas through Narrow Endemic Plant Species Survey Area (NEPSSA) or Criteria Area Species Survey Areas (CASSA) based on the presence of select soils, existing occurrence data for special-status plants, and personal communication with the USFWS and Fred Roberts, a botanist with extensive experience in Western Riverside County. Habitat type was also a consideration. These areas represent the portions of the plan area that the agencies determined to have moderate to high potential to occur. As described previously, the project site is located within a NEPSSA and a habitat assessment concluded that the site does not have habitat that is suitable for the species identified in the NEPSSA.

No special-status plant species were identified on site during the site visits, and no NEPSSA species have moderate or high potential to occur. Construction-related dust, soil erosion, and water runoff can affect any potentially occurring NEPSSA species that may occur on site or adjacent to the site. However, no special-status plant species are expected

to occur on site or adjacent to the site. Therefore, no significant direct or indirect short-term or long-term impacts to special-status plant species would occur.

Special-Status Wildlife

The project was designed and would be implemented to minimize impacts to special-status wildlife species. Burrowing owl is identified by the MSHCP as having potential to occur on site; however, the 2015 site visit determined the project site did not contain suitable habitat for burrowing owl. Burrowing owl is not expected to occur on site due to the lack of suitable burrows and habitat. The project site is surrounded by residential development, and more than half the site supports developed land uses including heavily traversed roadways and residential development. Substantial long-term impacts due to noise, lighting, vibration, and traffic collisions to nocturnal wildlife are not expected because the proposed project is an improvement to an existing roadway and bridge, and would not result in new or increased long-term direct or indirect impacts to burrowing owls.

Birds protected under the Migratory Bird Treaty Act could be impacted if construction activities occur during the nesting season, resulting in a significant impact. MM-BIO-1 would reduce impacts to potential nesting birds through pre-construction nesting surveys. Therefore, impacts would be less than significant with incorporation of MM-BIO-1.

Mitigation Measures

MM-BIO-1 All vegetation removal and ground disturbance activities should be planned outside the nesting season for raptors (February 1 to August ~~15~~31) and outside the peak nesting season for birds (March 1 to August ~~15~~31) if practicable. If vegetation removal would occur during those time periods, a pre-construction survey for active nests shall be conducted by a qualified biologist no more than 1 week prior to the onset of ground disturbance activities. If active nests are found on the site, disturbance or removal of the nest shall be avoided until the young have fledged and the nest is no longer active. Depending on the species, site conditions, and the proposed construction activities near the active nest, a buffer distance may be prescribed, as determined by a qualified biologist, to the satisfaction of the City of Menifee Community Development Department.

b) Would the project 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?

No Impact. Construction of the proposed project would result in direct permanent impacts and direct temporary impacts to the land covers on site, as presented in Table 6 and shown on Figure 6.

Table 6
Permanent and Temporary Impacts to Land Covers

Vegetation Community/Land Cover	Permanent Impact (acres)	Temporary Impact (acre)
Developed	–	–
Disturbed	0.4	–
Open Channel	–	0.1
Ruderal	0.4	0.7
Total	**0.8**	**0.8**

The project site consists of developed, disturbed, open channel, and ruderal lands, and are not sensitive vegetation communities. Therefore, no significant, direct short- or long-term impacts to sensitive vegetation communities would occur.

During construction activities, indirect edge effects may include dust, which could disrupt plant vitality in the short term, or construction-related soil erosion and water runoff. In the absence of best management practices (BMPs), construction-related minimization measures to control dust, erosion, and runoff, and compliance with National Pollutant Discharge Elimination System (NPDES) requirements, indirect impacts to on-site water features could occur. However, standard construction BMPs and implementation of a SWPPP, which would include construction-related minimization measures to control dust, erosion, and runoff, including, but not limited to, straw bales and silt fencing, would be implemented to minimize these adverse effects.

Areas surrounding the project are developed, disturbed, open channel and ruderal lands, and are not sensitive vegetation communities. Therefore, no significant, indirect short- or long-term impacts to sensitive vegetation communities would occur.

c) Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant with Mitigation Incorporated. The project has been designed to avoid permanent impacts to the main, active low-flow channel and a majority of the active floodplain. Implementation of the proposed project would result in direct permanent impacts to 0.2 acre and direct temporary impacts to 0.8 acre of waters of the U.S. and state and riverine habitat defined under the MSHCP, as shown on Figure 6. To comply with the local, state, and federal regulations for permanent and temporary impacts to waters of the U.S. and state and riverine habitat defined under the MSHCP, the following agency permits and determinations are required, or verification that they are not required would be obtained:

- The riverine habitat impacts shall comply with the MSHCP and addressed in a Determination of Biologically Equivalent or Superior Preservation (DBESP).
- A Clean Water Act Section 401/404 permit issued by the California RWQCB and the ACOE for all project-related disturbances of waters of the U.S.
- A Section 1602 Streambed Alteration Agreement issued by the CDFW for all project-related disturbances to any streambed.

However, impacts would be significant before mitigation is incorporated. With implementation of measures MM-BIO-2a, MM-BIO-2b, and MM-BIO-3, impacts to jurisdictional waters and riverine habitat defined under the MSHCP would be reduced to less than significant.

Indirect impacts to jurisdictional waters could result primarily from adverse indirect edge effects. Indirect edge effects are defined as side effects of the project that do not directly impact habitat, vegetation communities, species, or water quality, but might have an effect on the long-term vitality of these resources if left unmanaged. During construction activities, edge effects may include dust, which could disrupt water quality in the short-term or construction-related soil erosion and water runoff. With implementation of water quality BMPs, there would be no long-term indirect impacts to on-site or adjacent jurisdictional waters.

No long-term indirect impacts are anticipated because the proposed project improvements to an existing road and bridge would not result in new or increased long-term indirect impacts, such as increased pollutants or human disturbance in the active floodplain.

Mitigation Measures

MM-BIO-2a After completion of project construction, to mitigate for the temporary disturbance of 0.8 acre of waters of the U.S./state, all temporarily disturbed riverine resources shall be restored in place to pre-construction contours and conditions following construction. The City shall work with the RCA, ACOE, RWQCB, and CDFW to develop a native hydroseed mix that shall be applied to the temporarily disturbed areas and monitored for a period of 12 months to confirm germination., to the satisfaction of the City of Menifee Community Development Department.

MM-BIO-2b Mitigation for direct, permanent impacts to 0.2 acre of non-wetland waters of the U.S./state shall accomplished at a 3:1 ratio through the provision of a one-time fee for 0.6 acre of credits at an approved off site mitigation bank and/or in-lieu fee program to adequately compensate for no net loss of waters of the U.S./State. At this time, the City is considering the purchase of riverine re-establishment credits from the Riverside-Corona Resource Conservation District (RCRCD) In-Lieu Fee Project Site (ILF Project), located adjacent to the main stem of the Santa Ana River, west of the Hamner Avenue Bridge over the Santa Ana River, near Norco/Eastvale, Riverside County, California. In the event this option is not available, the City shall coordinate and work closely with the RCA, ACOE, RWQCB, and CDFW to identify an appropriate alternative.

MM-BIO-3 To minimize potential indirect impacts to jurisdictional waters, the following shall be implemented during construction to the satisfaction of the City of Menifee Community Development Department:

Best management practices shall be implemented to avoid indirect impacts to jurisdictional waters, including:

a. Vehicles and equipment shall not be operated in ponded or flowing water except as described in the permits.

b. Water containing mud, silt, or other pollutants from grading or other activities shall not be allowed to enter jurisdictional waters or be placed in locations that may be subjected to high storm flows.

c. Spoil sites shall not be located within locations that may be subject to high storm flows, where spoils might be washed back into drainages.

d. Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil, or other petroleum products, or any other substances that could be hazardous to vegetation or wildlife resources, resulting from project-related activities, shall be prevented from contaminating the soil and/or entering avoided jurisdictional waters.

e. No equipment maintenance shall occur within jurisdictional waters and no petroleum products or other pollutants from the equipment shall be allowed to enter these areas or enter any off-site state-jurisdictional waters under any flow.

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

Less Than Significant with Mitigation Incorporated. The project site is bound to the north and south by residential development. The Salt Creek floodplain is approximately 500 feet wide and runs east-to-west, and from the project site, flows for approximately 4 miles until it enters Railroad Canyon Reservoir, which is commonly referred to as Canyon Lake. Some wildlife may move through the floodplain; however, movement of medium and large wildlife through the region is limited.

The project site is not located within an MSHCP core or linkage. There is an existing constrained linkage approximately 2.8 miles to the northeast and proposed linkages 4.5 miles west and south of the project site. The areas targeted for conservation are not adjacent to the project site, and as a result, the proposed project is not anticipated to significantly affect wildlife movement within the conservation areas.

There are no wildlife corridors within the project site; therefore, there would be no impacts to wildlife corridors.

Project implementation would not interfere substantially with the movement of any native resident or migratory bird species. The project site has a limited potential to support nesting resident and migratory birds, but significant impacts are possible. The City would comply

with all federal and state regulations that protect nesting and migratory bird species and will implement MM-BIO-1 avoiding nesting birds; therefore, potentially significant impacts to migratory birds would be reduced to below a level of significance.

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

No Impact. The City's Municipal Code contains regulations for tree preservation. The project would not result in removal of trees. The proposed project would comply with all goals and policies related to biological resources in the City's General Plan. No impact would occur.

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

No Impact. The project site is located within the City of Menifee which has four conservation areas: a small portion of Proposed Core 2, a small portion of Proposed Constrained Linkage 16, a small portion of Proposed Constrained Linkage 17, and a small portion of Proposed Linkage 8. The project site is not within these conservation areas and does not overlap any Criteria Cells; therefore, there are no conservation requirements for the project.

Chapter 6 of the MSHCP outlines additional implementation measures with which permittees must comply. The relevant section of the MSHCP, requirements, and project's consistency with the requirement are discussed in the following text:

- MSHCP Section 6.1.2, Riparian/Riverine and Vernal Pools Guidelines.
- MSHCP Section 6.1.3, Narrow Endemic Plant Species: The project site is within a Narrow Endemic Plant Species Survey Area.
- MSHCP Section 6.1.4, Urban Wildlands/Interface Guidelines.
- MSHCP Section 6.3.2, Additional Survey Requirements: This section of the MSHCP outlines survey requirements for criteria area plant species, burrowing owl, mammals, and amphibians. The project site is within a burrowing owl additional survey area.

Riparian/Riverine and Vernal Pool Habitat (MSHCP Section 6.1.2)

The MSHCP defines riparian/riverine areas as "lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year." In addition, riverine areas (streams) include areas that "do not contain riparian vegetation, but that have water flow for all or a portion of the year, and contain biological functions and values that contribute to downstream habitat values for covered species inside the MSHCP Conservation Area " (County of Riverside 2003).

Riparian/Riverine Habitat

The project site does not support habitat suitable for riparian-dependent species as defined as riparian habitat under the MSHCP.

In the project site, Salt Creek is riverine habitat and consists of an active floodplain and an active, low-flow channel. These features support conveyance of surface and groundwater flows west towards Canyon Lake, which is located adjacent to Critical Cells and within a Proposed Linkage. The proposed project would only temporarily impact the active channel and the majority of the floodplain would not be permanently impacted. The functions and values of Salt Creek would be maintained through avoidance and minimization measures as previously described in this section. Therefore, the project is consistent with the MSHCP Section 6.1.2, Riparian/Riverine and Vernal Pool Habitat Guidelines.

Vernal Pools and Fairy Shrimp Habitat

No vernal pools, stock ponds, ephemeral pools, or other similar features were observed during biological surveys within the project site.

Narrow Endemic Plant Species (MSHCP Section 6.1.3)

The MSHCP has additional survey requirements for areas outside of the Conservation Areas. The project site is within NEPSSA 3 for the following species: Munz's onion, San Diego ambrosia, many-stemmed dudleya, spreading navarretia, California Orcutt grass, and Wright's trichocoronis. However, Dudek conducted a site visit on October 22, 2015, and determined that the project site is not suitable for any of these plants due to the elevation range and/or suitable habitat (Appendix C). Narrow endemic plant species (NEPS) are not expected to occur within the project site, and no additional actions are required.

Urban/Wildlands Interface Guidelines (MSHCP Section 6.1.4)

The project site is not located near any Criteria Cells or any other targeted Conservation Areas. Because the areas targeted for conservation are not adjacent to the project site, the proposed project is not anticipated to affect a Conservation Area and would not result in long-term adverse edge effects, such as drainage, toxics, lighting, noise, or invasive species, that would affect biological resources within outside areas proposed for MSHCP conservation. The project would not facilitate unauthorized public access, domestic animal predation, illegal trespass, or dumping into the MSHCP Conservation Areas. In addition, the project would not include manufactured slopes that might extend into a MSHCP Conservation Area. Therefore, the project is consistent with the MSHCP Urban/Wildlands Interface Guidelines.

Additional Survey Requirements (MSHCP Section 6.3.2)

The project site is located within the MSHCP Burrowing Owl Survey Area. A habitat assessment for burrowing owls was conducted by Dudek biologist Tricia Wotipka on October 22, 2015. No suitable burrowing owl habitat was found on the project site. Therefore, the project is consistent with the MSHCP Additional Survey Requirements.

Conclusion

The project is consistent with the MSHCP and no impact would occur.

3.5 Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

This section is based on Phase I Cultural Resource Inventory (cultural report) prepared by Dudek in January 2016. The cultural report is included as Appendix C to this MND. Detailed background and methodologies regarding the cultural resources analysis are found in Appendix C.

Previous Cultural Resources Investigations

In 2014, a Draft Technical Memorandum was completed for the proposed project. Dudek prepared a cultural resources constraints analysis consisting of archival research for the project to identify any previously recorded cultural or built environment resources within the proposed project site that may be impacted during construction (Appendix C).

A California Historical Resources Information System (CHRIS) records search was conducted for the proposed project site and a half-mile radius by a Dudek archaeologist on March 27, 2014, at the Eastern Information Center (EIC), located on the campus of the University of California Riverside. This search included a review of all previously recorded prehistoric, historic, and built-environment resources located within the project site and a half-mile radius, including Department of Parks and Recreation (DPR) Site Records, technical reports, archival resources, and ethnographic references. Additional sources reviewed included the National Register of Historic Places (NRHP), California Office of Historic Preservation (OHP) Historic Properties Data File, the Archaeological Determinations of Eligibility listings, California Points of Historical Interest, California Historical Landmarks, and the Caltrans Bridge Inventory.

The EIC records search results indicate that 11 previous investigations have been conducted within a half-mile of the project area with two studies completely overlapping the project site, suggesting that the entirety of the project site has be previously surveyed for cultural resources (Appendix C). Neither of these studies identified cultural resources within the proposed project site.

No previously recorded cultural resources were identified within the proposed project site as a result of the records search. One resource was identified within the half-mile search radius, approximately 500 meters southwest of the project site (Appendix C).

Native American Coordination

As part of the process of identifying cultural resources within or near the project site, Dudek contacted the NAHC to request a review of the Sacred Lands File (SLF) on December 8, 2015. The NAHC emailed a response on January 5, 2016, which stated that the SLF search was completed with negative results. Because the SLF search does not include an exhaustive list of Native American cultural resources, the NAHC suggested contacting Native American individuals and/or tribal organizations who may have direct knowledge of cultural resources in or near the project site. The NAHC provided the contact list along with the SLF search results.

Dudek prepared and sent letters to each of the nineteen (19) persons and entities on the contact list requesting information about cultural sites and resources in or near the project site. These letters, mailed on February 15, 2016, contained a brief description of the proposed project, a summary of the SLF and EIC search results, cultural resources survey results, and a reference map. Recipients were asked to reply within 30 days of receipt of the letter should they have any knowledge of cultural resources in the area.

Dudek received three responses to the initial inquiry letters. All responses were forwarded to the City of Menifee. Documents related to the NAHC SLF search and initial Native American outreach efforts are included in Appendix C. The following paragraphs provide a brief summary of the responses:

- Katie Croft, Archaeologist, Tribal Historic Preservation Office of the Aqua Caliente Band of Cahuilla Indians (ACBCI), stated that the project site is within the Tribe's Traditional Use Area (TUA). Ms. Croft conducted a review of the ACBCI registry and identified cultural resources within the vicinity of the project site; however, the ACBCI deferred consultation to the Soboba Band of Luiseño Indians who are closer in proximity to the project site.
- Vincent Whipple, Manager of the Rincon Cultural Resources Department, Rincon Band of Luiseño Indians, identified the project site as within the Luiseño Aboriginal Territory but outside of Rincon's Historic Boundaries. As such, Mr. Whipple did not have any additional information regarding the project site and deferred consultation to the Pechanga Band of Luiseño Indians or the Soboba Band of Luiseño Indians.
- Joseph Ontiveros, Cultural Resources Director of the Soboba Band of Luiseño Indians noted that the Tribe would be requesting consultation with the City of Menifee under Assembly Bill (AB) 52. Mr. Ontiveros indicated that the project site is within the Tribe's TUA. A review of the Tribe's in-house database indicated that the project site is in proximity to known sites. The proposed project is subject to compliance with AB 52 (PRC 21074) which requires consideration of impacts to "tribal cultural resources" as part of the CEQA process, and requires the lead agency, the City of Menifee, to notify any groups (who have requested notification) of the proposed project who are traditionally or culturally affiliated with the geographic area of the project. Section 3.17, Tribal Cultural Resources, describes the City's efforts to comply with AB 52 and the results of the government-to-government consultation process.

Dudek Archaeologist Adriane Dorrler conducted the intensive-level pedestrian survey on November 23, 2015, using standard archaeological procedures and techniques. All field practices met the Secretary of Interior's standards and guidelines for a cultural resources inventory.

a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Less Than Significant Impact. The EIC had one historic topographic map of the project site on file. The 1953 USGS 7.5-foot Romoland Quadrangle shows that Sun City (north of the project area) was still largely undeveloped at this time. However, Bradley Road is depicted on the 1953 map, suggesting that Bradley Road is of historic-age (greater than 50 years). Additional historic map research was conducted on NETR Online (historicaerials.com). The 1901 1:250,000 Elsinore topographic sheet does depict Bradley Road, suggesting that the road has been in this location for over a century. The 1901 sheet does not depict Salt Creek, which presently runs beneath Bradley Road. There is also a road that runs from present-day Bradley Road to the east, following the path of the creek. This road appears to have been removed in the late 1950s. Historic topographic maps from the years 1905, 1909, 1913, 1924, 1936, and 1941 indicate that very little change occurred within the project area during the first half of the twentieth century. The 1943 USGS 7.5' Quadrangle is the first map to show visible changes in and around the project area. The creek running beneath Bradley Road is depicted for the first time, and the roads noted on the earlier maps running east of the project area are no longer depicted. Interestingly, these roads are visible on the 1954 map, but disappear again from all subsequent topographic maps of the project area. The map review indicates that I-15 was constructed through the Menifee area between 1948 and 1954, which coincides with the time in which the area started to undergo residential development.

Documentation of Bradley Road complied with the Office of Historic Preservation (OHP) and Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44716–44740) and the California Office of Historic Preservation Planning Bulletin Number 4(a). Newly identified built environment resource Bradley Road was recorded on California Department of Parks and Recreation Form DPR 523 (Series 1/95), using the *Instructions for Recording Historical Resources* (OHP 1995).

Bradley Road traverses the City of Menifee for a total distance of approximately 4 miles, spanning north-south between the towns of Paloma Valley and Sun City. This segment of road within the project site is an asphalt-concrete two-lane road with turning lanes at Potomac Drive and Rio Vista Drive. The segment of road is bordered by residential development at the northern and southern terminus, although the majority of the road segment is bordered by Salt Creek. No historic artifacts were found in association with the road, but modern trash is found along the sides of the road.

No major historic event or individual is associated with this road and it was not a historic factor in the development of this area. The road segment retains its original alignment as mapped, but has been impacted by modern improvements (such as grading and paving) and alterations in response to historical flooding events. The segment of Bradley Road does not retain any integrity and is therefore found not eligible under state level eligibility criteria. Impacts would be less than significant.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant With Mitigation Incorporated. No previously recorded cultural resources were identified within the proposed project site as a result of the records search. No new archaeological resources were identified during the intensive-level pedestrian survey. Given the extent of previous development and the cultural resources inventory, there is low potential for the inadvertent discovery of cultural resources during ground disturbing activities during construction, which would result in a potentially significant impact. However, in the event that potential cultural resources are discovered during ground-disturbing activities, mitigation measure MM-CUL-1, which requires cultural monitoring during construction, would reduce potential impacts to less than significant.

Mitigation Measures

MM-CUL-1 If during ground disturbance activities, unique cultural resources are discovered that were not assessed by the archaeological report(s) and/or environmental assessment conducted prior to project approval, the following procedures shall be followed. Unique cultural resources are defined, for this condition only, as being multiple artifacts in close association with each other, but may include fewer artifacts if the area of the find is determined to be of significance due to its sacred or cultural importance as determined in consultation with the Native American Tribe(s).

i. All ground disturbance activities within 100 feet of the discovered cultural resources shall be halted until a meeting is convened between the developer, the archaeologist, the tribal representative(s) and the Community Development Director to discuss the significance of the find.

ii. At the meeting, the significance of the discoveries shall be discussed and after consultation with the tribal representative(s)

and the archaeologist, a decision shall be made, with the concurrence of the Community Development Director, as to the appropriate mitigation (documentation, recovery, avoidance, etc.) for the cultural resources.

iii. Grading of further ground disturbance shall not resume within the area of the discovery until an agreement has been reached by all parties as to the appropriate mitigation.

iv. Treatment and avoidance of the newly discovered resources shall be consistent with the Cultural Resources Treatment and Monitoring Agreements entered into with the appropriate tribes. This may include avoidance of the cultural resources through project design, in-place preservation of cultural resources located in native soils and/or re-burial on the Project property so they are not subject to further disturbance in perpetuity.

v. Pursuant to Calif. Pub. Res. Code § 21083.2(b) avoidance is the preferred method of preservation for archaeological resources and cultural resources. If the landowner and the Tribe(s) cannot agree on the significance or the mitigation for the archaeological or cultural resources, these issues will be presented to the City Community Development Director for decision. The City Community Development Director shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological resources, recommendations of the project archeologist and shall take into account the cultural and religious principles and practices of the Tribe. Notwithstanding any other rights available under the law, the decision of the City Community Development Director shall be appealable to the City Planning Commission and/or City Council.

c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less-Than-Significant Impact. The proposed project is primarily located within Salt Creek and extends into nearby developed areas. No unique geological features exist within or nearby the project site. According to the City's General Plan Open Space and Conservation Element, the project is located in an area with low paleontological sensitivity (City of Menifee 2013). Given the extent of previous development within the

project site, it is unlikely that any paleontological resources remain intact within the area of excavation. Impacts would be less than significant.

d) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less-Than-Significant Impact. The discovery of human remains is always a possibility during ground disturbances. Should any human remains be encountered during ground disturbing activities, the project would comply with the State of California Health and Safety Code Section 7050.5. As required by Health and Safety Code Section 7050.5, no further disturbance shall occur in areas that could contain human remains until the San Diego County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. The requirements of PRC Section 5097.98 state that the County Coroner must be notified of the find immediately. If the human remains are determined to be prehistoric, the Coroner will notify the NAHC within 24 hours. The NAHC will then determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Compliance with existing regulations for proper protocol of inadvertent discovery of human remains would ensure that impacts would be less than significant.

3.6 Geology and Soils

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
VI. GEOLOGY AND SOILS – Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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 waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Less-Than-Significant Impact. The project site is located within seismically active Southern California, an area where several faults and fault zones are considered active by the California Division of Mines and Geology. The Alquist-Prolo Earthquake Fault Zoning Map identifies important faults with high potential to produce ground rupture. The nearest fault included in Priolo Earthquake Fault Zoning Map (DOC 2015b) is the Elsinore Fault within Elsinore Lake Quadrangle. The fault is approximately 9 miles to the southwest of the project site. Because there are no known faults that occur within one mile of the project site, ground rupture from an earthquake event would not be anticipated to affect the proposed project. Although the project site is not associated with an Alquist-Priolo earthquake fault zone, the proposed project would be designed and built to the latest seismic requirements which would minimize adverse effects from earthquakes and strong seismic activity. Impacts would be less than significant.

ii) Strong seismic ground shaking?

Less-Than-Significant Impact. The soil type of the project area is generally characterized in the Menifee General Plan as "Young Alluvial Valley and Channel Deposits," which include unconsolidated sand and silt deposits. This information in conjunction with information regarding the Elsinore Fault would be used to prepare the structural engineering design and specifications for the bridge structure to meet seismic safety design and engineering requirements to minimize potential adverse effects from ground shaking. Therefore, impacts from strong seismic ground shaking would be less than significant.

iii) Seismic-related ground failure, including liquefaction.

Less-Than-Significant Impact. As identified in the City's General Plan Safety Element there is a potential for liquefaction in parts of the City where young, unconsolidated alluvial deposits are present. Because the project would be located parallel to the seasonal Salt Creek, the project site is identified as an area with potential for liquefaction (City of Menifee 2013). The project would be designed to current seismic safety standards, which includes accounting for soil type and liquefaction potential. Therefore, impacts from seismic-related ground failure would be less than significant.

iv) Landslides?

No Impact. The project area and vicinity is generally flat with no steep slopes. According to the City's General Plan Safety Element, the project site is not located within an area subject to landslide hazard (City of Menifee 2013). Therefore, no impact would occur.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less-Than-Significant Impact. Refer to Section 3.9, Hydrology and Water Quality. Construction of the proposed project would involve ground-disturbing activities for grading and excavation would increase erosion potential of the project site. However, construction of the proposed project would result in more than 1 acre of land disturbance, and therefore, the proposed project would be required to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the Statewide Construction General Permit; the project would implement BMPs in accordance with SWPPP requirements to control for erosion. Therefore, impacts would be less than significant.

c) Would the project 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?

Less-Than-Significant Impact. The proposed project would be located within a previously developed area. As part of the design process, geotechnical studies of the project site would be prepared to assess geologic conditions, including potential for landslide, lateral spreading, subsidence, liquefaction, and other hazards. These geotechnical studies would inform the design process. Additionally, the project would be designed and built to current seismic and geologic safety standards to minimize potential risk of adverse effects. Impacts would be less than significant.

d) Would the project 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?

Less-Than-Significant Impact. Soils mapping for the project site from the U.S. Department of Agriculture (USDA) Soil Survey Geographic Database (USDA 2016) shows the project site consists of soils in the Traver-Domino-Willows soil association, which includes saline-alkali soils largely located along floodplain areas of the San Jacinto River and Salt Creek. As part of the design process of the proposed bridge, geotechnical studies, including expansion potential, would inform seismic safety design considerations to minimize potential for adverse geologic effects. Impacts would be less than significant.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The project does not include septic tanks. No impact would occur.

3.7 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
VII. GREENHOUSE GAS EMISSIONS – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Existing Setting

Greenhouse gases (GHGs) are gases that absorb infrared radiation in the atmosphere. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature. Global climate change concerns are focused on whether human activities are leading to an enhancement of the greenhouse effect. Principal GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), O_3, and water vapor. If the atmospheric concentrations of GHGs rise, the average temperature of the lower atmosphere will gradually increase. The effect each GHG has on climate change is measured as a combination of the mass of its emissions and the potential of a gas or aerosol to trap heat in the atmosphere, known as its global warming potential (GWP), which varies among GHGs. Total GHG emissions are expressed as a function of how much warming would be caused by the same mass of CO_2. Thus, GHG gas emissions are typically measured in terms of pounds or tons of CO_2 equivalent (CO_2E).[2]

Climate change is the result of numerous, cumulative sources of GHGs. Thus, GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective (CAPCOA 2008). This approach is consistent with that recommended by the California Natural Resource Agency, which noted in its Public Notice for the proposed CEQA amendments that the evidence indicates in most cases, the impact of GHG emissions should be considered in the context of a cumulative impact, rather than a project-level impact (CNRA 2009a). Similarly, the *Final Statement of Reasons for Regulatory Action* for amendments to the CEQA Guidelines confirms that an environmental impact report or other environmental document must analyze the incremental contribution of a project to GHG levels and determine whether those emissions are cumulatively considerable (CNRA 2009b).

Local or Micro Conditions

Neither the State of California nor the SCAQMD has adopted emission-based thresholds for GHG emissions applicable to the proposed project. The Governor's Office of Planning and Research issued a technical advisory titled *CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act Review*, which states that "public agencies are encouraged but not required to adopt thresholds of significance for environmental impacts. Even in the absence of clearly defined thresholds for GHG emissions, the law requires that such emissions from CEQA projects must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative

[2] The CO_2 equivalent for a gas is derived by multiplying the mass of the gas by the associated GWP, such that metric tons of CO_2E = (metric tons of a GHG) × (GWP of the GHG). For example, the GWP for CH_4 is 21. This means that emissions of 1 metric ton of CH_4 are equivalent to emissions of 21 metric tons of CO_2.

climate change impact" (OPR 2008). Furthermore, the advisory document indicates that "in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact,' individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice" (OPR 2008).

The CNRA adopted amendments to the CEQA Guidelines on December 30, 2009, which became effective on March 18, 2010. With respect to GHG emissions, the amended CEQA Guidelines state in Section 15064.4(a) that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. The CEQA Guidelines note that an agency may identify emissions by either selecting a "model or methodology" to quantify the emissions or by relying on "qualitative analysis or other performance based standards" (14 CCR 15000 et seq.). Section 15064.4(b) provides that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment:

1. The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).

In addition, Section 15064.7(c) of the CEQA Guidelines specifies that "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (14 CCR 15064.7(c)). The CEQA Guidelines do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA.

Status of Proposed SCAQMD Thresholds

The SCAQMD has not adopted recommended numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential and commercial development projects. In October 2008, SCAQMD presented to the *Governing Board the Draft*

Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold (SCAQMD 2008b). The guidance document was not adopted or approved by the Governing Board. This document explored various approaches for establishing a significance threshold for GHG emissions. Among the concepts discussed, the document considered a "de minimis," or screening, threshold to "identify small projects that would not likely contribute to significant cumulative GHG impacts" (SCAQMD 2008b). As further explained in this document, "projects with GHG emissions less than the screening level are considered to be small projects, that is, they would not likely be considered cumulatively considerable" (SCAQMD 2008b). The SCAQMD formed a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established. The SCAQMD proposed three tiers of compliance that may lead to a determination that impacts are less than significant, including the following:

1. Projects with GHGs within budgets set out in approved regional plans to be developed under the SB 375 process
2. Projects with GHG emissions that are below designated quantitative thresholds:
    a. Industrial projects with an incremental GHG emissions increase that falls below (or is mitigated to be less than) 10,000 metric tons (MT) CO_2E per year
    b. Commercial and residential projects with an incremental GHG emissions increase that falls below (or is mitigated to be less than) 3,000 MT CO_2E per year, provided that such projects also meet energy efficiency and water conservation performance targets that have yet to be developed
3. Projects that purchase GHG offsets that, either alone or in combination with one of the three tiers mentioned previously, achieve the target significance screening level

From December 2008 to September 2010, the SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. The most recent working group meeting on September 28, 2010 (SCAQMD 2010), proposed two options lead agencies can select from to screen thresholds of significance for GHG emissions in residential and commercial projects, and proposes to expand the industrial threshold to other lead agency industrial projects. Option 1 proposes a threshold of 3,000 MT CO_2E per year for all residential and commercial projects. Option 2 proposes a threshold value by land use type where the numeric threshold is 3,500 MT CO_2E per year for residential projects, 1,400 MT CO_2E per year for commercial projects, and 3,000 MT CO_2E per year for mixed use projects (SCAQMD 2010).

Although not directly applicable to the proposed bridge construction project, the proposed project's GHG emissions will be compared to the SCAQMD-recommended threshold of 3,000 MT CO_2E per year for mixed-use project. As discussed previously, this threshold is intended to be applied to the proposed project's emissions to determine whether they would result in a cumulatively considerable contribution to the cumulative impacts of global climate change.

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

Less-Than-Significant Impact. Construction of the project would result in GHG emissions that are primarily associated with use of off-road construction equipment and on-road construction and worker vehicles. CalEEMod was used to calculate the annual GHG emissions based on the same construction assumptions used for the air quality analysis, as described in Section 2.C(b). The SCAQMD Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold recommends that "construction emissions be amortized over a 30-year project lifetime, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies" (SCAQMD 2008b). Thus, the total construction GHG emissions were calculated, amortized over 30 years, for comparison with the GHG significance threshold of 3,000 MT CO_2E. The determination of significance, therefore, is addressed in the operational emissions discussion in the following text.

On-site sources of GHG emissions include off-road equipment, and off-site sources include hauling, including off-site disposal of soil, and vendor (delivery) trucks and worker vehicles. Table 7 presents construction emissions for the project from years 2017 to 2018.

Table 7
Estimated Construction GHG Emissions – Proposed Project

Year	MT CO_2	MT CH_4	MT N_2O	MT CO_2E
2017	370.07	0.07	0.00	371.50
2018	293.29	0.05	0.00	294.30
Total	**663.36**	**0.12**	**0.00**	**665.80**

Notes: MT = metric tons; CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2E = carbon dioxide equivalent.
See Appendix C for detailed results.

As shown in Table 7, the estimated total GHG emissions during project construction would be approximately 666 MT CO_2E. Amortized over 30 years, construction GHG emissions would be approximately 22 MT CO_2E per year.

As explained in Section 1.1.3.3, Operation, and Section 3.3, Air Quality, upon completion of construction of the bridge, operational activities would be limited to occasional maintenance that would consist of paving and restriping as necessary. Project maintenance would not result in a substantial source of long-term operational GHG emissions, and the project will not require additional employees to maintain the bridge; therefore, there will be no additional routine vehicular traffic or associated mobile source GHG emissions.

Estimated project-generated amortized GHG emissions of 22 MT CO_2E per year are well below SCAQMD threshold of 3,000 MT CO_2E for mixed-use projects. Therefore, impacts resulting from GHG emissions would less than significant. Additional details regarding these calculations are provided in Appendix A.

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

Less-Than-Significant Impact. The Climate Change Scoping Plan, approved by CARB on December 12, 2008, provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. As such, the Scoping Plan is not directly applicable to specific projects. Moreover, the Final Statement of Reasons for the amendments to the CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009b). Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (hybrid, electric, and more fuel-efficient vehicles) and associated fuels, among others. Additionally, as discussed previously, Executive Order S-3-05 established a goal to reduce statewide GHG emissions to the 1990 level by 2020 and to reduce statewide GHG emissions to 80% below the 1990 level by 2050.

As explained in Response 3.7(a), the project would result in minimal short-term construction emissions, and operational activities are limited to temporary maintenance. As such, the proposed project would not conflict with any applicable plans, policies or

regulations adopted for the purposes of reducing GHG emissions. Therefore, the cumulative impact would be less than significant.

3.8 Hazards and Hazardous Materials

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

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less-Than-Significant Impact. The proposed project would involve the transport of fuels, lubricants, and various other liquids needed for operation of construction equipment at the site via service trucks. Workers would likely commute to the project site via private vehicles, and would operate construction vehicles/equipment within the public ROW and within Salt Creek. Materials hazardous to humans, wildlife, and sensitive environments would be present during construction of the proposed project. These materials include fuels, equipment fluids, cleaning solutions and solvents, and lubricants.

Direct impacts to human health and biological resources from accidental spills of small amounts of hazardous materials from construction equipment during construction would potentially occur. However, compliance with federal, state, and local regulations including the California Division of Occupational Safety and Health (CalOSHA), California Accidental Release Prevention (CalARP) Program, the Hazardous Material Management Act and Hazardous Waste Control Act that provide safety and control measures for those materials handled on site would ensure that potentially significant impacts would not occur. During the construction period, standard BMPs would be applied, such as those required by the SWPPP (refer to Section 3.9, Hydrology and Water Quality), to ensure that all hazardous materials (e.g., construction equipment fuels) are stored properly and that no hazards occur during this phase of the project, in compliance with applicable regulations.

During operation, the proposed project would not produce, generate, handle, dispose, or discharge hazardous materials. Impacts would be less than significant.

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less-Than-Significant Impact. As discussed in Response 3.8(a), construction would comply with applicable federal, state, and local regulations, which provide for safety and control measures that would minimize hazardous materials risk to human health and the environment. The proposed project consists of transportation roadway improvements that would not require the use of hazardous materials during operation. Therefore, the proposed project would not result in reasonably foreseeable upset and accident conditions involving the release of hazardous materials and impacts would be less than significant.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. The nearest school is Chester W. Morrison Elementary located more than a half-mile to the south of the project site. Therefore, the project would not handle or emit hazardous materials within one-quarter mile of a school. No impact would occur.

d) Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The project site is not identified on any list compiled pursuant to Government Code Section 65962.5 (Cortese List), including the Department of Toxic Substances Control (DTSC) EnviroStor database, the list of leaking underground storage tank sites from the Water Board GeoTracker database, the list of solid waste disposal site identified by the Water Board, the list of "active" Cease and Desist Orders and Clean up and Abatement Orders, and the list of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code (DTSC 2016; SWRCB 2016; CalEPA 2016). Therefore, the project site is not listed on the Cortese List, and no impact would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The proposed project would not be located within an airport land use plan, and is not located within 2 miles of a public airport or public use airport. The nearest airport is Perris Valley Airport, located approximately 5 miles to the north, in the City of Perris. The project would not expose people residing or working in the project area to airport hazards. Therefore, there would be no impact.

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?

No Impact. The proposed project would not be located within the vicinity of a private airstrip. The nearest private airstrip is Skylark Field, located approximately 7.5 miles to the southwest, in the City of Lake Elsinore. The project would not expose people residing or working in the project area to air traffic hazards. Therefore, there would be no impact.

g) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less-Than-Significant Impact. The City of Menifee does not have an adopted emergency response plan or emergency evacuation plan. However, the City's General Plan Safety Element includes policies for disaster preparedness and identifies critical facilities. As discussed in detail in Section 3.16, Transportation and Traffic, the proposed project would temporarily close Bradley Road within the project site during construction. Traffic control and coordination with emergency service providers, affected property owners and users of the roadway would minimize potential adverse effects related to temporarily closing the roadway during construction.

It should be noted that the proposed project would prevent potential future inadequate access along this segment of Bradley Road during rain events. Upon completion of construction, the project would result in a beneficial impact to the circulation network. Impacts would be less than significant.

h) Would the project 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?

No Impact. According to the City's General Plan Safety Element, the project is not located within or adjacent to fire hazards zones (City of Menifee 2013). Therefore, the project would not increase the risk of wildland fires, and no impact would occur.

3.9 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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 a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☒	☐
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

a) Would the project violate any water quality standards or waste discharge requirements?

Less-Than-Significant Impact. The proposed project is located within the Santa Ana Regional Water Quality Control Board (RWQCB) jurisdiction that oversees water quality in various areas within Orange, Riverside, and San Bernardino Counties. The RWQCB has adopted the Water Quality Control Plan for the Santa Ana River Basin that designates beneficial uses of the region's surface water and groundwater, identifies water quality objectives for the reasonable protection of those uses, and establishes an implementation plan to achieve the objectives. The Basin Plan identifies intermittent beneficial uses of Salt Creek for recreation, warm water ecosystem, and wildlife habitat.

Construction of the proposed project would involve ground-disturbing activities for grading and excavation that could result in sediment discharge in stormwater runoff.

Additionally, construction would involve the use of oil, lubricants, and other chemicals that could be discharged from leaks or accidental spills. These potential sediment and chemical discharges during construction would have the potential to impact water quality in receiving water bodies. However, construction of the proposed project would result in more than 1 acre of land disturbance and therefore, the proposed project would be required to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the Statewide Construction General Permit. This requires implementation of water quality Best Management Practices (BMPs) to ensure that water quality standards are met, and that stormwater runoff from the construction work areas do not cause degradation of water quality in receiving water bodies. Some of these BMPs include use of silt screening or fiber filtration rolls, appropriate handling and disposal of contaminants, pesticide application restrictions, litter control and pickup, and vehicle and equipment repair and maintenance in designated areas. Implementation of SWPPP requirements would minimize potential hydrology and water quality impacts during construction and impacts would be less than significant.

Operation of the proposed project would not directly produce water or wastewater discharge. Sediment, oils, and other debris from vehicles may collect on the proposed bridge and be discharged during rain events. Such potential indirect discharges would not be substantially different when compared to the existing condition. The proposed project would not interfere with the water quality objectives in the Basin Plan for Salt Creek or any discharge requirements. Impacts would be less than significant.

b) Would the project 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 (i.e., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

Less-Than-Significant Impact. The proposed project may require water for construction-related activities including, but not limited to, watering dirt or dusty materials, or washing down staging or paved areas. Any water required for construction would be minimal and temporary. Therefore, the project would not substantially deplete groundwater supplies.

The proposed project would replace Bradley Road with a bridge raised above Salt Creek. The area under the bridge (the former roadway) would be maintained as a flood control channel; there would not be an increase of on the ground impervious surfaces. The

project would allow for groundwater infiltration in the Bradley Road alignment where it was not previously able to occur. Therefore, impacts would be less than significant.

c) Would the project 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?

Less-Than-Significant Impact. The project would beneficially alter drainage pattern at Bradley Road within Salt Creek. With the replacement of Bradley Road with a bridge, and removal of the existing culverts, flow within Salt Creek would be improved during rain events. Bradley Road would no longer flood during rain events and the overall drainage pattern and flow direction of Salt Creek would not change. The area currently developed as Bradley Road would be maintained as a flood control channel, which may result in an increase in erosion. However, when compared to the greater extent of Salt Creek, any potential erosion would not be substantial and would likely remain within Salt Creek. Therefore, impacts would be less than significant.

d) Would the project 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?

Less-Than-Significant Impact. Refer to Response 3.9(c). The project would beneficially alter the drainage pattern within Salt Creek at the project site. ~~The replacement of Bradley Road with a bridge would reduce potentially flooding during rain events~~The proposed elevation of the project above Salt Creek would alleviate road closures due to flooding events. Impacts would be less than significant.

e) Would the project 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?

Less-Than-Significant Impact. Upon completion of construction, flows from the proposed bridge would run to the north and the south and eventually into Salt Creek. The proposed bridge would include adequate drainage to move flows away from the bridge to minimize overloading of the existing drainage systems to the north and south of the project. Given the similar size of the proposed bridge when compared to the existing condition, the proposed bridge would not result in an increase in potential source of polluted runoff or runoff quantity. Therefore, impacts would be less than significant.

f) Would the project otherwise substantially degrade water quality?

Less-Than-Significant Impact. Refer to Responses 3.9(a)-(e). The project would not directly result in water, wastewater, or pollutant discharge. Potentially pollutants deposited on the proposed bridge from erosion and vehicles would not be substantially different from the existing condition. Impacts would be less than significant.

g) Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. The proposed project does not include housing. No impact would occur.

h) Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Less-Than-Significant Impact. The project is within the floodway zone for Salt Creek, according to the City's General Plan Safety Element (City of Menifee 2013). However, the purpose of the proposed project is to prevent and minimize potential future flooding of the portion of Bradley Road within Salt Creek by replacing it with a bridge, effectively raising it out of the floodplain. The project would decrease flooding hazards and thus result in a beneficial impact.

i) Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Less-Than-Significant Impact. Refer to Response 3.9(h). The purpose of the project is to prevent and minimize potential future flooding of the portion of Bradley Road within Salt Creek. The project would decrease risk of flooding. Impacts would be less than significant.

j) Inundation by seiche, tsunami, or mudflow?

No Impact. Due to distance from the Pacific Ocean, the proposed project is not located within a tsunami inundation zone. The project is not located downslope of any large bodies of water that could adversely affect the site in an event of earthquake-induced failures or seiches or wave oscillations in an enclosed or semi-enclosed body of water. Additionally, the project site and vicinity is generally flat with no large slopes that may pose potential for mudflows. No impact would occur.

3.10 Land Use and Planning

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
X. LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	☐	☐	☒	☐
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

a) Would the project physically divide an established community?

Less-Than-Significant Impact. Typical types of projects that typically have the potential to physically divide an established community are projects involving the construction of an airport, stadium, railroad track, roadways, and freeways. The project involves improvement to an existing roadway to create a bridge to alleviate flooding. While the proposed project would result in the division of established communities during construction of the proposed bridge (refer to Section 3.16, Transportation and Traffic), adequate detour signage and notification of users of Bradley Road would minimize impacts. Additionally, this closure would be temporary and Bradley Road would continue functioning during operation similar to existing conditions. After construction of the proposed bridge, the proposed project would improve access between communities. Therefore, impacts would be less than significant.

b) Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The project would be located entirely within the public ROW for Bradley Road, Potomac Drive, and Rio Vista Drive. Construction would require encroachment into Salt Creek. The project would result in new roadway infrastructure within the current alignment of Bradley Road by replacing the current crossing at Salt Creek with a bridge. No other land uses are proposed. The proposed bridge would not alter the capacity of this

segment of Bradley Road. The project would otherwise be in compliance with the City's General Plan, Zoning, and municipal code. No impact would occur.

c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The project's consistency with the MSHCP is discussed in Section 3.4, Biological Resources. As described, the project would be consistent with the MSHCP requirements, and no impact would occur.

3.11 Mineral Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XI. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. According to the Department of Conservation's Updated Mineral Land Classification Map for Portland Cement Concrete-Grade Aggregate in the Temescal Valley Production Area, Riverside County, California, the project site is classified as Mineral Resource Zone – 3, which is defined as areas containing known or inferred mineral occurrences of undetermined mineral resource significance (DOC 2014).

Additionally, the project site is designated as an "Urban Area" in the City's General Plan, Mineral Resources Zone exhibit (City of Menifee 2013). The project would not result in the loss of availability of a known mineral resource. Further, mineral extraction land uses would be incompatible with the existing surrounding residential and institutional land uses. No impact would result.

b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

No Impact. Refer to Response 3.11(a). The project would not result in the loss of availability of a known mineral resource. Further, mineral extraction land uses would be incompatible with the existing surrounding residential and institutional land uses. No impact would result.

3.12 Noise

This section is based in part on noise modeling conducted by Dudek and is included as Appendix D to this MND.

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

a) Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant with Mitigation Incorporated. As described in Section 1.1, Project Overview, the resulting bridge would not result in an increase in vehicle capacity or traffic volumes. Therefore, there would be no increase in long-term (operational) traffic noise. Potential noise impacts are limited to short-term (construction-related) activity noise.

Construction would be carried out in the following major phases:

- Grubbing and land clearing
- Grading and excavation
- Bridge construction
- Utilities/trenching/subgrade
- Paving

Construction for all major construction phases would involve standard heavy equipment that would be employed for any routine construction project of this scale; construction equipment with substantially higher noise-generation characteristics (such as pile drivers, rock drills, blasting) would not be necessary for this project. Construction noise is difficult to quantify because of the many variables involved, including the specific equipment types, size of equipment used, percentage of time, condition of each piece of equipment, and number of pieces of equipment that will actually operate on-site. The range of maximum noise levels for various types of construction equipment at a distance of 50 feet is depicted in Table 8. The noise values represent maximum noise generation, or full-power operation of the equipment. As an example, a loader and two dozers, all operating at full power and relatively close together, would generate a maximum sound level of approximately 90 A-weighted decibels (dBA) at 50 feet from their operations. As one increases the distance between equipment, and/or the separation of areas with simultaneous construction activity, dispersion and distance attenuation reduce the effects of separation noise sources added together. In addition, typical operating cycles may involve two minutes of full-power operation, followed by three or four minutes at lower levels. The average noise level during construction activity is generally lower, since maximum noise generation may only occur up to 50% of the time.

Table 8
Construction Equipment Noise Emission Levels

Equipment	Typical Sound Level (dBA) 50 Feet from Source
Roller	74
Concrete vibrator	76
Pump	76
Saw	76
Backhoe	80
Air compressor	81
Generator	81
Compactor	82
Concrete pump	82
Crane, mobile	83
Concrete mixer	85
Dozer	85
Grader	85
Impact wrench	85
Loader	85
Pneumatic tool	85
Jackhammer	88
Truck	88
Paver	89

Source: FTA 2006.

The nearest off-site sensitive receptor to the project site are single-family residential land uses north of the project site. The single-family residential properties and the northern side of the project site share the same property line boundary. Single-family residences would be located within approximately 5 feet of the nearest point of planned construction. Such points would also be limited to construction staging as opposed to noise generating construction activities.

Project construction would take place both near and far from adjacent, existing noise-sensitive uses. For example, construction of the project along the northern and southern project boundaries would take place within approximately 30 feet of existing residences for relatively short periods of time, but during construction of other project components, construction would be more than 400 feet away. On average, construction noise would occur at distances of approximately 115 feet from existing noise-sensitive uses.

The Federal Highway Administration's (FHWA) Roadway Construction Noise Model (RCNM) (FHWA 2011) was used to estimate construction noise levels at the nearest

occupied noise-sensitive land use. Input variables for the RCNM consist of the receiver/land use types, the equipment type and number of each (e.g., two graders, a loader, a tractor), the duty cycle for each piece of equipment (e.g., percentage of hours the equipment typically works per day), and the distance from the noise-sensitive receiver. No topographical or structural shielding was assumed in the modeling. The RCNM has default duty-cycle values for the various pieces of equipment, which were derived from an extensive study of typical construction activity patterns. Those default duty-cycle values were used for this noise analysis.

Using the FHWA's RCNM construction noise model and construction information (types and number of construction equipment by phase), the estimated noise levels from construction were calculated for a representative range of distances, as presented in Table 9, Construction Noise Model Results Summary. The RCNM inputs and outputs are provided in Appendix D.

Table 9
Construction Noise Model Results Summary

Construction Phase	Construction Noise at Representative Receiver Distances (L_{eq} (dBA))		
	30 Feet	*114 feet*	*430* Feet
Grubbing and Land Clearing	85	76	65
Grading and Excavation	88	79	69
Bridge Construction	88	78	67
Utilities/Trenching/Subgrade	85	75	65
Paving	85	75	65

Leq = equivalent continuous sound level

As presented in Table 9, the highest noise levels are predicted to occur during grading/excavation and bridge construction, when noise levels from construction activities would be approximately 88 dBA equivalent continuous sound level (L_{eq}) at the nearest existing residential land uses approximately 30 feet away. More typically, construction noise levels would be in the 75 to 79 dBA L_{eq} range.

The City of Menifee regulates noise from stationary sources (i.e., non-transportation sources) through its Municipal Code (Chapter 9.09, Noise Regulations). Section 9.09.05 of the Municipal Code establishes an exterior standard for residential land uses based upon a 10-minute L_{eq} of 65 dBA from 7 a.m. to 10 p.m. and 45 dBA from 10 p.m. to 7 a.m. As presented in Table 9, construction would potentially result in temporary generation of noise above the noise thresholds defined in the City's Municipal Code, resulting in a potentially significant impact. However, with incorporation of mitigation

measure MM-NOI-1, which includes construction noise reduction measures, temporary noise impacts during construction would be reduced to less than significant.

Mitigation Measures

MM-NOI-1 The following measures shall be incorporated into construction plans prior to the start of construction, to the satisfaction of the City of Menifee Community Development Department:

1. All noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with mufflers; air-inlet silencers where appropriate; and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specifications. Mobile or fixed "package" equipment (e.g., arc welders, air compressors) shall be equipped with shrouds and noise-control features that are readily available for that type of equipment.
2. Electrically powered equipment shall be used instead of pneumatic or internal-combustion-powered equipment, where feasible.
3. Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors.
4. The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.

b) Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less-Than-Significant Impact. As described in Section 1.1, Project Overview, the proposed bridge would not result in an increase in vehicle capacity or traffic volumes. Therefore, there would be no increase in long-term (operational) traffic-related vibration. Potential vibration impacts are limited to short-term (construction-related) activities.

Groundborne vibration is a small, rapidly fluctuating motion transmitted through the ground that diminishes (attenuates) fairly rapidly over distance. Anticipated groundborne vibration from heavy equipment operations during construction of the proposed project was evaluated and compared to relevant vibration impact criteria using the Federal Transit Administration's Transit Noise and Vibration Impact Assessment, which provides vibration impact criteria and recommended methodologies and guidance for assessment

of vibration effects (FTA 2006). At a distance of approximately 30 feet (the distance to the nearest noise/vibration-sensitive land uses), the vibration level from heavy construction machinery (such as a loaded truck or a drilling rig) would be between approximately 0.058 and 0.068 peak particle velocity in inches per second. Vibration levels of this magnitude would likely be perceptible at nearby residences, but they would be well below the Federal Transit Administration's threshold of potential damage for normal structures (0.20 peak particle velocity in inches per second), and would not be considered excessive. Therefore, short-term construction impacts associated with exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels would be less than significant.

c) Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less-Than-Significant Impact. As addressed in Response 3.12(a), no increase in long-term (operational) traffic noise would result from implementation of the proposed project. Impacts would be less than significant.

d) Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than Significant with Mitigation Incorporated. Noise levels from construction of the proposed project were addressed in Response 3.12(a). The noise during construction is considered a substantial temporary increase above existing ambient levels, hence resulting in a potentially significant impact. With the incorporation of mitigation measure MM-NOI-1, which includes construction noise reduction measures, impacts would be reduced to a level below significance.

e) Would the project be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The proposed project would not be located within an airport land use plan, and is not located within 2 miles of a public airport or public use airport. The nearest airport is Perris Valley Airport, located approximately 5 miles to the north, in the City of Perris. The project would not expose people residing or working in the project area to excessive noise levels from aircraft. Therefore there would be no impact.

f) Would the project be within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The proposed project would not be located within the vicinity of a private airstrip. The nearest private airstrip is Skylark Field, located approximately 7.5 miles to the southwest, in the City of Lake Elsinore. The project would not expose people residing or working in the project area to excessive noise levels from aircraft. Therefore, there would be no impact.

3.13 Population and Housing

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XIII. POPULATION AND HOUSING – Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

a) Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact. The proposed project involves the construction of a bridge that would extend over Salt Creek in order to this segment of Bradley Road from flooding during storm events. Roadway capacity would not increase. No housing units or employment opportunities are proposed that would directly facilitate population growth; no utilities or infrastructure would be expanded as a result of the project. The proposed project would not directly or indirectly induce population growth. No impact would occur.

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

No Impact. The project would be located entirely within the public ROW for Bradley Road, Potomac Drive, and Rio Vista Drive. Construction would require encroachment

into Salt Creek. The proposed project would not displace existing housing that would necessitate the construction of replacement housing; therefore, there would be no impact.

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

No Impact. The project would be located entirely within the public ROW for Bradley Road, Potomac Drive, and Rio Vista Drive. Construction would require encroachment into Salt Creek. The proposed project would not displace any people and would not necessitate the construction of replacement housing; no impact would occur.

3.14 Public Services

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XIV. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire protection?

Less-Than-Significant Impact. The proposed project would not include the addition of housing, schools, or other community facilities that may result in an increase in demand for fire protection services. During the construction phase of the proposed project, Bradley Road would be temporarily shut down (refer to Section 3.16, Transportation and Traffic). Construction would be coordinated with the Riverside County Fire Department/CAL FIRE to ensure that service providers are properly

notified of the road closure and adequate rerouting is achieved. Any impact on services would be temporary; no elements of the proposed project would contribute to the need for an increase in the existing level of fire protection services such that existing fire protection facilities would require expansion. Impacts would be less than significant.

Police protection?

Less-Than-Significant Impact. During the construction phase of the proposed project, Bradley Road would be temporarily shut down (refer to Section 3.16, Transportation and Traffic). Construction would be coordinated with the Riverside County Sheriff Department to ensure that service providers are properly notified of the road closure and adequate rerouting is achieved.

During operation, the bridge could potentially attract loiterers and graffitists. However, such events would minimally affect provision of police services. The proposed project would not include the addition of housing, schools, or other community facilities that may result in an increase in demand for police protection services. Demand for law enforcement services would not exceed existing demand in a way that would require additional law enforcement personnel or substantially alter acceptable service ratios. Any impact on services would be temporary; no elements of the proposed project would contribute to the need for an increase in the existing level of police protection services such that existing police protection facilities would require expansion. Impacts would be less than significant.

Schools?

No Impact. The proposed project would not involve a housing component that would result in population growth and increase demands on existing schools. The proposed project would also not expand any existing infrastructure that would result in the need for new or expanded educational infrastructure. Therefore, no impact would occur.

Parks?

No Impact. The proposed project would not include the addition of housing, schools, or other community facilities that might contribute to the increase in use of existing neighborhood or regional park. The proposed project would not affect the provision of the proposed recreational trail contemplated by the City to travel along the northern boundary of Salt Creek and would include a portion of the planned NEV/Class II bicycle lanes along Bradley Road (City of Menifee 2013). No impact would occur to park facilities or services.

Other public facilities?

No Impact. As discussed previously, the proposed project does not include any component that would typically result in an increase in demand for public facilities such that facilities would require expansion. No impact would occur.

3.15 Recreation

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XV. RECREATION				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

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

No Impact. The proposed project does not involve a population generating land use that could contribute to the increase in use of existing neighborhood or regional parks or other recreational facilities. The proposed project would contribute to the physical deterioration of recreational facilities and no impacts would result.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

Less-Than-Significant Impact. The proposed project includes a portion of the planned NEV/Class II bicycle lanes along Bradley Road as indicated in the City's General Plan Circulation Element. These lanes are part of the proposed bridge, the impacts of which are disclosed throughout this MND. The provision of the NEV/Class II bicycle lanes would not result in any additional impacts beyond what is disclosed throughout this MND. Therefore, impacts would be less than significant. ..

3.16 Transportation and Traffic

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC – Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☒
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐

a) Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

No Impact. This brief analysis focuses on operation of the proposed project. For potential impacts to circulation during construction, refer to Response 3.16(e). The proposed bridge would not alter the roadway capacity of this segment of Bradley Road.

Therefore, the proposed project would result in the continuation of the City's circulation network as currently operating. Operation of the proposed project would not alter vehicular circulation, transit operations, or bicycle circulation from the existing condition. The project would include pedestrian sidewalks and NEV/Class II bicycle lanes on both sides of the proposed bridge where none exist on this portion of Bradley Road currently, increasing pedestrian/cyclist safety and connectivity. Therefore, no impact would occur.

b) Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

No Impact. Refer to Response 3.16(a). Upon completion, the proposed project would not result in a change in roadway capacity for this segment of Bradley Road as the project does not include an increase in lanes from what is existing. No impact to level of service or other means of measuring the effectiveness of roadways would occur.

c) Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact. The proposed project is not located within an airport land use compatibility plan, and the nearest airport is the Perris Valley Airport, located approximately 5 miles to the north, in the City of Perris. The project does not propose tall structures that may affect air traffic patterns. No impact would occur.

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

Less-Than-Significant Impact. The proposed project would be designed to applicable roadway and bridge safety standards to minimize hazards. The project would not introduce sharp curves or affect line of sight at intersections. The project would result in a beneficial impact as it would raise this portion of Bradley Road out of the floodplain, preventing future flooding hazards to motorists, cyclists, and pedestrians. Therefore, impacts would be less than significant.

e) Would the project result in inadequate emergency access?

Less-Than-Significant Impact. Upon completion of construction, Bradley Road would continue operations as it exists currently. This discussion focuses on both access for

emergencies and access overall. During construction, Bradley Road would be shut down within the project limits; traffic would be detoured away along Newport Road, Murrieta Road, McCall Boulevard, and other smaller roadways as necessary. Traffic control and detours are incorporated into project design. The City would coordinate with public service providers (fire, police, and emergency medical) and the RTA during the planning stages of the project to ensure proper discussion of potential rerouting of service during construction, including alternation in responder location and temporary bus stops. Early notification, coordination, and planning with public service providers and RTA would minimize potential adverse impacts to access and circulation.

During the planning efforts of the proposed project, the City would provide early notification to the affected users of this portion of Bradley Road. Signage would be posted at the project site indicating dates of closure, clear detour signage, and methods of finding additional information (e.g., website or phone number). Property owners in the immediate vicinity of the project would be notified directly of project construction as early as possible. Early notification, coordination, and clear signage would minimize potential adverse effects of project construction.

It should be noted that the proposed project would prevent potential future inadequate access along this segment of Bradley Road during rain events. Upon completion of construction, the project would result in a beneficial impact to the circulation network. Impacts would be less than significant.

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

Less-Than-Significant Impact. The project would temporarily affect public transit, bicycle, and pedestrian facilities, which is discussed in detail in Response 3.16(e). Such effects resulting from the closure of this portion of Bradley Road would no longer be present upon completion of construction, and operation of bus and bicycle circulation would continue as it exists currently. The project would include pedestrian sidewalks on both sides of the proposed bridge where none exist on this portion of Bradley Road currently, increasing pedestrian safety and connectivity. As all potential impacts to circulation would be temporary, and the bridge would not alter the circulation network upon completion of construction, impacts would be less than significant.

3.17 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XVII. Tribal Cultural Resources – Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

Less-Than-Significant Impact. As described under Section 3.5, Cultural Resources, a CHRIS records search was conducted at the EIC on March 27, 2014, for the proposed project site and a surrounding radius of one-half mile. The CHRIS search included a review of the CRHR, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The records search also included a review of all available historic USGS 7.5- and 15-minute quadrangle maps. No previously recorded tribal cultural resources listed in the CRHR or a local register were identified within the project site. Further, no tribal cultural resources were identified by

California Native American tribes as part of the City's AB 52 notification and consultation process (see Response 3.17(b) below). The proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource and impacts would be less than significant.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less-Than-Significant Impact. Refer to Response 3.17(a) above. There are no resources on the project site that have been determined by the City to be significant pursuant to the criteria set forth in Public Resources Code Section 5024.1. Further, no tribal cultural resources were identified by California Native American tribes as part of the City's AB 52 notification and consultation process.

The City has received four requests for formal AB 52 notification for proposed CEQA projects from California Native American Tribes who are traditionally and culturally affiliated with the geographic area. On April 6, 2016, the City prepared and sent notification letters to Joseph Ontiveros, Director of Cultural Resources, Soboba Band of Luiseño Indians and Anna Hoover, Cultural Analyst, Pechanga Band of Luiseño Indians.

The City received a written response from Mr. Ontiveros on May 11, 2016 (postmarked May 5, 2016). Mr. Ontiveros requested formal government-to-government consultation with the City of Menifee regarding the proposed Project. A consultation meeting between Mr. Ontiveros and the City occurred on July 20, 2016 to discuss the scope of the Project and the proposed mitigation measures that will be included in the CEQA document. Mr. Ontiveros made no further requests, and no tribal cultural resources were identified during the AB 52 consultation process. As such, the consultation process concluded.

Ms. Hoover replied on June 1, 2016 and stated that the Pechanga Band of Luiseno Indians would not be requesting formal consultation but asked that she be contacted should the scope of work increase.

On December 2, 2016, the City prepared and set notification letters to Katie Croft, Archaeologist, Tribal Historic Preservation Office of the Aqua Caliente Band of Cahuilla Indians (ACBCI) and Vincent Whipple, Manager of the Rincon Cultural Resources Department, Rincon Band of Luiseño Indians. The City also placed phone calls to both

Ms. Croft and Mr. Whipple on December 2 and December 5, 2016. Ms. Croft spoke with the City on December 5, 2016 stating that she is not aware of any potential issues related to the project and would send a formal letter deferring consultation to the Soboba Band of Luiseño Indians, as stated in her response letter during NAHC outreach efforts. Mr. Whipple responded via email on December 5, 2016, reiterating statements from his February 15, 2016 letter as part of NAHC outreach efforts, which deferred consultation to the Pechanga Band of Luiseño Indians or the Soboba Band of Luiseño Indians. No formal consultation was requested by Ms. Croft or Mr. Whipple. As such, the consultation process concluded.

The proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource and impacts would be less than significant.

3.18 Utilities and Service Systems

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

a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

No Impact. The proposed project would not generate wastewater. Therefore, the proposed project would not exceed wastewater treatment requirements. No impacts would occur.

b) Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. The proposed project involves the construction of a bridge to replace Bradley Road between Potomac Drive and Rio Vista Drive at Salt Creek. The proposed project does not include any component that would generate wastewater or require the use of water. Therefore, the proposed project would not result in the expansion of existing facilities or the construction of new facilities. No impacts would occur.

c) Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less-Than-Significant Impact. The proposed project would be constructed within the same footprint of Bradley Road; there would be no increase impervious surface area as the area under the proposed bridge would be maintained as a flood control channel. All temporarily disturbed areas would be returned to pre-project conditions upon completion of construction. Stormwater runoff from the new bridge would be directed toward existing stormwater drainage facilities, similar to current conditions. No new stormwater drainage facilities or expansion of existing facilities would be required. Impacts would be less than significant.

d) Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Less-Than-Significant Impact. The proposed project may require water for construction related activities including, but not limited to, watering dirt or dusty materials, or washing down staging or paved areas. Any water required for construction would be minimal and temporary. The bridge would not require the use of water during operation. Therefore, the proposed project would have sufficient water supplies and no new or expanded entitlements would be needed. Impacts would be less than significant.

e) Would the project 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?

No Impact. The proposed project would not generate wastewater. No impacts would occur.

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

Less-Than-Significant Impact. Solid waste generated from the proposed project would include debris from demolition of Bradley Road. All trash produced by contractors and equipment operators would be removed from the project area daily and disposed of properly in accordance with federal, state, and local statutes and regulations related to solid waste. Impacts on the surrounding landfills would be minimal and limited to construction activities; no solid waste would be generated from the operation of the proposed project. Therefore, impacts to surrounding landfills would be temporary during the construction phase, and impacts associated with sufficient landfill capacity to accommodate the proposed project's solid waste disposal needs would be less than significant.

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

No Impact. All trash produced by contractors and equipment operators would be removed from the project area daily and disposed of properly in accordance with federal, state, and local statutes and regulations related to solid waste. The project does not possess any atypical component that would prevent compliance with existing solid waste regulations. No impact would occur.

3.19 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XIX. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant With Mitigation Incorporated. As discussed in Section 3.4, Biological Resources, potential impacts to migratory birds and jurisdictional waters could occur during construction. However, implementation of mitigation measures MM-BIO-1 through MM-BIO-3, would reduce impacts to less than significant. As discussed in Section 3.5, Cultural Resources, potential impacts regarding inadvertent discovery of cultural could occur during excavation. However, implementation of mitigation measure MM-CUL-1 would ensure that impacts would be less than significant. As discussed in Section 3.12, Noise, potential impacts to noise could occur during construction. However, implementation of mitigation measure MM-NOI-1 would ensure that impacts would be

less than significant. Overall, impacts would be less than significant with the incorporation of mitigation.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant With Mitigation Incorporated. As provided in the analysis presented in Chapter 3, the proposed project would not result in significant impacts to aesthetics, agriculture and forestry resources, air quality, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, transportation and traffic, and utilities and service systems. Mitigation measures recommended for biological resources, cultural resources, and noise would reduce impacts to below a level of significance.

The proposed project would incrementally contribute to cumulative impacts for projects occurring within the City. With mitigation, however, implementation of the proposed project would not result in any residually significant impacts that could contribute to a cumulative impact. In the absence of residually significant impacts, the incremental accumulation of effects would not be cumulatively considerable and would be less than significant.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant With Mitigation Incorporated. The potential for adverse direct or indirect impacts to human beings was considered in this MND in Sections 3.1, Aesthetics; 3.3, Air Quality; 3.5, Cultural Resources; 3.6, Geology and Soils; 3.7, Greenhouse Gas Emissions; 3.8, Hazards and Hazardous Materials; 3.9, Hydrology and Water Quality; 3.12, Noise; 3.13, Population and Housing; 3.14, Public Services; 3.15, Recreation; 3.16, Transportation and Traffic; and 3.18, Utilities and Service Systems. Based on this evaluation, there is no substantial evidence that construction or operation of the proposed project with the proposed mitigation measures incorporated would result in a substantial adverse effect on human beings.

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4 REFERENCES AND LIST OF PREPARERS

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4.2 List of Preparers

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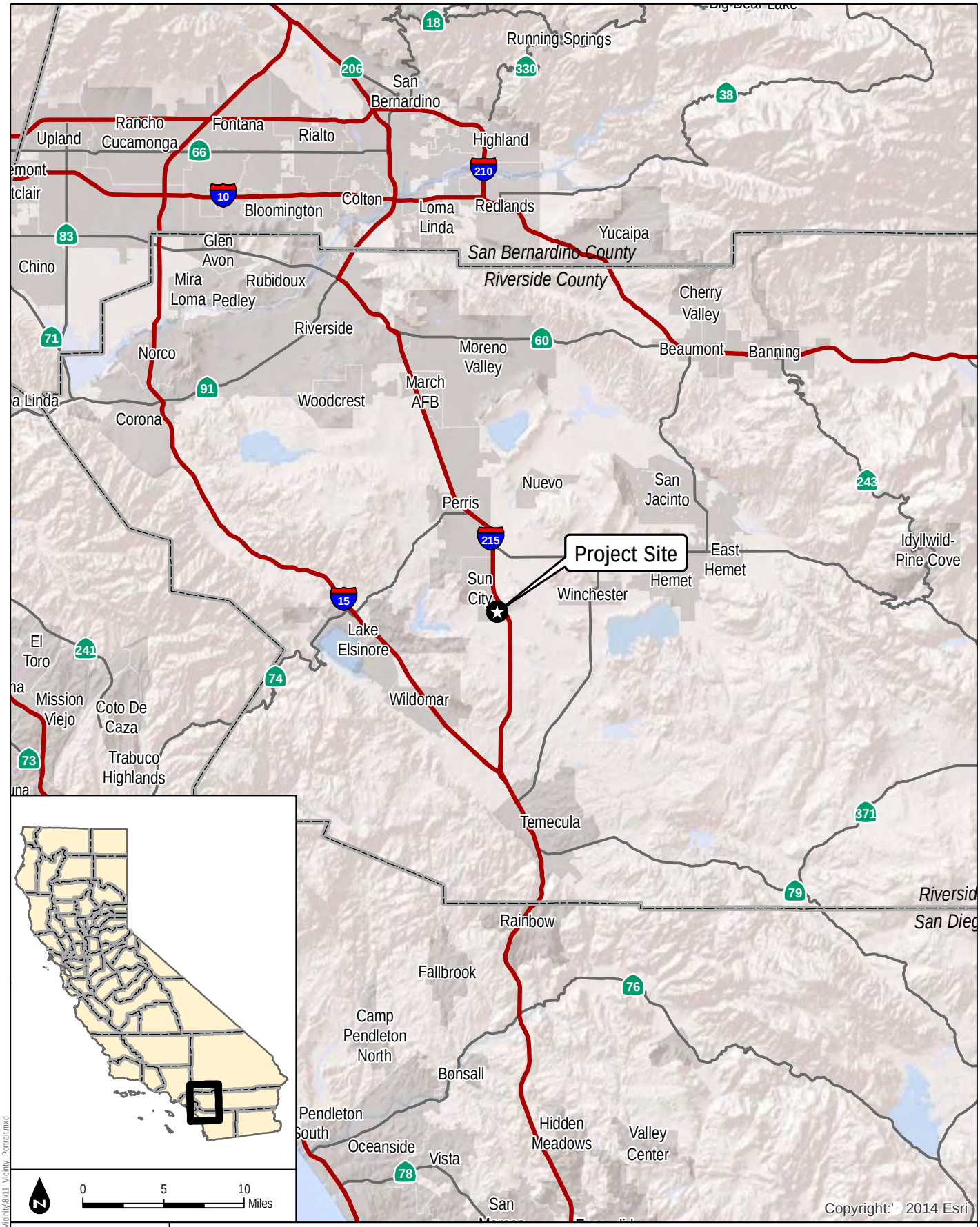

DUDEK

FIGURE 1

Regional Map

Bradley Road Bridge Mitigated Negative Declaration

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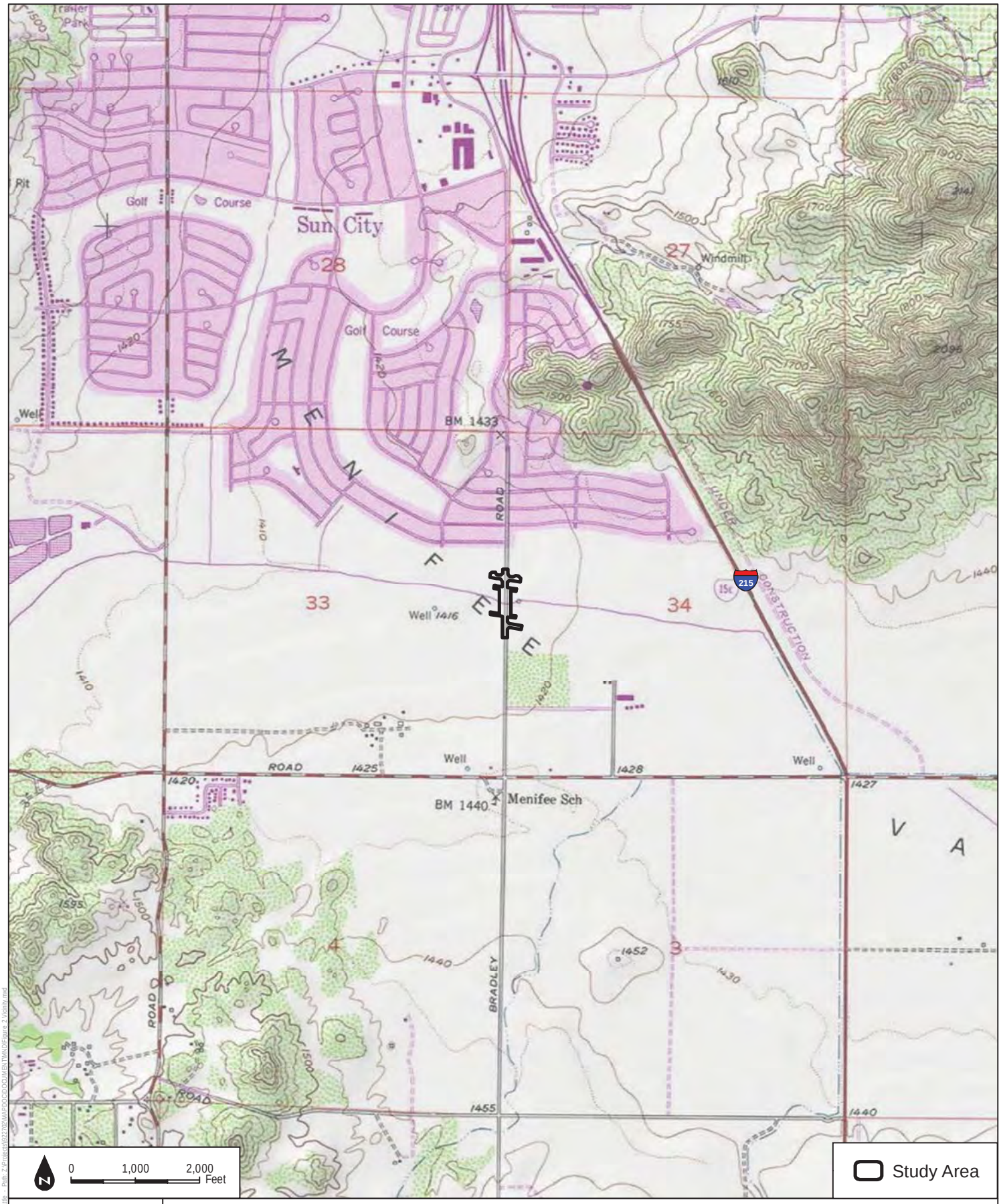

SOURCE: USGS 7.5-Minute Series Romoland Quadrangle

DUDEK

Figure 2

Vicinity Map

Bradley Road Bridge Mitigated Negative Declaration

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SOURCE: Bing Maps, 2016

FIGURE 3
Project Site

Bradley Road Bridge Mitigated Negative Declaration

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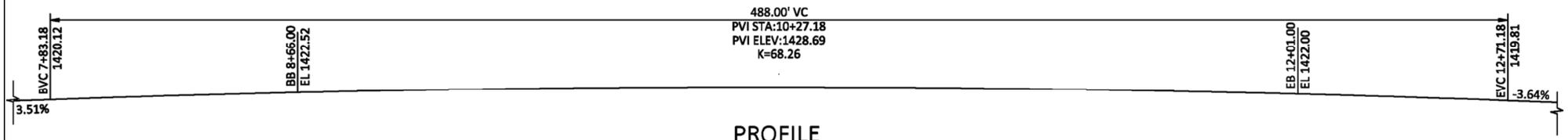
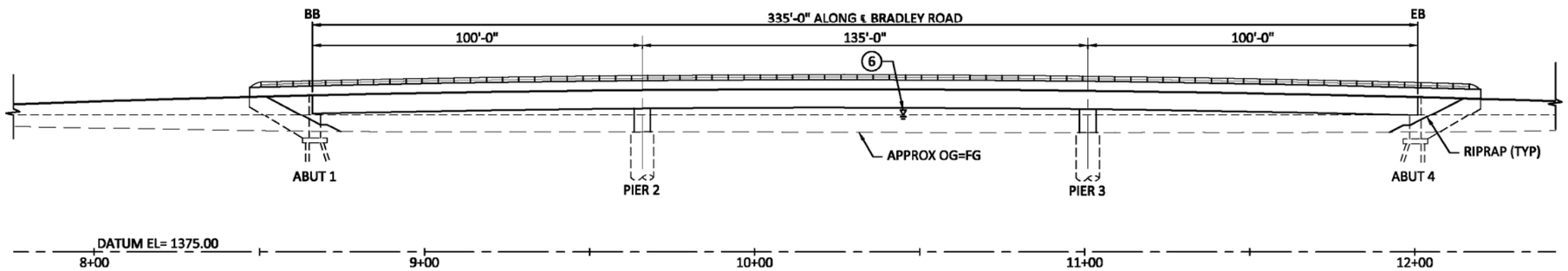
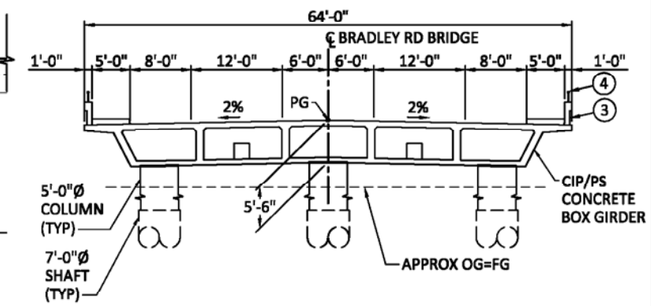


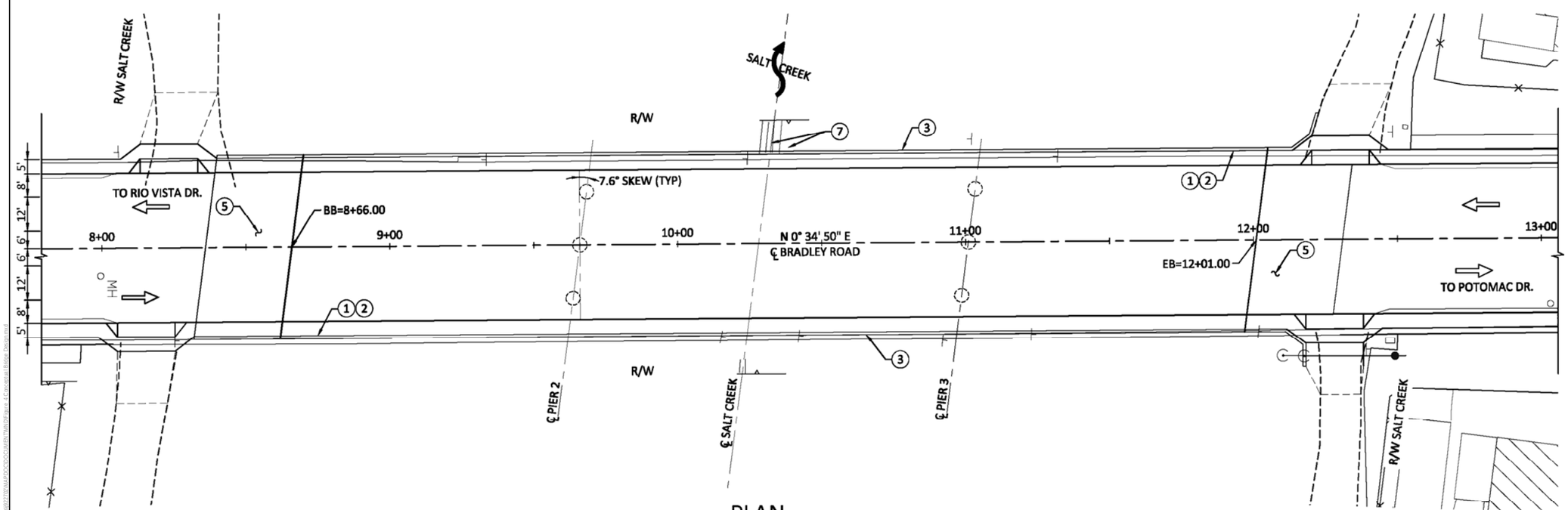
PROFILE

SCALE: 1"=20'



DEVELOPED ELEVATION





PLAN

SCALE: 1"=20'

NOTES:

1. PAINT "BRIDGE NUMBER: 56C-XXX"
2. PAINT "BRADLEY ROAD BRIDGE"
3. CONCRETE BARRIER (TYPE 26)
4. TUBULAR HAND RAILING (TYP)
5. STRUCTURE APPROACH, TYPE N (30S)
6. 100 YEAR FLOOD WATER SURFACE ELEVATION = _____
7. EXISTING DUAL 30" RCP CULVERTS TO BE REMOVED

LEGEND:

DIRECTION OF TRAFFIC

DIRECTION OF FLOW

GRAPHIC SCALE

0' 10' 20' 30' 40' 60' 80'

DUDEK

SOURCE: NV5, 2016

FIGURE 4

Conceptual Bridge Design

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SOURCE: Bing Maps, 2016

DUDEK

FIGURE 6

Vegetation Map

Bradley Road Bridge Mitigated Negative Declaration

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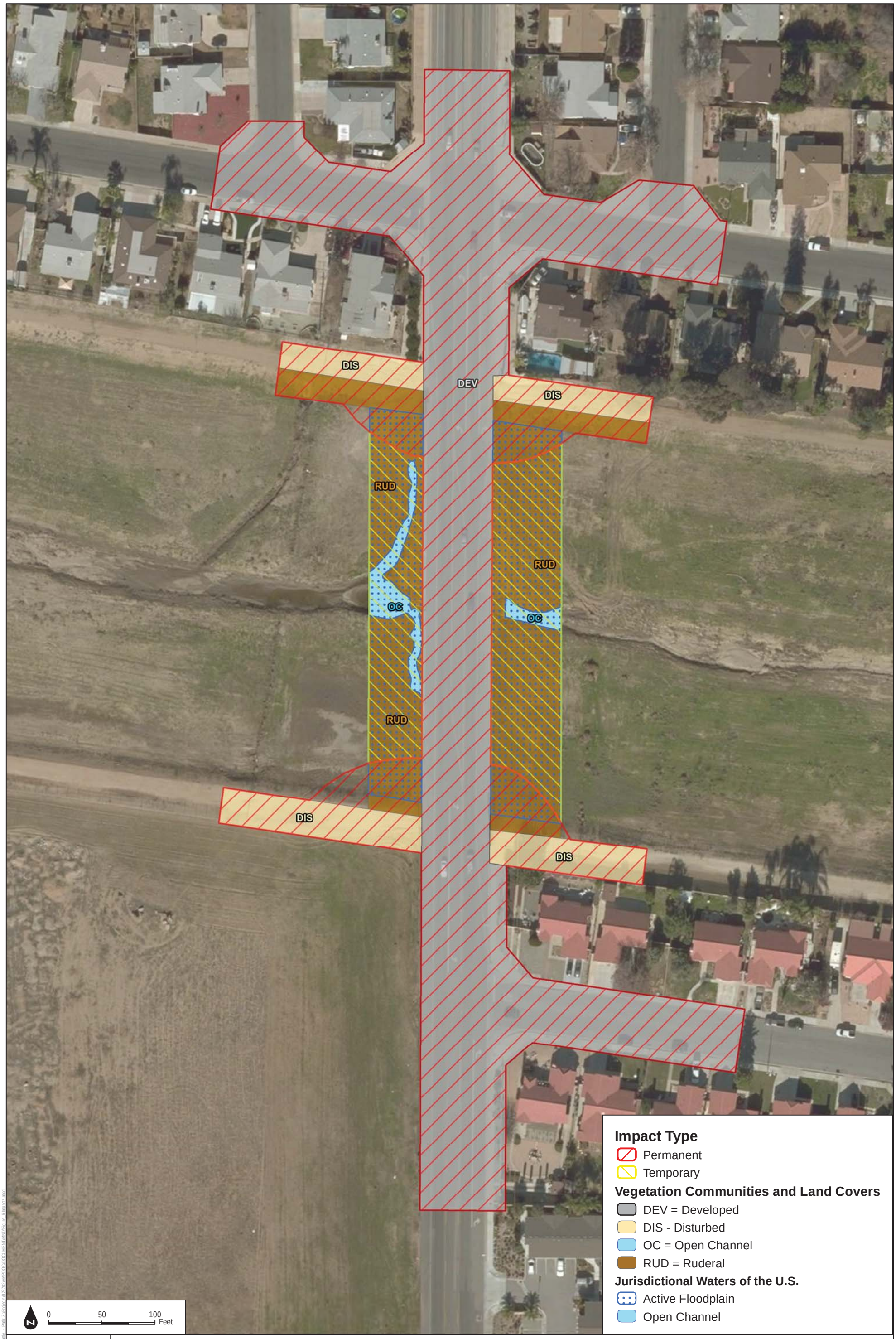

DUDEK

SOURCE: Bing Maps, 2016

FIGURE 6

Biological Resource Impacts Map

Bradley Road Bridge Mitigated Negative Declaration

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APPENDIX A

Air Quality and Greenhouse Gas Emissions Model Output

Bradley Road Bridge Project

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	3.00	Acre	3.00	130,680.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2018
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	1325.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Construction Phase - Client provided construction schedule

Off-road Equipment - Off-road equipment assumptions were provided by the client

Off-road Equipment - Off-road equipment assumptions were provided by the client

Off-road Equipment - Off-road equipment assumptions were provided by the client

Off-road Equipment - Off-road equipment assumptions were provided by the client

Off-road Equipment - Off-road equipment assumptions were provided by the client

Trips and VMT - Mod: Information from client data request.

Grading -Total acres disturbed = total acreage

Construction Off-road Equipment Mitigation - None

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	196020	0
tblConstructionPhase	NumDays	220.00	196.00

tblConstructionPhase	NumDays	6.00	89.00
tblConstructionPhase	NumDays	3.00	5.00
tblGrading	AcresOfGrading	44.50	4.39
tblGrading	MaterialImported	0.00	4,500.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblTripsAndVMT	WorkerTripNumber	18.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	32.00
tblTripsAndVMT	WorkerTripNumber	55.00	32.00
tblTripsAndVMT	WorkerTripNumber	15.00	24.00
tblTripsAndVMT	WorkerTripNumber	23.00	28.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.9068	51.8347	40.4157	0.0497	18.2898	2.7556	21.0454	9.9900	2.5351	12.5251	0.0000	4,747.0292	4,747.0292	1.2353	0.0000	4,772.9709
2018	3.5366	31.1434	22.7343	0.0496	0.4898	1.5705	2.0603	0.1326	1.5188	1.6514	0.0000	4,693.0738	4,693.0738	0.7797	0.0000	4,709.4470
Total	**8.4434**	**82.9781**	**63.1499**	**0.0993**	**18.7796**	**4.3261**	**23.1057**	**10.1226**	**4.0539**	**14.1765**	**0.0000**	**9,440.1030**	**9,440.1030**	**2.0150**	**0.0000**	**9,482.4179**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.9068	51.8347	40.4157	0.0497	7.2694	2.7556	10.0250	3.9323	2.5351	6.4674	0.0000	4,747.0292	4,747.0292	1.2353	0.0000	4,772.9709
2018	3.5366	31.1434	22.7343	0.0496	0.4898	1.5705	2.0603	0.1326	1.5188	1.6514	0.0000	4,693.0738	4,693.0738	0.7797	0.0000	4,709.4470
Total	**8.4434**	**82.9781**	**63.1499**	**0.0993**	**7.7592**	**4.3261**	**12.0852**	**4.0648**	**4.0539**	**8.1188**	**0.0000**	**9,440.1030**	**9,440.1030**	**2.0150**	**0.0000**	**9,482.4179**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**58.68**	**0.00**	**47.70**	**59.84**	**0.00**	**42.73**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7949	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**2.7949**	**0.0000**	**3.1000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**6.6000e-004**	**6.6000e-004**	**0.0000**	**0.0000**	**6.9000e-004**

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	2.7949	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**2.7949**	**0.0000**	**3.1000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**6.6000e-004**	**6.6000e-004**	**0.0000**	**0.0000**	**6.9000e-004**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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	Grubbing/Land Clearing Phase	Site Preparation	3/1/2017	3/7/2017	5	5	
2	Grading/Excavation Phase	Grading	3/8/2017	7/10/2017	5	89	
3	Bridge Phase	Building Construction	7/11/2017	4/10/2018	5	196	
4	Utilities/Trenching/Subgrade	Trenching	4/11/2018	9/11/2018	5	110	
5	Paving	Paving	9/12/2018	9/25/2018	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; 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
Grubbing/Land Clearing Phase	Rubber Tired Dozers	3	8.00	255	0.40
Grubbing/Land Clearing Phase	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading/Excavation Phase	Excavators	0	8.00	162	0.38
Grading/Excavation Phase	Graders	1	8.00	174	0.41
Grading/Excavation Phase	Plate Compactors	2		8	0.43
Grading/Excavation Phase	Rubber Tired Dozers	0	8.00	255	0.40
Grading/Excavation Phase	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Bridge Phase	Bore/Drill Rigs	1	8.00	205	0.50
Bridge Phase	Cement and Mortar Mixers	1	8.00	9	0.56
Bridge Phase	Concrete/Industrial Saws	2	8.00	81	0.73
Bridge Phase	Cranes	2	7.00	226	0.29
Bridge Phase	Forklifts	0	8.00	89	0.20
Bridge Phase	Generator Sets	1	8.00	84	0.74
Bridge Phase	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Bridge Phase	Welders	1	8.00	46	0.45
Utilities/Trenching/Subgrade	Air Compressors	1	8.00	78	0.48
Utilities/Trenching/Subgrade	Concrete/Industrial Saws	2	8.00	81	0.73
Utilities/Trenching/Subgrade	Skid Steer Loaders	1	8.00	64	0.37
Utilities/Trenching/Subgrade	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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	3	6.00	80	0.38
Paving	Sweepers/Scrubbers	1	8.00	64	0.46
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37

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

Grubbing/Land Clearing Phase	7	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading/Excavation Phase	6	32.00	0.00	563.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Bridge Phase	8	32.00	21.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utilities/Trenching/Sub grade	6	24.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	28.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grubbing/Land Clearing Phase - 2017

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	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**18.0663**	**2.7542**	**20.8205**	**9.9307**	**2.5339**	**12.4646**		**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

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	0.0687	0.0812	1.0186	2.6800e-003	0.2236	1.3600e-003	0.2249	0.0593	1.2500e-003	0.0605		213.1313	213.1313	8.7800e-003		213.3156
Total	**0.0687**	**0.0812**	**1.0186**	**2.6800e-003**	**0.2236**	**1.3600e-003**	**0.2249**	**0.0593**	**1.2500e-003**	**0.0605**		**213.1313**	**213.1313**	**8.7800e-003**		**213.3156**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**7.0458**	**2.7542**	**9.8001**	**3.8730**	**2.5339**	**6.4069**	**0.0000**	**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

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	0.0687	0.0812	1.0186	2.6800e-003	0.2236	1.3600e-003	0.2249	0.0593	1.2500e-003	0.0605		213.1313	213.1313	8.7800e-003		213.3156
Total	**0.0687**	**0.0812**	**1.0186**	**2.6800e-003**	**0.2236**	**1.3600e-003**	**0.2249**	**0.0593**	**1.2500e-003**	**0.0605**		**213.1313**	**213.1313**	**8.7800e-003**		**213.3156**

3.3 Grading/Excavation Phase - 2017

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					0.0587	0.0000	0.0587	6.6200e-003	0.0000	6.6200e-003			0.0000			0.0000
Off-Road	1.9030	18.7729	12.0196	0.0156		1.2283	1.2283		1.1301	1.1301		1,592.3962	1,592.3962	0.4879		1,602.6422
Total	**1.9030**	**18.7729**	**12.0196**	**0.0156**	**0.0587**	**1.2283**	**1.2870**	**6.6200e-003**	**1.1301**	**1.1367**		**1,592.3962**	**1,592.3962**	**0.4879**		**1,602.6422**

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	0.0880	1.5337	1.0195	4.5000e-003	0.1104	0.0282	0.1386	0.0302	0.0260	0.0562		446.5776	446.5776	2.8000e-003		446.6364
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	0.1098	0.1299	1.6298	4.2900e-003	0.3577	2.1700e-003	0.3599	0.0949	2.0100e-003	0.0969		341.0100	341.0100	0.0141		341.3050
Total	**0.1978**	**1.6637**	**2.6493**	**8.7900e-003**	**0.4680**	**0.0304**	**0.4984**	**0.1251**	**0.0280**	**0.1531**		**787.5876**	**787.5876**	**0.0169**		**787.9414**

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					0.0229	0.0000	0.0229	2.5800e-003	0.0000	2.5800e-003			0.0000			0.0000

Off-Road	1.9030	18.7729	12.0196	0.0156		1.2283	1.2283		1.1301	1.1301	0.0000	1,592.3962	1,592.3962	0.4879		1,602.6422
Total	**1.9030**	**18.7729**	**12.0196**	**0.0156**	**0.0229**	**1.2283**	**1.2512**	**2.5800e-003**	**1.1301**	**1.1326**	**0.0000**	**1,592.3962**	**1,592.3962**	**0.4879**		**1,602.6422**

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	0.0880	1.5337	1.0195	4.5000e-003	0.1104	0.0282	0.1386	0.0302	0.0260	0.0562		446.5776	446.5776	2.8000e-003		446.6364
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	0.1098	0.1299	1.6298	4.2900e-003	0.3577	2.1700e-003	0.3599	0.0949	2.0100e-003	0.0969		341.0100	341.0100	0.0141		341.3050
Total	**0.1978**	**1.6637**	**2.6493**	**8.7900e-003**	**0.4680**	**0.0304**	**0.4984**	**0.1251**	**0.0280**	**0.1531**		**787.5876**	**787.5876**	**0.0169**		**787.9414**

3.4 Bridge Phase - 2017

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	3.7391	33.1168	20.3088	0.0410		1.7873	1.7873		1.7288	1.7288		3,969.8226	3,969.8226	0.7881		3,986.3724
Total	**3.7391**	**33.1168**	**20.3088**	**0.0410**		**1.7873**	**1.7873**		**1.7288**	**1.7288**		**3,969.8226**	**3,969.8226**	**0.7881**		**3,986.3724**

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	0.1474	1.5984	1.7224	4.4100e-003	0.1321	0.0307	0.1628	0.0377	0.0282	0.0659		436.1966	436.1966	2.7800e-003		436.2550
Worker	0.1098	0.1299	1.6298	4.2900e-003	0.3577	2.1700e-003	0.3599	0.0949	2.0100e-003	0.0969		341.0100	341.0100	0.0141		341.3050
Total	**0.2572**	**1.7283**	**3.3522**	**8.7000e-003**	**0.4898**	**0.0328**	**0.5226**	**0.1326**	**0.0302**	**0.1628**		**777.2066**	**777.2066**	**0.0168**		**777.5600**

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	lb/day										lb/day					
Off-Road	3.7391	33.1168	20.3088	0.0410		1.7873	1.7873		1.7288	1.7288	0.0000	3,969.8226	3,969.8226	0.7881		3,986.3724
Total	**3.7391**	**33.1168**	**20.3088**	**0.0410**		**1.7873**	**1.7873**		**1.7288**	**1.7288**	**0.0000**	**3,969.8226**	**3,969.8226**	**0.7881**		**3,986.3724**

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	0.1474	1.5984	1.7224	4.4100e-003	0.1321	0.0307	0.1628	0.0377	0.0282	0.0659		436.1966	436.1966	2.7800e-003		436.2550
Worker	0.1098	0.1299	1.6298	4.2900e-003	0.3577	2.1700e-003	0.3599	0.0949	2.0100e-003	0.0969		341.0100	341.0100	0.0141		341.3050
Total	**0.2572**	**1.7283**	**3.3522**	**8.7000e-003**	**0.4898**	**0.0328**	**0.5226**	**0.1326**	**0.0302**	**0.1628**		**777.2066**	**777.2066**	**0.0168**		**777.5600**

3.4 Bridge Phase - 2018

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	3.3012	29.5637	19.6208	0.0409		1.5394	1.5394		1.4902	1.4902		3,936.3958	3,936.3958	0.7639		3,952.4384
Total	**3.3012**	**29.5637**	**19.6208**	**0.0409**		**1.5394**	**1.5394**		**1.4902**	**1.4902**		**3,936.3958**	**3,936.3958**	**0.7639**		**3,952.4384**

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	0.1364	1.4622	1.6392	4.4000e-003	0.1321	0.0289	0.1610	0.0377	0.0266	0.0643		428.6068	428.6068	2.7600e-003		428.6647
Worker	0.0990	0.1174	1.4742	4.2900e-003	0.3577	2.1400e-003	0.3598	0.0949	1.9800e-003	0.0968		328.0712	328.0712	0.0130		328.3439
Total	**0.2354**	**1.5797**	**3.1135**	**8.6900e-003**	**0.4898**	**0.0311**	**0.5208**	**0.1326**	**0.0286**	**0.1612**		**756.6779**	**756.6779**	**0.0158**		**757.0087**

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	3.3012	29.5637	19.6208	0.0409		1.5394	1.5394		1.4902	1.4902	0.0000	3,936.3958	3,936.3958	0.7639		3,952.4384
Total	**3.3012**	**29.5637**	**19.6208**	**0.0409**		**1.5394**	**1.5394**		**1.4902**	**1.4902**	**0.0000**	**3,936.3958**	**3,936.3958**	**0.7639**		**3,952.4384**

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	0.1364	1.4622	1.6392	4.4000e-003	0.1321	0.0289	0.1610	0.0377	0.0266	0.0643		428.6068	428.6068	2.7600e-003		428.6647
Worker	0.0990	0.1174	1.4742	4.2900e-003	0.3577	2.1400e-003	0.3598	0.0949	1.9800e-003	0.0968		328.0712	328.0712	0.0130		328.3439
Total	**0.2354**	**1.5797**	**3.1135**	**8.6900e-003**	**0.4898**	**0.0311**	**0.5208**	**0.1326**	**0.0286**	**0.1612**		**756.6779**	**756.6779**	**0.0158**		**757.0087**

3.5 Utilities/Trenching/Subgrade - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0592	16.9582	15.9646	0.0247		1.1657	1.1657		1.1312	1.1312		2,390.8304	2,390.8304	0.3859		2,398.9342

Total	**2.0592**	**16.9582**	**15.9646**	**0.0247**		**1.1657**	**1.1657**		**1.1312**	**1.1312**		**2,390.8304**	**2,390.8304**	**0.3859**		**2,398.9342**

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	0.0743	0.0881	1.1057	3.2200e-003	0.2683	1.6100e-003	0.2699	0.0711	1.4900e-003	0.0726		246.0534	246.0534	9.7400e-003		246.2580
Total	**0.0743**	**0.0881**	**1.1057**	**3.2200e-003**	**0.2683**	**1.6100e-003**	**0.2699**	**0.0711**	**1.4900e-003**	**0.0726**		**246.0534**	**246.0534**	**9.7400e-003**		**246.2580**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0592	16.9582	15.9646	0.0247		1.1657	1.1657		1.1312	1.1312	0.0000	2,390.8304	2,390.8304	0.3859		2,398.9342
Total	**2.0592**	**16.9582**	**15.9646**	**0.0247**		**1.1657**	**1.1657**		**1.1312**	**1.1312**	**0.0000**	**2,390.8304**	**2,390.8304**	**0.3859**		**2,398.9342**

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	0.0743	0.0881	1.1057	3.2200e-003	0.2683	1.6100e-003	0.2699	0.0711	1.4900e-003	0.0726		246.0534	246.0534	9.7400e-003		246.2580
Total	**0.0743**	**0.0881**	**1.1057**	**3.2200e-003**	**0.2683**	**1.6100e-003**	**0.2699**	**0.0711**	**1.4900e-003**	**0.0726**		**246.0534**	**246.0534**	**9.7400e-003**		**246.2580**

3.6 Paving - 2018

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	1.6446	16.2263	13.3935	0.0200		0.9920	0.9920		0.9144	0.9144		1,985.9386	1,985.9386	0.6025		1,998.5916
Paving	0.7860					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4306**	**16.2263**	**13.3935**	**0.0200**		**0.9920**	**0.9920**		**0.9144**	**0.9144**		**1,985.9386**	**1,985.9386**	**0.6025**		**1,998.5916**

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	0.0866	0.1028	1.2900	3.7500e-003	0.3130	1.8700e-003	0.3149	0.0830	1.7300e-003	0.0847		287.0623	287.0623	0.0114		287.3010
Total	**0.0866**	**0.1028**	**1.2900**	**3.7500e-003**	**0.3130**	**1.8700e-003**	**0.3149**	**0.0830**	**1.7300e-003**	**0.0847**		**287.0623**	**287.0623**	**0.0114**		**287.3010**

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	1.6446	16.2263	13.3935	0.0200		0.9920	0.9920		0.9144	0.9144	0.0000	1,985.9386	1,985.9386	0.6025		1,998.5916
Paving	0.7860					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4306**	**16.2263**	**13.3935**	**0.0200**		**0.9920**	**0.9920**		**0.9144**	**0.9144**	**0.0000**	**1,985.9386**	**1,985.9386**	**0.6025**		**1,998.5916**

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	0.0866	0.1028	1.2900	3.7500e-003	0.3130	1.8700e-003	0.3149	0.0830	1.7300e-003	0.0847		287.0623	287.0623	0.0114		287.3010
Total	**0.0866**	**0.1028**	**1.2900**	**3.7500e-003**	**0.3130**	**1.8700e-003**	**0.3149**	**0.0830**	**1.7300e-003**	**0.0847**		**287.0623**	**287.0623**	**0.0114**		**287.3010**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.459583	0.069267	0.177530	0.170944	0.045911	0.007406	0.012759	0.044006	0.000935	0.001057	0.006483	0.000867	0.003251

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	2.7949	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004
Unmitigated	2.7949	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004

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	0.2074					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5875					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004
Total	**2.7949**	**0.0000**	**3.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**6.6000e-004**	**6.6000e-004**	**0.0000**		**6.9000e-004**

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	0.2074					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5875					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004
Total	**2.7949**	**0.0000**	**3.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**6.6000e-004**	**6.6000e-004**	**0.0000**		**6.9000e-004**

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

10.0 Vegetation

Bradley Road

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	3.00	Acre	3.00	130,680.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2018
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	1325.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Construction Phase - Client provided construction schedule

Off-road Equipment - Off-road equipment assumptions were provided by the client

Off-road Equipment -Off-road equipment assumptions were provided by the client

Off-road Equipment - Off-road equipment assumptions were provided by the client

Off-road Equipment - Off-road equipment assumptions were provided by the client

Off-road Equipment - Off-road equipment assumptions were provided by the client

Trips and VMT - Mod: Information from client data request.

Grading --Mod Total acres disturbed = total acreage

Construction Off-road Equipment Mitigation - None

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	196020	0
tblConstructionPhase	NumDays	220.00	196.00

tblConstructionPhase	NumDays	6.00	89.00
tblConstructionPhase	NumDays	3.00	5.00
tblGrading	AcresOfGrading	44.50	4.39
tblGrading	MaterialImported	0.00	4,500.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblTripsAndVMT	WorkerTripNumber	18.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	32.00
tblTripsAndVMT	WorkerTripNumber	55.00	32.00
tblTripsAndVMT	WorkerTripNumber	15.00	24.00
tblTripsAndVMT	WorkerTripNumber	23.00	28.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.9035	51.8399	40.2722	0.0493	18.2898	2.7556	21.0454	9.9900	2.5351	12.5251	0.0000	4,713.8263	4,713.8263	1.2353	0.0000	4,739.7679
2018	3.5401	31.1855	22.7859	0.0492	0.4898	1.5707	2.0605	0.1326	1.5190	1.6516	0.0000	4,661.0181	4,661.0181	0.7798	0.0000	4,677.3935
Total	**8.4436**	**83.0254**	**63.0580**	**0.0985**	**18.7796**	**4.3263**	**23.1059**	**10.1226**	**4.0541**	**14.1767**	**0.0000**	**9,374.8444**	**9,374.8444**	**2.0151**	**0.0000**	**9,417.1614**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.9035	51.8399	40.2722	0.0493	7.2694	2.7556	10.0250	3.9323	2.5351	6.4674	0.0000	4,713.8263	4,713.8263	1.2353	0.0000	4,739.7679
2018	3.5401	31.1855	22.7859	0.0492	0.4898	1.5707	2.0605	0.1326	1.5190	1.6516	0.0000	4,661.0181	4,661.0181	0.7798	0.0000	4,677.3935
Total	**8.4436**	**83.0254**	**63.0580**	**0.0985**	**7.7592**	**4.3263**	**12.0855**	**4.0648**	**4.0541**	**8.1190**	**0.0000**	**9,374.8444**	**9,374.8444**	**2.0151**	**0.0000**	**9,417.1614**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**58.68**	**0.00**	**47.70**	**59.84**	**0.00**	**42.73**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7949	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**2.7949**	**0.0000**	**3.1000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**6.6000e-004**	**6.6000e-004**	**0.0000**	**0.0000**	**6.9000e-004**

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	2.7949	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**2.7949**	**0.0000**	**3.1000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**6.6000e-004**	**6.6000e-004**	**0.0000**	**0.0000**	**6.9000e-004**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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	Grubbing/Land Clearing Phase	Site Preparation	3/1/2017	3/7/2017	5	5	
2	Grading/Excavation Phase	Grading	3/8/2017	7/10/2017	5	89	
3	Bridge Phase	Building Construction	7/11/2017	4/10/2018	5	196	
4	Utilities/Trenching/Subgrade	Trenching	4/11/2018	9/11/2018	5	110	
5	Paving	Paving	9/12/2018	9/25/2018	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; 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
Grubbing/Land Clearing Phase	Rubber Tired Dozers	3	8.00	255	0.40
Grubbing/Land Clearing Phase	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading/Excavation Phase	Excavators	0	8.00	162	0.38
Grading/Excavation Phase	Graders	1	8.00	174	0.41
Grading/Excavation Phase	Plate Compactors	2		8	0.43
Grading/Excavation Phase	Rubber Tired Dozers	0	8.00	255	0.40
Grading/Excavation Phase	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Bridge Phase	Bore/Drill Rigs	1	8.00	205	0.50
Bridge Phase	Cement and Mortar Mixers	1	8.00	9	0.56
Bridge Phase	Concrete/Industrial Saws	2	8.00	81	0.73
Bridge Phase	Cranes	2	7.00	226	0.29
Bridge Phase	Forklifts	0	8.00	89	0.20
Bridge Phase	Generator Sets	1	8.00	84	0.74
Bridge Phase	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Bridge Phase	Welders	1	8.00	46	0.45
Utilities/Trenching/Subgrade	Air Compressors	1	8.00	78	0.48
Utilities/Trenching/Subgrade	Concrete/Industrial Saws	2	8.00	81	0.73
Utilities/Trenching/Subgrade	Skid Steer Loaders	1	8.00	64	0.37
Utilities/Trenching/Subgrade	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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	3	6.00	80	0.38
Paving	Sweepers/Scrubbers	1	8.00	64	0.46
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37

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

Grubbing/Land Clearing Phase	7	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading/Excavation Phase	6	32.00	0.00	563.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Bridge Phase	8	32.00	21.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utilities/Trenching/Sub grade	6	24.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	28.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grubbing/Land Clearing Phase - 2017

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	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**18.0663**	**2.7542**	**20.8205**	**9.9307**	**2.5339**	**12.4646**		**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

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	0.0653	0.0864	0.8751	2.4500e-003	0.2236	1.3600e-003	0.2249	0.0593	1.2500e-003	0.0605		194.7462	194.7462	8.7800e-003		194.9306
Total	**0.0653**	**0.0864**	**0.8751**	**2.4500e-003**	**0.2236**	**1.3600e-003**	**0.2249**	**0.0593**	**1.2500e-003**	**0.0605**		**194.7462**	**194.7462**	**8.7800e-003**		**194.9306**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**7.0458**	**2.7542**	**9.8001**	**3.8730**	**2.5339**	**6.4069**	**0.0000**	**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

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	0.0653	0.0864	0.8751	2.4500e-003	0.2236	1.3600e-003	0.2249	0.0593	1.2500e-003	0.0605		194.7462	194.7462	8.7800e-003		194.9306
Total	**0.0653**	**0.0864**	**0.8751**	**2.4500e-003**	**0.2236**	**1.3600e-003**	**0.2249**	**0.0593**	**1.2500e-003**	**0.0605**		**194.7462**	**194.7462**	**8.7800e-003**		**194.9306**

3.3 Grading/Excavation Phase - 2017

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					0.0587	0.0000	0.0587	6.6200e-003	0.0000	6.6200e-003			0.0000			0.0000
Off-Road	1.9030	18.7729	12.0196	0.0156		1.2283	1.2283		1.1301	1.1301		1,592.3962	1,592.3962	0.4879		1,602.6422
Total	**1.9030**	**18.7729**	**12.0196**	**0.0156**	**0.0587**	**1.2283**	**1.2870**	**6.6200e-003**	**1.1301**	**1.1367**		**1,592.3962**	**1,592.3962**	**0.4879**		**1,602.6422**

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	0.0914	1.5920	1.1316	4.4900e-003	0.1104	0.0283	0.1386	0.0302	0.0260	0.0562		445.4772	445.4772	2.8500e-003		445.5370
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	0.1045	0.1383	1.4002	3.9200e-003	0.3577	2.1700e-003	0.3599	0.0949	2.0100e-003	0.0969		311.5940	311.5940	0.0141		311.8889
Total	**0.1959**	**1.7302**	**2.5318**	**8.4100e-003**	**0.4680**	**0.0304**	**0.4985**	**0.1251**	**0.0280**	**0.1531**		**757.0712**	**757.0712**	**0.0169**		**757.4260**

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					0.0229	0.0000	0.0229	2.5800e-003	0.0000	2.5800e-003			0.0000			0.0000

Off-Road	1.9030	18.7729	12.0196	0.0156		1.2283	1.2283		1.1301	1.1301	0.0000	1,592.3962	1,592.3962	0.4879		1,602.6422
Total	**1.9030**	**18.7729**	**12.0196**	**0.0156**	**0.0229**	**1.2283**	**1.2512**	**2.5800e-003**	**1.1301**	**1.1326**	**0.0000**	**1,592.3962**	**1,592.3962**	**0.4879**		**1,602.6422**

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	0.0914	1.5920	1.1316	4.4900e-003	0.1104	0.0283	0.1386	0.0302	0.0260	0.0562		445.4772	445.4772	2.8500e-003		445.5370
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	0.1045	0.1383	1.4002	3.9200e-003	0.3577	2.1700e-003	0.3599	0.0949	2.0100e-003	0.0969		311.5940	311.5940	0.0141		311.8889
Total	**0.1959**	**1.7302**	**2.5318**	**8.4100e-003**	**0.4680**	**0.0304**	**0.4985**	**0.1251**	**0.0280**	**0.1531**		**757.0712**	**757.0712**	**0.0169**		**757.4260**

3.4 Bridge Phase - 2017

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	3.7391	33.1168	20.3088	0.0410		1.7873	1.7873		1.7288	1.7288		3,969.8226	3,969.8226	0.7881		3,986.3724
Total	**3.7391**	**33.1168**	**20.3088**	**0.0410**		**1.7873**	**1.7873**		**1.7288**	**1.7288**		**3,969.8226**	**3,969.8226**	**0.7881**		**3,986.3724**

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	0.1569	1.6373	1.9818	4.3800e-003	0.1321	0.0309	0.1630	0.0377	0.0284	0.0662		432.4097	432.4097	2.8800e-003		432.4702
Worker	0.1045	0.1383	1.4002	3.9200e-003	0.3577	2.1700e-003	0.3599	0.0949	2.0100e-003	0.0969		311.5940	311.5940	0.0141		311.8889
Total	**0.2614**	**1.7756**	**3.3820**	**8.3000e-003**	**0.4898**	**0.0331**	**0.5229**	**0.1326**	**0.0304**	**0.1630**		**744.0037**	**744.0037**	**0.0169**		**744.3591**

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	3.7391	33.1168	20.3088	0.0410		1.7873	1.7873		1.7288	1.7288	0.0000	3,969.8226	3,969.8226	0.7881		3,986.3724
Total	**3.7391**	**33.1168**	**20.3088**	**0.0410**		**1.7873**	**1.7873**		**1.7288**	**1.7288**	**0.0000**	**3,969.8226**	**3,969.8226**	**0.7881**		**3,986.3724**

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	0.1569	1.6373	1.9818	4.3800e-003	0.1321	0.0309	0.1630	0.0377	0.0284	0.0662		432.4097	432.4097	2.8800e-003		432.4702
Worker	0.1045	0.1383	1.4002	3.9200e-003	0.3577	2.1700e-003	0.3599	0.0949	2.0100e-003	0.0969		311.5940	311.5940	0.0141		311.8889
Total	**0.2614**	**1.7756**	**3.3820**	**8.3000e-003**	**0.4898**	**0.0331**	**0.5229**	**0.1326**	**0.0304**	**0.1630**		**744.0037**	**744.0037**	**0.0169**		**744.3591**

3.4 Bridge Phase - 2018

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	3.3012	29.5637	19.6208	0.0409		1.5394	1.5394		1.4902	1.4902		3,936.3958	3,936.3958	0.7639		3,952.4384
Total	**3.3012**	**29.5637**	**19.6208**	**0.0409**		**1.5394**	**1.5394**		**1.4902**	**1.4902**		**3,936.3958**	**3,936.3958**	**0.7639**		**3,952.4384**

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	0.1450	1.4969	1.9024	4.3700e-003	0.1321	0.0291	0.1612	0.0377	0.0268	0.0645		424.8755	424.8755	2.8600e-003		424.9356
Worker	0.0939	0.1249	1.2627	3.9200e-003	0.3577	2.1400e-003	0.3598	0.0949	1.9800e-003	0.0968		299.7468	299.7468	0.0130		300.0196
Total	**0.2390**	**1.6218**	**3.1651**	**8.2900e-003**	**0.4898**	**0.0313**	**0.5211**	**0.1326**	**0.0288**	**0.1614**		**724.6223**	**724.6223**	**0.0159**		**724.9552**

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	3.3012	29.5637	19.6208	0.0409		1.5394	1.5394		1.4902	1.4902	0.0000	3,936.3958	3,936.3958	0.7639		3,952.4384
Total	**3.3012**	**29.5637**	**19.6208**	**0.0409**		**1.5394**	**1.5394**		**1.4902**	**1.4902**	**0.0000**	**3,936.3958**	**3,936.3958**	**0.7639**		**3,952.4384**

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	0.1450	1.4969	1.9024	4.3700e-003	0.1321	0.0291	0.1612	0.0377	0.0268	0.0645		424.8755	424.8755	2.8600e-003		424.9356
Worker	0.0939	0.1249	1.2627	3.9200e-003	0.3577	2.1400e-003	0.3598	0.0949	1.9800e-003	0.0968		299.7468	299.7468	0.0130		300.0196
Total	**0.2390**	**1.6218**	**3.1651**	**8.2900e-003**	**0.4898**	**0.0313**	**0.5211**	**0.1326**	**0.0288**	**0.1614**		**724.6223**	**724.6223**	**0.0159**		**724.9552**

3.5 Utilities/Trenching/Subgrade - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0592	16.9582	15.9646	0.0247		1.1657	1.1657		1.1312	1.1312		2,390.8304	2,390.8304	0.3859		2,398.9342

Total	**2.0592**	**16.9582**	**15.9646**	**0.0247**		**1.1657**	**1.1657**		**1.1312**	**1.1312**		**2,390.8304**	**2,390.8304**	**0.3859**		**2,398.9342**

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	0.0705	0.0937	0.9471	2.9400e-003	0.2683	1.6100e-003	0.2699	0.0711	1.4900e-003	0.0726		224.8101	224.8101	9.7400e-003		225.0147
Total	**0.0705**	**0.0937**	**0.9471**	**2.9400e-003**	**0.2683**	**1.6100e-003**	**0.2699**	**0.0711**	**1.4900e-003**	**0.0726**		**224.8101**	**224.8101**	**9.7400e-003**		**225.0147**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0592	16.9582	15.9646	0.0247		1.1657	1.1657		1.1312	1.1312	0.0000	2,390.8304	2,390.8304	0.3859		2,398.9342
Total	**2.0592**	**16.9582**	**15.9646**	**0.0247**		**1.1657**	**1.1657**		**1.1312**	**1.1312**	**0.0000**	**2,390.8304**	**2,390.8304**	**0.3859**		**2,398.9342**

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	0.0705	0.0937	0.9471	2.9400e-003	0.2683	1.6100e-003	0.2699	0.0711	1.4900e-003	0.0726		224.8101	224.8101	9.7400e-003		225.0147
Total	**0.0705**	**0.0937**	**0.9471**	**2.9400e-003**	**0.2683**	**1.6100e-003**	**0.2699**	**0.0711**	**1.4900e-003**	**0.0726**		**224.8101**	**224.8101**	**9.7400e-003**		**225.0147**

3.6 Paving - 2018

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	1.6446	16.2263	13.3935	0.0200		0.9920	0.9920		0.9144	0.9144		1,985.9386	1,985.9386	0.6025		1,998.5916
Paving	0.7860					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4306**	**16.2263**	**13.3935**	**0.0200**		**0.9920**	**0.9920**		**0.9144**	**0.9144**		**1,985.9386**	**1,985.9386**	**0.6025**		**1,998.5916**

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	0.0822	0.1093	1.1049	3.4300e-003	0.3130	1.8700e-003	0.3149	0.0830	1.7300e-003	0.0847		262.2785	262.2785	0.0114		262.5171
Total	**0.0822**	**0.1093**	**1.1049**	**3.4300e-003**	**0.3130**	**1.8700e-003**	**0.3149**	**0.0830**	**1.7300e-003**	**0.0847**		**262.2785**	**262.2785**	**0.0114**		**262.5171**

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	1.6446	16.2263	13.3935	0.0200		0.9920	0.9920		0.9144	0.9144	0.0000	1,985.9386	1,985.9386	0.6025		1,998.5916
Paving	0.7860					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4306**	**16.2263**	**13.3935**	**0.0200**		**0.9920**	**0.9920**		**0.9144**	**0.9144**	**0.0000**	**1,985.9386**	**1,985.9386**	**0.6025**		**1,998.5916**

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	0.0822	0.1093	1.1049	3.4300e-003	0.3130	1.8700e-003	0.3149	0.0830	1.7300e-003	0.0847		262.2785	262.2785	0.0114		262.5171
Total	**0.0822**	**0.1093**	**1.1049**	**3.4300e-003**	**0.3130**	**1.8700e-003**	**0.3149**	**0.0830**	**1.7300e-003**	**0.0847**		**262.2785**	**262.2785**	**0.0114**		**262.5171**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.459583	0.069267	0.177530	0.170944	0.045911	0.007406	0.012759	0.044006	0.000935	0.001057	0.006483	0.000867	0.003251

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	2.7949	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004
Unmitigated	2.7949	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004

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	0.2074					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5875					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004
Total	**2.7949**	**0.0000**	**3.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**6.6000e-004**	**6.6000e-004**	**0.0000**		**6.9000e-004**

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	0.2074					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5875					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.6000e-004	6.6000e-004	0.0000		6.9000e-004
Total	**2.7949**	**0.0000**	**3.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**6.6000e-004**	**6.6000e-004**	**0.0000**		**6.9000e-004**

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

10.0 Vegetation

Bradley Road

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	3.00	Acre	3.00	130,680.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2018
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	1325.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Construction Phase -Mod- Lot acreage was provided by the client

Off-road Equipment - Construction Equipment assumptions were provided by the client

Off-road Equipment - Construction Equipment assumptions were provided by the client

Off-road Equipment - Construction Equipment assumptions were provided by the client

Off-road Equipment - Construction Equipment assumptions were provided by the client

Off-road Equipment -Construction Equipment assumptions were provided by the client

Trips and VMT - Mod: Information from client data request.

Grading -Mod Total Acres disturbed = total acreage

Construction Off-road Equipment Mitigation - None

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	196020	0
tblConstructionPhase	NumDays	220.00	196.00

tblConstructionPhase	NumDays	6.00	89.00
tblConstructionPhase	NumDays	3.00	5.00
tblGrading	AcresOfGrading	44.50	4.39
tblGrading	MaterialImported	0.00	4,500.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblTripsAndVMT	WorkerTripNumber	18.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	32.00
tblTripsAndVMT	WorkerTripNumber	55.00	32.00
tblTripsAndVMT	WorkerTripNumber	15.00	24.00
tblTripsAndVMT	WorkerTripNumber	23.00	28.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.3529	3.2091	2.2270	4.2300e-003	0.0987	0.1758	0.2745	0.0389	0.1669	0.2058	0.0000	370.0655	370.0655	0.0685	0.0000	371.5031
2018	0.2566	2.1437	1.8284	3.4200e-003	0.0334	0.1257	0.1591	8.9700e-003	0.1216	0.1305	0.0000	293.3021	293.3021	0.0480	0.0000	294.3099
Total	**0.6095**	**5.3528**	**4.0554**	**7.6500e-003**	**0.1321**	**0.3015**	**0.4336**	**0.0478**	**0.2885**	**0.3363**	**0.0000**	**663.3677**	**663.3677**	**0.1164**	**0.0000**	**665.8130**

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					
2017	0.3529	3.2091	2.2270	4.2300e-003	0.0696	0.1758	0.2453	0.0235	0.1669	0.1905	0.0000	370.0652	370.0652	0.0685	0.0000	371.5027
2018	0.2566	2.1437	1.8284	3.4200e-003	0.0334	0.1257	0.1591	8.9700e-003	0.1216	0.1305	0.0000	293.3018	293.3018	0.0480	0.0000	294.3096
Total	**0.6095**	**5.3528**	**4.0554**	**7.6500e-003**	**0.1030**	**0.3015**	**0.4044**	**0.0325**	**0.2885**	**0.3210**	**0.0000**	**663.3670**	**663.3670**	**0.1164**	**0.0000**	**665.8123**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**22.06**	**0.00**	**6.72**	**32.04**	**0.00**	**4.56**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5101	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.5101**	**0.0000**	**4.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0000**	**8.0000e-005**

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	0.5101	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.5101**	**0.0000**	**4.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0000**	**8.0000e-005**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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	Grubbing/Land Clearig Phase	Site Preparation	3/1/2017	3/7/2017	5	5	
2	Grading/Excavation Phase	Grading	3/8/2017	7/10/2017	5	89	
3	Bridge Phase	Building Construction	7/11/2017	4/10/2018	5	196	
4	Utilities/Trenching/Subgrade	Trenching	4/11/2018	9/11/2018	5	110	
5	Paving	Paving	9/12/2018	9/25/2018	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; 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
Grubbing/Land Clearing Phase	Rubber Tired Dozers	3	8.00	255	0.40
Grubbing/Land Clearing Phase	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading/Excavation Phase	Excavators	0	8.00	162	0.38
Grading/Excavation Phase	Graders	1	8.00	174	0.41
Grading/Excavation Phase	Plate Compactors	2		8	0.43
Grading/Excavation Phase	Rubber Tired Dozers	0	8.00	255	0.40
Grading/Excavation Phase	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Bridge Phase	Bore/Drill Rigs	1	8.00	205	0.50
Bridge Phase	Cement and Mortar Mixers	1	8.00	9	0.56
Bridge Phase	Concrete/Industrial Saws	2	8.00	81	0.73
Bridge Phase	Cranes	2	7.00	226	0.29
Bridge Phase	Forklifts	0	8.00	89	0.20
Bridge Phase	Generator Sets	1	8.00	84	0.74
Bridge Phase	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Bridge Phase	Welders	1	8.00	46	0.45
Utilities/Trenching/Subgrade	Air Compressors	1	8.00	78	0.48
Utilities/Trenching/Subgrade	Concrete/Industrial Saws	2	8.00	81	0.73
Utilities/Trenching/Subgrade	Skid Steer Loaders	1	8.00	64	0.37
Utilities/Trenching/Subgrade	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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	3	6.00	80	0.38
Paving	Sweepers/Scrubbers	1	8.00	64	0.46
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37

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
Grubbing/Land Clearing Phase	7	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading/Excavation Phase	6	32.00	0.00	563.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Bridge Phase	8	32.00	21.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utilities/Trenching/Subgrade	6	24.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	28.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grubbing/Land Clearing Phase - 2017

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	0.0121	0.1294	0.0985	1.0000e-004		6.8900e-003	6.8900e-003		6.3300e-003	6.3300e-003	0.0000	9.0789	9.0789	2.7800e-003	0.0000	9.1373
Total	**0.0121**	**0.1294**	**0.0985**	**1.0000e-004**	**0.0452**	**6.8900e-003**	**0.0521**	**0.0248**	**6.3300e-003**	**0.0312**	**0.0000**	**9.0789**	**9.0789**	**2.7800e-003**	**0.0000**	**9.1373**

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	2.2700e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4477	0.4477	2.0000e-005	0.0000	0.4481
Total	**1.5000e-004**	**2.3000e-004**	**2.2700e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4477**	**0.4477**	**2.0000e-005**	**0.0000**	**0.4481**

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					0.0176	0.0000	0.0176	9.6800e-003	0.0000	9.6800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.1294	0.0985	1.0000e-004		6.8900e-003	6.8900e-003		6.3300e-003	6.3300e-003	0.0000	9.0788	9.0788	2.7800e-003	0.0000	9.1373
Total	**0.0121**	**0.1294**	**0.0985**	**1.0000e-004**	**0.0176**	**6.8900e-003**	**0.0245**	**9.6800e-003**	**6.3300e-003**	**0.0160**	**0.0000**	**9.0788**	**9.0788**	**2.7800e-003**	**0.0000**	**9.1373**

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	2.2700e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4477	0.4477	2.0000e-005	0.0000	0.4481

Total	**1.5000e-004**	**2.3000e-004**	**2.2700e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4477**	**0.4477**	**2.0000e-005**	**0.0000**	**0.4481**

3.3 Grading/Excavation Phase - 2017

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					2.6100e-003	0.0000	2.6100e-003	2.9000e-004	0.0000	2.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0847	0.8354	0.5349	6.9000e-004		0.0547	0.0547		0.0503	0.0503	0.0000	64.2846	64.2846	0.0197	0.0000	64.6982
Total	**0.0847**	**0.8354**	**0.5349**	**6.9000e-004**	**2.6100e-003**	**0.0547**	**0.0573**	**2.9000e-004**	**0.0503**	**0.0506**	**0.0000**	**64.2846**	**64.2846**	**0.0197**	**0.0000**	**64.6982**

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	4.0600e-003	0.0720	0.0516	2.0000e-004	4.8400e-003	1.2600e-003	6.1000e-003	1.3300e-003	1.1600e-003	2.4800e-003	0.0000	18.0096	18.0096	1.1000e-004	0.0000	18.0120
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	4.3600e-003	6.4100e-003	0.0646	1.8000e-004	0.0157	1.0000e-004	0.0158	4.1600e-003	9.0000e-005	4.2500e-003	0.0000	12.7507	12.7507	5.7000e-004	0.0000	12.7626
Total	**8.4200e-003**	**0.0784**	**0.1161**	**3.8000e-004**	**0.0205**	**1.3600e-003**	**0.0219**	**5.4900e-003**	**1.2500e-003**	**6.7300e-003**	**0.0000**	**30.7603**	**30.7603**	**6.8000e-004**	**0.0000**	**30.7746**

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					1.0200e-003	0.0000	1.0200e-003	1.1000e-004	0.0000	1.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0847	0.8354	0.5349	6.9000e-004		0.0547	0.0547		0.0503	0.0503	0.0000	64.2845	64.2845	0.0197	0.0000	64.6981
Total	**0.0847**	**0.8354**	**0.5349**	**6.9000e-004**	**1.0200e-003**	**0.0547**	**0.0557**	**1.1000e-004**	**0.0503**	**0.0504**	**0.0000**	**64.2845**	**64.2845**	**0.0197**	**0.0000**	**64.6981**

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	4.0600e-003	0.0720	0.0516	2.0000e-004	4.8400e-003	1.2600e-003	6.1000e-003	1.3300e-003	1.1600e-003	2.4800e-003	0.0000	18.0096	18.0096	1.1000e-004	0.0000	18.0120
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	4.3600e-003	6.4100e-003	0.0646	1.8000e-004	0.0157	1.0000e-004	0.0158	4.1600e-003	9.0000e-005	4.2500e-003	0.0000	12.7507	12.7507	5.7000e-004	0.0000	12.7626
Total	**8.4200e-003**	**0.0784**	**0.1161**	**3.8000e-004**	**0.0205**	**1.3600e-003**	**0.0219**	**5.4900e-003**	**1.2500e-003**	**6.7300e-003**	**0.0000**	**30.7603**	**30.7603**	**6.8000e-004**	**0.0000**	**30.7746**

3.4 Bridge Phase - 2017

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	0.2318	2.0532	1.2591	2.5400e-003		0.1108	0.1108		0.1072	0.1072	0.0000	223.2845	223.2845	0.0443	0.0000	224.2153
Total	**0.2318**	**2.0532**	**1.2591**	**2.5400e-003**		**0.1108**	**0.1108**		**0.1072**	**0.1072**	**0.0000**	**223.2845**	**223.2845**	**0.0443**	**0.0000**	**224.2153**

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	9.6200e-003	0.1035	0.1262	2.7000e-004	8.0800e-003	1.9100e-003	9.9900e-003	2.3100e-003	1.7500e-003	4.0700e-003	0.0000	24.4446	24.4446	1.6000e-004	0.0000	24.4480
Worker	6.0800e-003	8.9400e-003	0.0899	2.5000e-004	0.0218	1.3000e-004	0.0219	5.7900e-003	1.2000e-004	5.9100e-003	0.0000	17.7650	17.7650	7.9000e-004	0.0000	17.7816
Total	**0.0157**	**0.1125**	**0.2161**	**5.2000e-004**	**0.0299**	**2.0400e-003**	**0.0319**	**8.1000e-003**	**1.8700e-003**	**9.9800e-003**	**0.0000**	**42.2097**	**42.2097**	**9.5000e-004**	**0.0000**	**42.2296**

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	0.2318	2.0532	1.2591	2.5400e-003		0.1108	0.1108		0.1072	0.1072	0.0000	223.2842	223.2842	0.0443	0.0000	224.2151
Total	**0.2318**	**2.0532**	**1.2591**	**2.5400e-003**		**0.1108**	**0.1108**		**0.1072**	**0.1072**	**0.0000**	**223.2842**	**223.2842**	**0.0443**	**0.0000**	**224.2151**

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	9.6200e-003	0.1035	0.1262	2.7000e-004	8.0800e-003	1.9100e-003	9.9900e-003	2.3100e-003	1.7500e-003	4.0700e-003	0.0000	24.4446	24.4446	1.6000e-004	0.0000	24.4480
Worker	6.0800e-003	8.9400e-003	0.0899	2.5000e-004	0.0218	1.3000e-004	0.0219	5.7900e-003	1.2000e-004	5.9100e-003	0.0000	17.7650	17.7650	7.9000e-004	0.0000	17.7816
Total	**0.0157**	**0.1125**	**0.2161**	**5.2000e-004**	**0.0299**	**2.0400e-003**	**0.0319**	**8.1000e-003**	**1.8700e-003**	**9.9800e-003**	**0.0000**	**42.2097**	**42.2097**	**9.5000e-004**	**0.0000**	**42.2296**

3.4 Bridge Phase - 2018

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	0.1188	1.0643	0.7064	1.4700e-003		0.0554	0.0554		0.0537	0.0537	0.0000	128.5574	128.5574	0.0250	0.0000	129.0813
Total	**0.1188**	**1.0643**	**0.7064**	**1.4700e-003**		**0.0554**	**0.0554**		**0.0537**	**0.0537**	**0.0000**	**128.5574**	**128.5574**	**0.0250**	**0.0000**	**129.0813**

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	5.1600e-003	0.0550	0.0702	1.6000e-004	4.6900e-003	1.0400e-003	5.7300e-003	1.3400e-003	9.6000e-004	2.3000e-003	0.0000	13.9465	13.9465	9.0000e-005	0.0000	13.9485

Worker	3.1700e-003	4.6900e-003	0.0471	1.4000e-004	0.0127	8.0000e-005	0.0127	3.3600e-003	7.0000e-005	3.4300e-003	0.0000	9.9231	9.9231	4.2000e-004	0.0000	9.9320
Total	**8.3300e-003**	**0.0596**	**0.1173**	**3.0000e-004**	**0.0174**	**1.1200e-003**	**0.0185**	**4.7000e-003**	**1.0300e-003**	**5.7300e-003**	**0.0000**	**23.8697**	**23.8697**	**5.1000e-004**	**0.0000**	**23.8805**

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	0.1188	1.0643	0.7064	1.4700e-003		0.0554	0.0554		0.0537	0.0537	0.0000	128.5572	128.5572	0.0250	0.0000	129.0812
Total	**0.1188**	**1.0643**	**0.7064**	**1.4700e-003**		**0.0554**	**0.0554**		**0.0537**	**0.0537**	**0.0000**	**128.5572**	**128.5572**	**0.0250**	**0.0000**	**129.0812**

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	5.1600e-003	0.0550	0.0702	1.6000e-004	4.6900e-003	1.0400e-003	5.7300e-003	1.3400e-003	9.6000e-004	2.3000e-003	0.0000	13.9465	13.9465	9.0000e-005	0.0000	13.9485
Worker	3.1700e-003	4.6900e-003	0.0471	1.4000e-004	0.0127	8.0000e-005	0.0127	3.3600e-003	7.0000e-005	3.4300e-003	0.0000	9.9231	9.9231	4.2000e-004	0.0000	9.9320
Total	**8.3300e-003**	**0.0596**	**0.1173**	**3.0000e-004**	**0.0174**	**1.1200e-003**	**0.0185**	**4.7000e-003**	**1.0300e-003**	**5.7300e-003**	**0.0000**	**23.8697**	**23.8697**	**5.1000e-004**	**0.0000**	**23.8805**

3.5 Utilities/Trenching/Subgrade - 2018

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	0.1133	0.9327	0.8781	1.3600e-003		0.0641	0.0641		0.0622	0.0622	0.0000	119.2909	119.2909	0.0193	0.0000	119.6952
Total	**0.1133**	**0.9327**	**0.8781**	**1.3600e-003**		**0.0641**	**0.0641**		**0.0622**	**0.0622**	**0.0000**	**119.2909**	**119.2909**	**0.0193**	**0.0000**	**119.6952**

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	3.6300e-003	5.3700e-003	0.0539	1.6000e-004	0.0145	9.0000e-005	0.0146	3.8500e-003	8.0000e-005	3.9300e-003	0.0000	11.3702	11.3702	4.9000e-004	0.0000	11.3804
Total	**3.6300e-003**	**5.3700e-003**	**0.0539**	**1.6000e-004**	**0.0145**	**9.0000e-005**	**0.0146**	**3.8500e-003**	**8.0000e-005**	**3.9300e-003**	**0.0000**	**11.3702**	**11.3702**	**4.9000e-004**	**0.0000**	**11.3804**

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	0.1133	0.9327	0.8781	1.3600e-003		0.0641	0.0641		0.0622	0.0622	0.0000	119.2907	119.2907	0.0193	0.0000	119.6951

Total	**0.1133**	**0.9327**	**0.8781**	**1.3600e-003**		**0.0641**	**0.0641**		**0.0622**	**0.0622**	**0.0000**	**119.2907**	**119.2907**	**0.0193**	**0.0000**	**119.6951**

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	3.6300e-003	5.3700e-003	0.0539	1.6000e-004	0.0145	9.0000e-005	0.0146	3.8500e-003	8.0000e-005	3.9300e-003	0.0000	11.3702	11.3702	4.9000e-004	0.0000	11.3804
Total	**3.6300e-003**	**5.3700e-003**	**0.0539**	**1.6000e-004**	**0.0145**	**9.0000e-005**	**0.0146**	**3.8500e-003**	**8.0000e-005**	**3.9300e-003**	**0.0000**	**11.3702**	**11.3702**	**4.9000e-004**	**0.0000**	**11.3804**

3.6 Paving - 2018

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	8.2200e-003	0.0811	0.0670	1.0000e-004		4.9600e-003	4.9600e-003		4.5700e-003	4.5700e-003	0.0000	9.0081	9.0081	2.7300e-003	0.0000	9.0655
Paving	3.9300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0122**	**0.0811**	**0.0670**	**1.0000e-004**		**4.9600e-003**	**4.9600e-003**		**4.5700e-003**	**4.5700e-003**	**0.0000**	**9.0081**	**9.0081**	**2.7300e-003**	**0.0000**	**9.0655**

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	3.9000e-004	5.7000e-004	5.7200e-003	2.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.2059	1.2059	5.0000e-005	0.0000	1.2070
Total	**3.9000e-004**	**5.7000e-004**	**5.7200e-003**	**2.0000e-005**	**1.5400e-003**	**1.0000e-005**	**1.5500e-003**	**4.1000e-004**	**1.0000e-005**	**4.2000e-004**	**0.0000**	**1.2059**	**1.2059**	**5.0000e-005**	**0.0000**	**1.2070**

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	8.2200e-003	0.0811	0.0670	1.0000e-004		4.9600e-003	4.9600e-003		4.5700e-003	4.5700e-003	0.0000	9.0081	9.0081	2.7300e-003	0.0000	9.0655
Paving	3.9300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0122**	**0.0811**	**0.0670**	**1.0000e-004**		**4.9600e-003**	**4.9600e-003**		**4.5700e-003**	**4.5700e-003**	**0.0000**	**9.0081**	**9.0081**	**2.7300e-003**	**0.0000**	**9.0655**

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	3.9000e-004	5.7000e-004	5.7200e-003	2.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.2059	1.2059	5.0000e-005	0.0000	1.2070
Total	**3.9000e-004**	**5.7000e-004**	**5.7200e-003**	**2.0000e-005**	**1.5400e-003**	**1.0000e-005**	**1.5500e-003**	**4.1000e-004**	**1.0000e-005**	**4.2000e-004**	**0.0000**	**1.2059**	**1.2059**	**5.0000e-005**	**0.0000**	**1.2070**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.459583	0.069267	0.177530	0.170944	0.045911	0.007406	0.012759	0.044006	0.000935	0.001057	0.006483	0.000867	0.003251

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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000

Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.5101	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Unmitigated	0.5101	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005

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	0.0379					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4722					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Total	**0.5101**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0000**	**8.0000e-005**

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	0.0379					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4722					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Total	**0.5101**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0000**	**8.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e

Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

APPENDIX B

Biological Resources Report

Bradley Road Bridge
Biological Resources Technical Report

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AUGUST 2016

Printed on 30% post-consumer recycled material.

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1 INTRODUCTION

1.1 Purpose and Scope

In accordance with the requirements of the California Environmental Quality Act (CEQA), the purpose of this biological resources technical report (BTR) for the proposed Bradley Road Bridge Project (project) is to (1) document the biological resources that are present in the project site, which is approximately 7 acres and includes all the proposed project impacts; (2) analyze the potential direct and indirect impacts to special-status biological resources resulting from the proposed project; (3) describe the significance of the potential impacts; (4) identify recommended avoidance and mitigation measures for consideration by the City of Menifee (City), the Lead Agency, as part of the CEQA process; and (5) describe the consistency of the proposed project with the requirements of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) administered by the Regional Conservation Authority (RCA).

1.1 Project Description and Location

The proposed project is along Bradley Road where it crosses Salt Creek between Potomac Drive and Rio Vista Drive in the City of Menifee, California (Figure 1). The project is situated in Sections 33 and 34 of Township 5 South and Range 3 West of the Romoland 7.5-minute U.S. Geological Survey quadrangle map (USGS n.d.; PLSS 2015) (Figure 2). The approximate centroid of the project is located at latitude 33°41′33″ N and longitude 117°11′19″ W.

The proposed project would replace the existing at-grade crossing of Bradley Road with an all-weather bridge crossing, thereby elevating the roadway out of the Salt Creek floodplain and allowing the conveyance of 100-year flows while avoiding the inundation of the approaches. The proposed project includes improvements at the Potomac Drive and Rio Vista Drive intersections. The proposed bridge would span approximately 335 feet across Salt Creek and would be approximately 64 feet wide. The bridge would have a 12-foot median, two 12-foot travel lanes (one in each direction), 8-foot shoulders on both sides, and 5-foot pedestrian sidewalks on both sides with tubular hand railings. The bridge would consist of a three-span cast-in-place post-tensioned concrete box girders supported by two intermediate piers consisting of three columns each (six columns total), and two open ended abutments. The two bridge abutments would be constructed north of the Rio Vista Drive intersection and south of the Potomac Drive intersection. The existing dual pipe culvert currently conveying flows from Salt Creek beneath Bradley Road would be removed. The bridge would be raised approximately 12 feet above Salt Creek at the bridge's highest point. Any lighting that may be proposed will consist of shielded low sodium, low wattage lighting designed to cut glare and light scatter and to direct light away from Salt Creek.

Improvements to Bradley Road to the north and south of the proposed bridge would entail grade changes to ramp up/down to the proposed bridge abutments.

The limits of work include temporary siting and disturbance areas.

Upon completion of construction of the bridge, operation of this segment of Bradley Road would resume as it exists today. The capacity of roadway at this segment would remain unchanged. Operations would be limited to occasional maintenance that would consist of paving and restriping as necessary.

1.2 Relationship of Project to the MSHCP

The proposed project is in the plan area of the Western Riverside County MSHCP, a comprehensive, multi-jurisdictional habitat conservation plan focusing on conservation of species and their associated habitats in Western Riverside County. The MSHCP was prepared by the County of Riverside Transportation and Land Management Agency and finalized in 2003. This plan is one of several large, multi-jurisdictional habitat-planning efforts in southern California with the overall goal of maintaining biological and ecological diversity within a rapidly urbanizing region. The MSHCP will allow Riverside County and its cities to better control local land-use decisions and maintain a strong economic climate in the region while addressing the requirements of the state and federal Endangered Species Acts.

The MSHCP serves as a habitat conservation plan pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act of 1973, as well as a natural community conservation plan under the Natural Community Conservation Planning Act of 2001. The MSHCP allows the participating jurisdictions to authorize "take" of plant and wildlife species identified within the plan area. The United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) have authority to regulate the take of threatened, endangered, and rare species. Under the MSHCP, the wildlife agencies have granted "take authorization" for otherwise lawful actions—such as public and private development that may incidentally take or harm individual species or their habitat outside of the MSHCP conservation area—in exchange for the assembly and management of a coordinated MSHCP conservation area.

The MSHCP is a "criteria-based plan" and does not rely on a hardline preserve map. Instead, within the MSHCP Plan Area, the MSHCP reserve will be assembled over time from a smaller subset of the Plan Area referred to as the Criteria Area. The Criteria Area consists of Criteria Cells (Cells) or Cell Groupings, and flexible guidelines (Criteria) for the assembly of conservation within the Cells or Cell Groupings have been developed for each Cell/Cell Grouping. Cells and Cell Groupings also may be included within larger units known as Cores, Linkages, or Habitat Blocks.

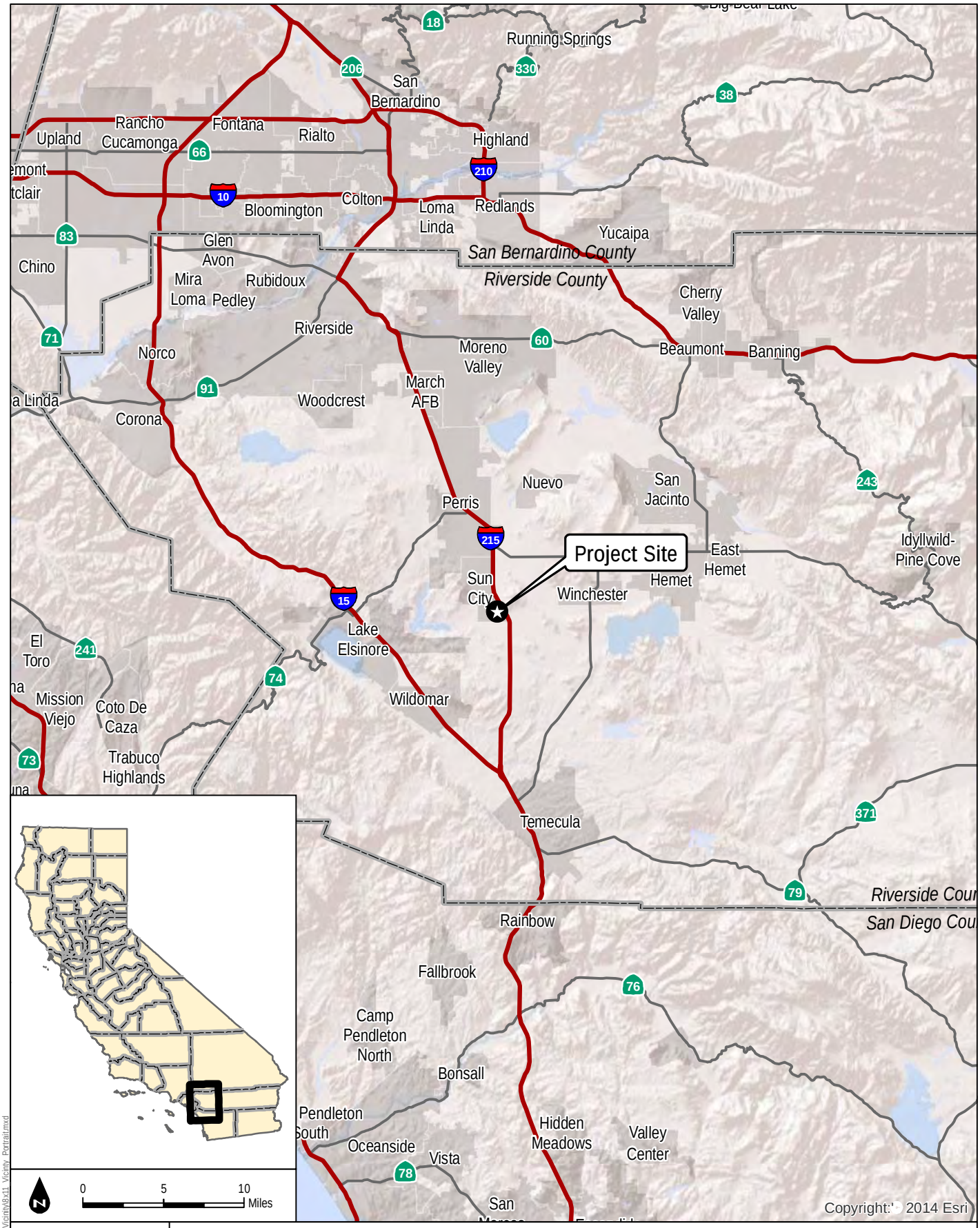

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FIGURE 1

Regional Map

Bradley Road Bridge - Biological Resources Technical Report

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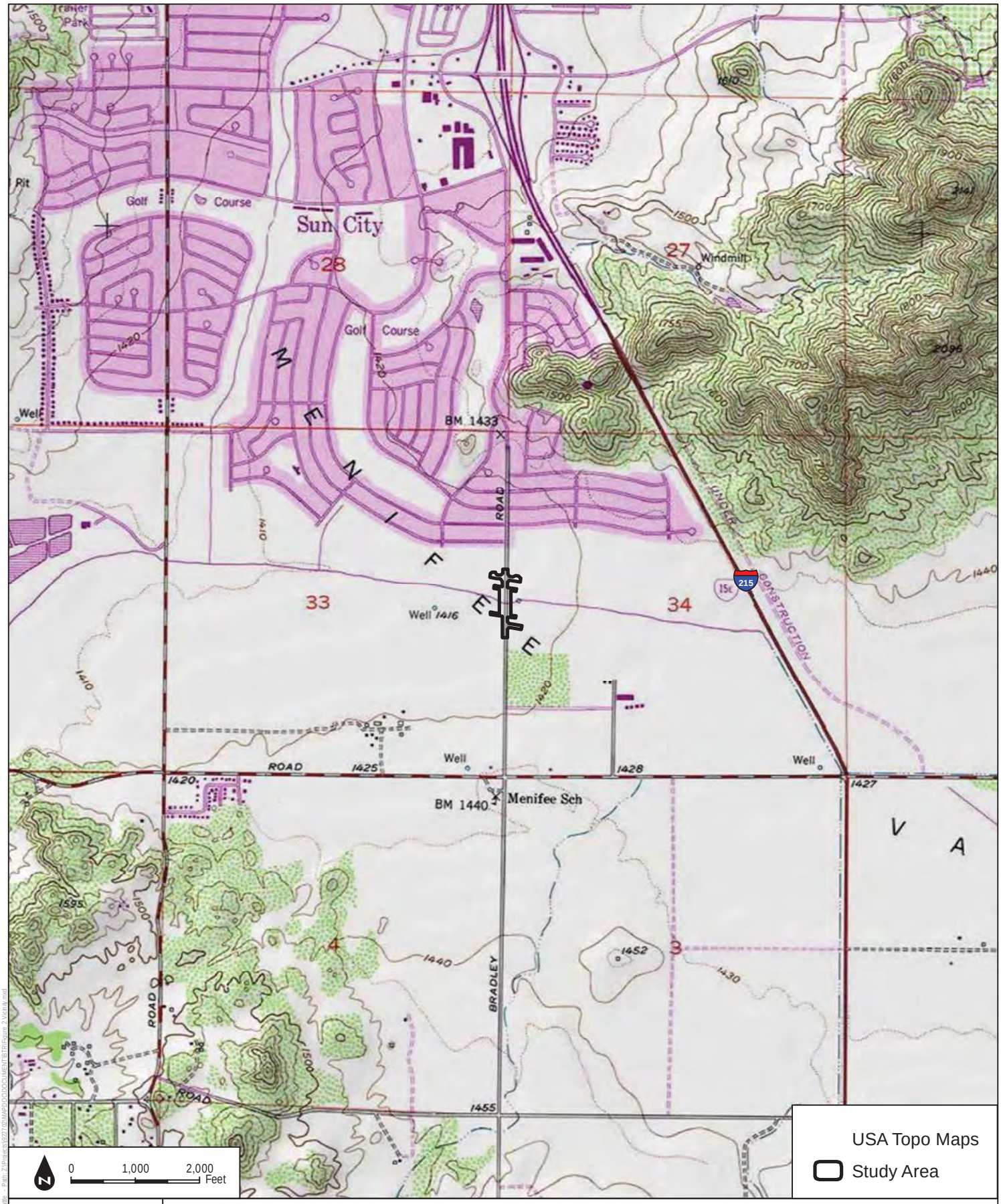

SOURCE: USGS 7.5-Minute Series Romoland Quadrangle

FIGURE 2
Vicinity Map

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Bradley Road Bridge - Biological Resources Technical Report

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The proposed project is located within the Sun City/Menifee Area Plan of the MSHCP. The proposed project is not located within Criteria Area, and, thus would not be part of the MSHCP reserve (Figure 3). Plan Area-wide requirements include habitat assessments, and focused surveys, if necessary for: (1) riverine/riparian, vernal pool, or fairy shrimp habitat; (2) narrow endemic plant species—the proposed project is located within a Narrow Endemic Plant Species Survey Area (NEPSSA), NEPSSA 3, and the burrowing owl (*Athene cunicularia [=Speotyto cunicularia hypugaea]*) survey area. The proposed project is located in Public/Quasi-Public Conserved Lands. As described in Section 7.2.1 of the MSHCP, there are many existing roadways within existing Public/Quasi-Public Conserved Lands, and safety improvements to publicly maintained existing roadways within Public/Quasi-Public Conserved Lands are Covered Activities. The MSHCP provides guidelines that would be implemented by the City that would minimize and avoid impacts to sensitive species and habitats occurring adjacent to the existing roadway; these guidelines are provided in Appendix C of Volume One of the Plan (County of Riverside 2003). Necessary operation and maintenance activities conducted for safety purposes would be permitted.

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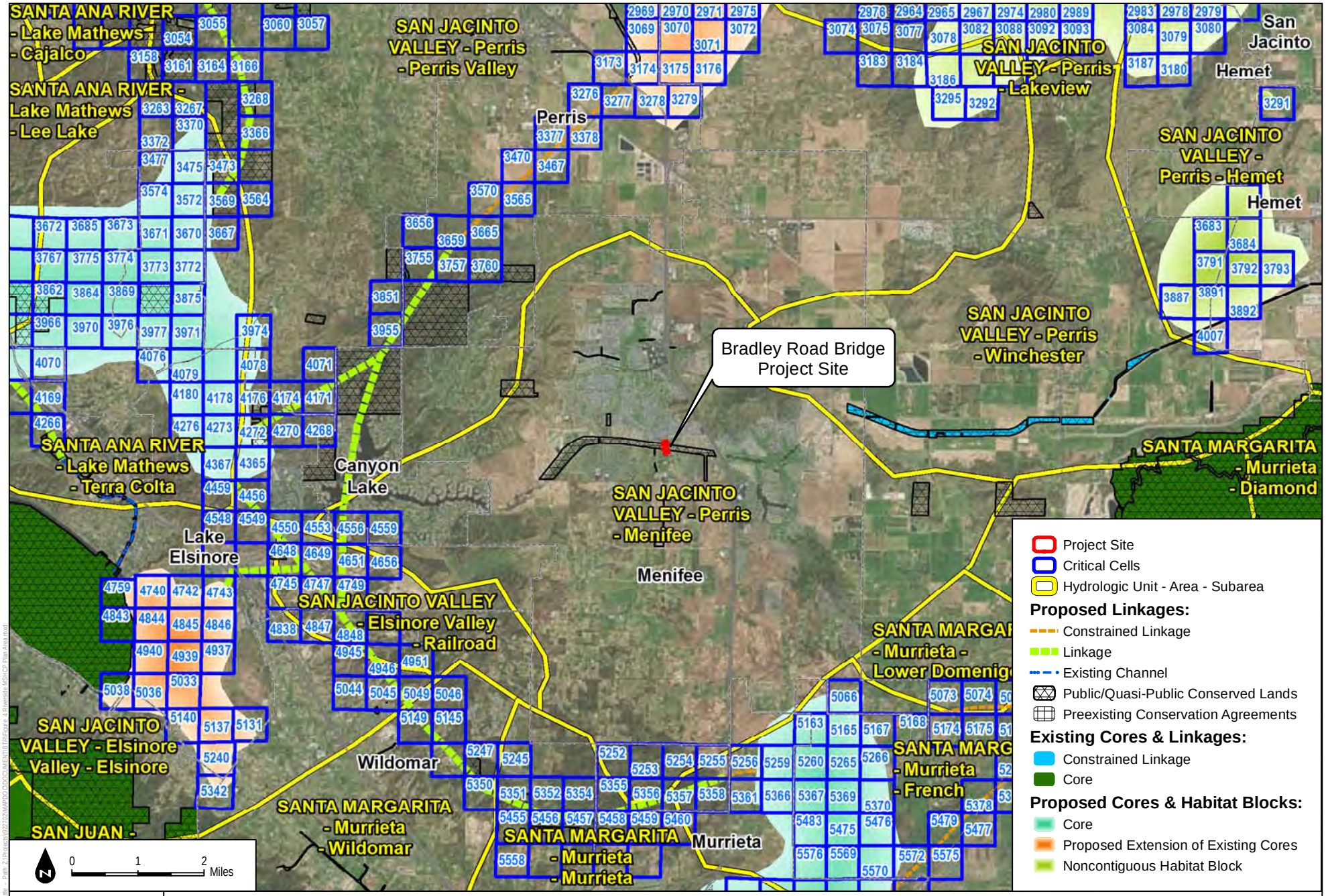

SOURCE: Bing Maps, 2016; County of Riverside, 2014

FIGURE 3

Regional Planning Context

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Bradley Road Bridge - Biological Resources Technical Report

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2 METHODS

2.1 Literature Review

Prior to field surveys, special-status biological resources present or potentially present within the project site were identified through queries of the California Natural Diversity Database (CDFW 2015), the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Vascular Plant*s (CNPS Inventory; CNPS 2015), MSHCP species occurrence data (County of Riverside 2003), and USFWS occurrence data (USFWS 2015). The CNPS Inventory and the California Natural Diversity Database were queried based on the U.S. Geological Survey 7.5-minute quadrangle on which the proposed is located (Romoland) and the eight surrounding quadrangles (Perris, Lakeview, Lake Elsinore, Wildomar, Steele Peak, Winchester, Murrieta, and Bachelor Mountain) (i.e., 9-quad search). The remaining databases were queried using geographic information systems (GIS) software based on a 10-mile buffer around the project site. Additional literature review conducted in concert with field surveys is discussed in relevant sections in this chapter.

2.2 Field Surveys

A general biological survey, delineation of jurisdictional waters, vegetation mapping, and burrowing owl habitat assessment of the project site was conducted by Dudek biologist Tricia Wotipka on October 22, 2015 and August 12, 2016 (Table 1).

Table 1
Schedule of Surveys

Date	Time	Staff	Environmental Conditions	Survey Type
10/22/2015	1000–1330	TLW	0%–15% cloud cover; wind 2–3 miles per hour; 71°F–84°F	General biological survey, jurisdictional wetland delineation, vegetation mapping, special-status plants habitat assessment, and burrowing owl habitat assessment
8/12/2016	1000-1130	TLW	0% cloud cover; winds calm; 83°F–85°F	General biological survey update

Staff Key: TLW (Tricia L. Wotipka).

2.2.1 Vegetation Communities and Land Covers

Vegetation communities and land covers were mapped in the field directly onto 100-scale (1 inch = 100 feet) topographic or aerial photographic base and later digitized into a GIS format using ArcGIS. Vegetation communities used in this report follow the MSHCP uncollapsed vegetation community classifications (County of Riverside 2003).

2.2.2 Wildlife

Wildlife species detected during the field survey by sight, calls, tracks, scat, or other signs were recorded. Binoculars (8 × 42 power) were used to aid in the identification of observed wildlife throughout the project site. In addition to species actually detected, expected wildlife use of the site was determined by known habitat preferences of local species and knowledge of their relative distributions in the area.

Common and scientific names used for wildlife include Crother (2012) for reptiles and amphibians, American Ornithologists' Union (AOU 2015) for birds, Wilson and Reeder (2005) for mammals, North American Butterfly Association (NABA 2001) or San Diego Natural History Museum (SDNHM 2012) for butterflies, and Moyle (2002) for fish.

2.2.3 Narrow Endemic Plant Species

A portion of the project site is located within a NEPSSA 3 for the following species: Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis*), California Orcutt grass (*Orcuttia californica*), and Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*). However, the NEPSSA is located within developed portions of the project site and therefore is not suitable for rare plants. No focused plant surveys were conducted due to lack of suitable habitat.

A list of all plant species observed within the project site was recorded. Latin and common names for plant species with a California Rare Plant Rank (formerly CNPS List) follow the CNPS Inventory (CNPS 2015). For plant species without a California Rare Plant Rank, Latin names follow the Jepson Interchange List of Currently Accepted Names of Native and Naturalized Plants of California (Jepson Flora Project 2015) and common names follow the United States Department of Agriculture (USDA) Natural Resources Conservation Service PLANTS Database (USDA 2015).

2.2.4 Burrowing Owl Habitat Assessment

Burrowing owl habitat includes, but is not limited to, native and non-native grassland, interstitial grassland within shrub lands, shrublands with low-density shrub cover, golf courses, drainage ditches, earthen berms, unpaved airfields, pastureland, dairies, fallow fields, and agricultural use areas. Burrowing owls typically use burrows made by fossorial (adapted for burrowing or digging) mammals, such as California ground squirrel (*Spermophilus beecheyi*) or American badger (*Taxidea taxus*). They also often utilize manmade structures, including earthen berms; cement culverts; cement, asphalt, rock, or wood debris piles; or openings beneath cement or asphalt pavement. Burrowing owls are often found within, under, or in close proximity to man-made structures.

Dudek conducted a habitat assessment for burrowing owl surveys on October 22, 2015 in accordance with the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* (County of Riverside 2006). Due to the lack of suitable habitat, no focused surveys were conducted.

2.2.5 Jurisdictional Wetlands and Waters

Salt Creek is an east-to-west trending man-made, flood control channel confined by unvegetated, earthen levees to the north and south and managed by the Riverside County Flood Control District (RCFCD). A jurisdictional delineation of "waters of the United States," including wetlands, under the jurisdiction of the U.S. Army Corps of Engineers (ACOE), CDFW, and California Regional Water Quality Control Board (RWQCB) was conducted on-site by Dudek biologist Tricia L. Wotipka on October 22, 2015. Potential non-wetland waters of the United States and State were considered to extend to the toe of the north and south levee where drainage patterns, drift lines, and surface soil cracks were evident. CDFW jurisdictional non-riparian streambeds were coincident with ACOE jurisdiction and extended to the toe of the both and south levee as well. Areas regulated by the RWQCB generally coincide with areas regulated by the ACOE, but can include features isolated from a water of the United States or otherwise determined not to have a significant nexus to a traditional navigable water body that have evidence of surface water. The boundaries of non-wetland waters were mapped in the field based on the observation of bed and bank morphology and other indicators of an ordinary high water mark (OHWM), as described in *A Field Guide to the Identification of the OHWM in the Arid West Region of the Western United States: A Delineation Manual* (ACOE 2008a).

Where the potential for the dominance of wetland plant species (i.e., hydrophytic vegetation) occurred, the wetlands delineation was performed in accordance with *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (ACOE 2008b). Additionally, guidance provided by the ACOE and Environmental Protection Agency on the geographic extent of jurisdiction based on the U.S. Supreme Court's interpretation of the Clean Water Act (ACOE and EPA 2007a; 2007b) and the ACOE and Environmental Protection Agency's Final Clean Water Rule defining waters of the United States (80 FR 37054–37127) were also taken into consideration. Hydrology, vegetation, and soils were assessed in the project vicinity at eight geographically distinct sampling locations along a north-to-south gradient to determine the presence or absence of wetland field indicators. The overall area was assessed for evidence of an OHWM, saturation, permanence of surface water, and wetland vegetation.

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3 PHYSICAL CHARACTERISTICS

3.1 Land Use

The project site primarily consists of Salt Creek and the adjacent disturbed floodplain supporting open, undeveloped lands adjacent to the active main channel. The project site also supports roads, including Bradley Road, Potomac Drive, and Rio Vista Road, and some residential development. The surrounding land uses are either residential development or vacant land.

3.2 Topography

The majority of the study area is in the 100-year floodplain of Salt Creek and as such there is very little topographic relief. Within the project site, elevations range from 1,405 feet above mean sea level (AMSL) to 1,420 feet AMSL (GoogleEarth Pro 2015)

3.3 Hydrology

The project site is located in the San Jacinto Valley Hydrologic Unit (Hydrologic Unit Code 802.11) of the Santa Ana Hydrologic Basin Planning Area. More specifically, the project is situated in the Perris Hydrologic Area and the Menifee Hydrologic Subarea (RWQCB 2011) (Figure 3). Within the project site, Salt Creek runs east–west and, from the project site, flows off-site and west for about 4 miles until it enters Railroad Canyon Reservoir, which is commonly referred to as Canyon Lake (USGS n.d.; USGS 2015).

3.4 Soils

Soils mapping from the USDA Web Soil Survey (USDA NRCS 2015) shows the project site consists of soils in the Travers-Domino-Willows soil association, which in the Plan Area includes saline-alkali soils largely located along floodplain areas of the San Jacinto River and Salt Creek within the Plan Area (County of Riverside 2003). More specifically, the soils in the project site are in the domino series (2.4 acres) and the willows series (4.4 acres). Table 2 lists the specific soils types and the acreages of each.

Table 2
Soils in the Study Area

Soil Texture	Soil Name	Acreage
Silt loam	Domino silt loam	<0.05
	Domino silt loam, saline-alkali	2.4
	Silt loam subtotal	*2.4*

Table 2
Soils in the Study Area

Soil Texture	Soil Name	Acreage
Silty clay	Willows silty clay	2.2
	Willows silty clay, strongly saline-alkali	2.2
	Silty clay subtotal	*4.4*
	Grand Total	**6.8**

The soils in the willows series are typically located in nearly level basins and the series "consists of very deep, poorly to very poorly drained sodic soils formed in alluvium from mixed rock sources (USDA NRCS 2015). The soils in the domino series, which are in basin areas and have slopes up to 2%, consist "of moderately deep, moderately well drained soils over lime-cemented hardpans" (USDA NRCS 2015). Sensitive plants supported by the Travers-Domino-Willows soil association include two federally listed species: San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*) and spreading navarretia (*Navarretia fossalis*). Other sensitive plant species found in this soils association include Parish's brittlescale (*Atriplex parishii*), Davidson's saltscale (*Atriplex serenana var. davidsonii*), and vernal barley (*Hordeum intercedens*) (County of Riverside 2003).

4 RESULTS

The results of the surveys are discussed in the following order: vegetation communities and land covers (Section 4.1), plants and wildlife observed (Section 4.2), special-status biological resources (Section 4.3), and wildlife corridors/habitat linkages (Section 4.4). A list of wildlife and plant species observed on site is provided in Appendices A and B, respectively. Additionally, an analysis of the project's consistency with the MSHCP is discussed in Section 4.5.

4.1 Vegetation Communities and Land Covers

The project site is characterized by four land covers: developed, disturbed, open channel, and ruderal (Figure 4). These land covers are summarized in the Table 3 and described below.

Table 3
Existing Land Covers on the Project Site

Vegetation Community or Land Cover	Existing Acreage
Developed	2.8
Disturbed	0.4
Open Channel	0.1
Ruderal	1.1
Total	**4.4**

4.1.1 Developed

Developed land represents areas that have been constructed upon or otherwise physically altered to an extent that native vegetation communities are not supported. This land cover type generally consists of semi-permanent structures, homes, parking lots, pavement or hardscape, and landscaped areas that require maintenance and irrigation to subsist (e.g., ornamental greenbelts). Typically, this land cover type is unvegetated or supports a variety of ornamental plants and landscaping. In the context of the proposed project, developed land refers to Bradley Road, Potomac Drive, Rio Vista Drive, associated sidewalks, and single-family residential landscaping.

4.1.2 Disturbed

Disturbed land is a land cover type characterized by a predominance of non-native species, often introduced and established through human action. Oberbauer et al. (2008) describes disturbed land as areas that have been physically disturbed (by previous legal human activity) and are no longer recognizable as a native or naturalized vegetation association but continues to retain a soil substrate. Typically, vegetation, if present, comprises a relatively small percent cover (15% or

less), and is nearly exclusively composed of non-native plant species such as ornamentals or ruderal exotic species (i.e., weeds).

Within the project site, the disturbed areas refer to land that is not developed yet lack vegetation and generally are the result of severe or repeated mechanical perturbation. The levees are mapped as disturbed and are void of vegetation.

4.1.3 Open Channel

Open channel refers to the sandy, gravelly, or rocky fringe of waterways or flood channels (either man-made or natural). Open channels are unvegetated on a relatively permanent basis with variable water lines that inhibit the growth of vegetation, although some weedy annual grass species may grow along the outer edges of the wash. Vegetation may exist here but is usually less than 10% total cover (Oberbauer 2008). In the context of the proposed project, open channel refers to the main, active low flow channel within the Salt Creek floodplain. Areas mapped as open channel on-site are characterized by dry, unvegetated, cobble-lined streambeds.

4.1.4 Ruderal

Ruderal lands are similar to disturbed lands but they often support a higher percent cover of native and non-native ruderal (i.e., disturbance-oriented) vegetation compared to disturbed lands, which typically support less than 20% vegetative cover. The project site is dominated by ruderal vegetation and the majority of the site is mapped as ruderal. The Salt Creek floodplain and areas between the levees are mapped as ruderal and, in the context of the project, are considered non-wetland waters of the United States/State as well as MSHCP riverine resources. On site, common ruderal species include narrowleaf plantain (*Plantago lanceolata*), cuman ragweed (*Ambrosia psilostachya*), Russian thistle (*Salsola tragus*), bermudagrass (*Cynodon dactylon*), bristly ox-tongue (*Helminthotheca echioides*), crowndaisy (*Glebionis coronaria*), and redstem stork's bill (*Erodium cicutarium*).

4.2 Plants and Wildlife Observed

4.2.1 Plants

The majority of the project site has been frequently maintained and disturbed and, as a result, supports limited plant diversity and richness. A total of 17 vascular plant species, consisting of 9 native species (53%) and 8 non-native species (47%), were recorded on site during surveys. A full list of plant species observed is provided in Appendix A.

4.2.2 Wildlife

The site supports limited habitat diversity since it is primarily characterized by developed, disturbed and ruderal land covers. Consequently, the wildlife diversity and richness on the project site is also limited. No special-status species were detected. Eight wildlife species were detected: house finch (*Haemorhous mexicanus*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), red-tailed hawk (*Buteo jamaicensis*), house sparrow (*Passer domesticus*), mourning dove (*Zenaida macroura*), common buckeye (*Junonia coenia*), and brush rabbit (*Sylvilagus bachmani*); a list of these species is also provided in Appendix B.

4.3 Special-Status Biological Resources

No special-status species were observed on site. Species identified in the MSHCP as having potential to occur on site are described below.

4.3.1 Special-Status Plants

No federally- or state-listed plant species or other special-status plant species were observed during the site visit. As described in Section 2.2.3, a portion of the project site is located within NEPSSA 3 for the following species: Munz's onion, San Diego ambrosia, many-stemmed dudleya, spreading navarretia, California Orcutt grass, and Wright's trichocoronis. However, the project site is primarily developed, disturbed, or consists of ruderal species, and therefore is not suitable for any of these plants. These six plants are further described in Appendix C.

4.3.2 Special-Status Wildlife

No special-status wildlife species were observed during focused surveys. The potential for special-status wildlife occurring on the project site was assessed based on habitat associations and disturbance conditions. The project site is within a MSHCP burrowing owl survey area. A burrowing owl habitat assessment was conducted in October 2015; all burrows and/or structures on site were inspected for burrowing owl sign or suitability. The project site did not have any burrowing owl sign or suitable burrows; therefore, focused surveys for burrowing owl were not conducted.

4.3.3 Jurisdictional Wetlands and Waters

There are no federal jurisdictional wetlands of the United States, as regulated by the ACOE under the Clean Water Act, within the project site. A portion of the project site is located within the active floodplain of Salt Creek (Figure 4). The main, active low flow channel ranges in width from 3 feet to 5 feet and is mapped as open channel with a sandy bottom intermixed with small

river cobble. The active floodplain boundary, where water overtops the main, active low flow channel during larger rain events, is approximately 500 feet wide, on average, and extends from the toe of the southern levee to the toe of the north levee. The main, active low flow channel supported clearly discernible channel morphology (i.e., clear bed and bank) with evidence of channel incision, shelving, drainage patterns, and drift lines. Areas delineated as active floodplain (0.9 acre) and low flow open channel (0.1 acre) total 1.0 acres and are considered waters of the United States and state subject to regulation by ACOE, CDFW, and RWQCB.

4.4 Wildlife Corridors/Habitat Linkages

The project site is bounded to the north and south by residential development. The Salt Creek floodplain is approximately 500 feet wide and runs east-to-west and, from the project site, flows for approximately 4 miles until it enters Railroad Canyon Reservoir, which is commonly referred to as Canyon Lake. Some wildlife may move through the floodplain; however, movement of medium and large wildlife through the region is limited.

The project site is not located within an MSHCP core or linkage (Figure 3). There is an existing constrained linkage approximately 2.8 miles to the northeast and proposed linkages 4.5 miles west and south of the project site. The areas targeted for conservation are not adjacent to the project site and, as a result, the proposed project is not anticipated to significantly affect wildlife movement within the conservation areas.

4.5 MSHCP Consistency Analysis

This section addresses the consistency of the project with the requirements of the MSHCP. The project site is located within the City of Menifee and Sun City/Menifee Area Plan, which has four conservation areas: a small portion of Proposed Core 2, a small portion of Proposed Constrained Linkage 16, a small portion of Proposed Constrained Linkage 17, and a small portion of Proposed Linkage 8. The project site is not within these conservation areas and does not overlap any Criteria Cells; therefore, there are no conservation requirements for the project.

SOURCE: Bing Maps, 2016

FIGURE 4
Vegetation Map

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Bradley Road Bridge - Biological Resources Technical Report

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Chapter 6 of the MSHCP outlines additional implementation measures with which permittees must comply. The relevant section of the MSHCP, requirements, and project's consistency with the requirement are outlined below.

- MSHCP Section 6.1.2, Riparian/Riverine and Vernal Pools Guidelines: Compliance is discussed in Section 4.5.1 of this report.
- MSHCP Section 6.1.3, Narrow Endemic Plant Species: The project site is within a Narrow Endemic Plant Species Survey Area. Compliance is discussed in Section 4.5.2 of this report.
- MSHCP Section 6.1.4, Urban/Wildlands Interface Guidelines: Compliance is discussed in Section 4.5.3 of this report.
- MSHCP Section 6.3.2, Additional Survey Requirements: This section of the MSHCP outlines survey requirements for criteria area plant species, burrowing owl, mammals, and amphibians. The project site is within a burrowing owl additional survey area. Compliance is discussed in Section 4.5.4 of this report.

4.5.1 Riparian/Riverine and Vernal Pool Habitat (MSHCP Section 6.1.2)

The MSHCP defines riparian/riverine areas as "lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year." In addition, riverine areas (streams) include areas that "do not contain riparian vegetation, but that have water flow for all or a portion of the year, and contain biological functions and values that contribute to downstream habitat values for covered species inside the MSHCP Conservation Area."

Riparian/Riverine Habitat

The project site does not support habitat suitable for riparian-dependent species as defined as riparian habitat under the MSHCP.

In the project site, Salt Creek is riverine habitat and consists of an active floodplain and an active, low-flow channel. These features support conveyance of surface and groundwater flows west towards Canyon Lake, which is located adjacent to Critical Cells and within a Proposed Linkage (Figure 3). The proposed project will only temporarily impact the active channel and the majority of the floodplain will not be permanently impacted. The functions and values of Salt Creek will be maintained through avoidance and minimization measures (described in

Section 6 of this BTR). Therefore, the project is consistent with the MSHCP Section 6.1.2, Riparian/Riverine and Vernal Pool Habitat Guidelines.

Vernal Pools and Fairy Shrimp Habitat

No vernal pools, stock ponds, ephemeral pools, or other similar features were observed during biological surveys within the project site.

4.5.2 Narrow Endemic Plant Species (MSHCP Section 6.1.3)

The MSHCP has additional survey requirements for areas outside of the Conservation Areas. The project site is within NEPSSA 3 for the following species: Munz's onion, San Diego ambrosia, many-stemmed dudleya, spreading navarretia, California Orcutt grass, and Wright's trichocoronis. However, Dudek conducted a site visit on October 22, 2015 and determined that the project site is not suitable for any of these plants due to the elevation range and/or suitable habitat (Appendix C). Narrow endemic plant species are not expected to occur within the project site, and no additional actions are required.

4.5.3 Urban/Wildlands Interface Guidelines (MSHCP Section 6.1.4)

The project site is not located near any Criteria Cells (Figure 3) or any other targeted Conservation Areas. Because the areas targeted for conservation are not adjacent to the project site, the proposed project is not anticipated to affect a Conservation Area and would not result in long-term adverse edge effects, such as drainage, toxics, lighting, noise, or invasive species, that would affect biological resources within outside areas proposed for MSHCP conservation. The project would not facilitate unauthorized public access, domestic animal predation, illegal trespass, or dumping into the MSHCP Conservation Areas. In addition, the project would not include manufactured slopes that might extend into a MSHCP Conservation Area. Therefore, the project is consistent with the MSHCP Urban/Wildlands Interface Guidelines.

4.5.4 Additional Survey Requirements (MSHCP Section 6.3.2)

The project site is located within the MSHCP Burrowing Owl Survey Area. A habitat assessment for burrowing owls was conducted by Dudek biologist Tricia Wotipka on October 22, 2015. No suitable burrowing owl habitat was found on the project site. Therefore, the project is consistent with the MSHCP Additional Survey Requirements.

5 PROJECT IMPACTS

This section addresses direct, indirect, and cumulative impacts to biological resources that would result from implementation of the proposed project, which consists of elevating Bradley Road and constructing a bridge to allow the conveyance of the 100-year flows while avoiding the inundation of the approaches. The proposed project also includes improvements at the Potomac Drive and Rio Vista Drive intersections.

Direct impacts refer to 100% loss of a biological resource. For purposes of this report, it refers to the area where clearing, grubbing, or grading replaces biological resources. Direct impacts were quantified by overlaying the proposed bridge improvement plans (i.e., impact limits) on the biological resources map of the project site. Permanent, direct impacts would occur from construction of the bridge abutments, permanent recontouring and regrading and other related improvements that represent a permanent change in condition. The limits of work also include temporary siting and disturbance areas associated with construction access and staging.

Indirect impacts are reasonably foreseeable effects caused by project implementation on remaining or adjacent biological resources outside the direct construction disturbance zone. Indirect impacts may affect areas within the project site but outside the construction disturbance zone, including open space and areas outside the project. Indirect impacts may be short term and construction-related or long term in nature and associated with development in proximity to biological resources. Short-term indirect impacts could include dust, which could disrupt plant vitality in the short term; construction-related soil erosion and water runoff; and construction-related vibration and noise and lighting, which could disturb wildlife species. Long-term indirect impacts could include invasion by exotic plants and domestic pets, lighting, noise, traffic collisions, exposure to urban pollutants (e.g., fertilizers, pesticides, herbicides, and other hazardous materials), soil erosion, and hydrologic changes (e.g., surface and groundwater level and quality).

Cumulative impacts refer to the combined environmental effects of the proposed project and other relevant projects. These are described in the project's CEQA document.

5.1 Impacts to Vegetation Communities and Land Covers

5.1.1 Direct Impacts

Construction of the proposed project would result in direct permanent impacts and direct temporary impacts to the land covers on site, as presented in Table 4 and shown on Figure 5.

Table 4
Permanent and Temporary Impacts to Land Covers

Vegetation Community/Land Cover	Permanent Impact (acres)	Temporary Impact (acre)
Developed	2.8	—
Disturbed	0.4	—
Open Channel	—	0.1
Ruderal	0.4	0.7
Total	**3.6**	**0.8**

The project site consists of developed, disturbed, and ruderal lands, which are not sensitive vegetation communities. Therefore, no significant indirect short- or long-term impacts to sensitive vegetation communities would occur. Impacts to open channel and other jurisdictional non-wetland waters of the United States/State are addressed in Section 5.5 of this report.

5.1.2 Indirect Impacts

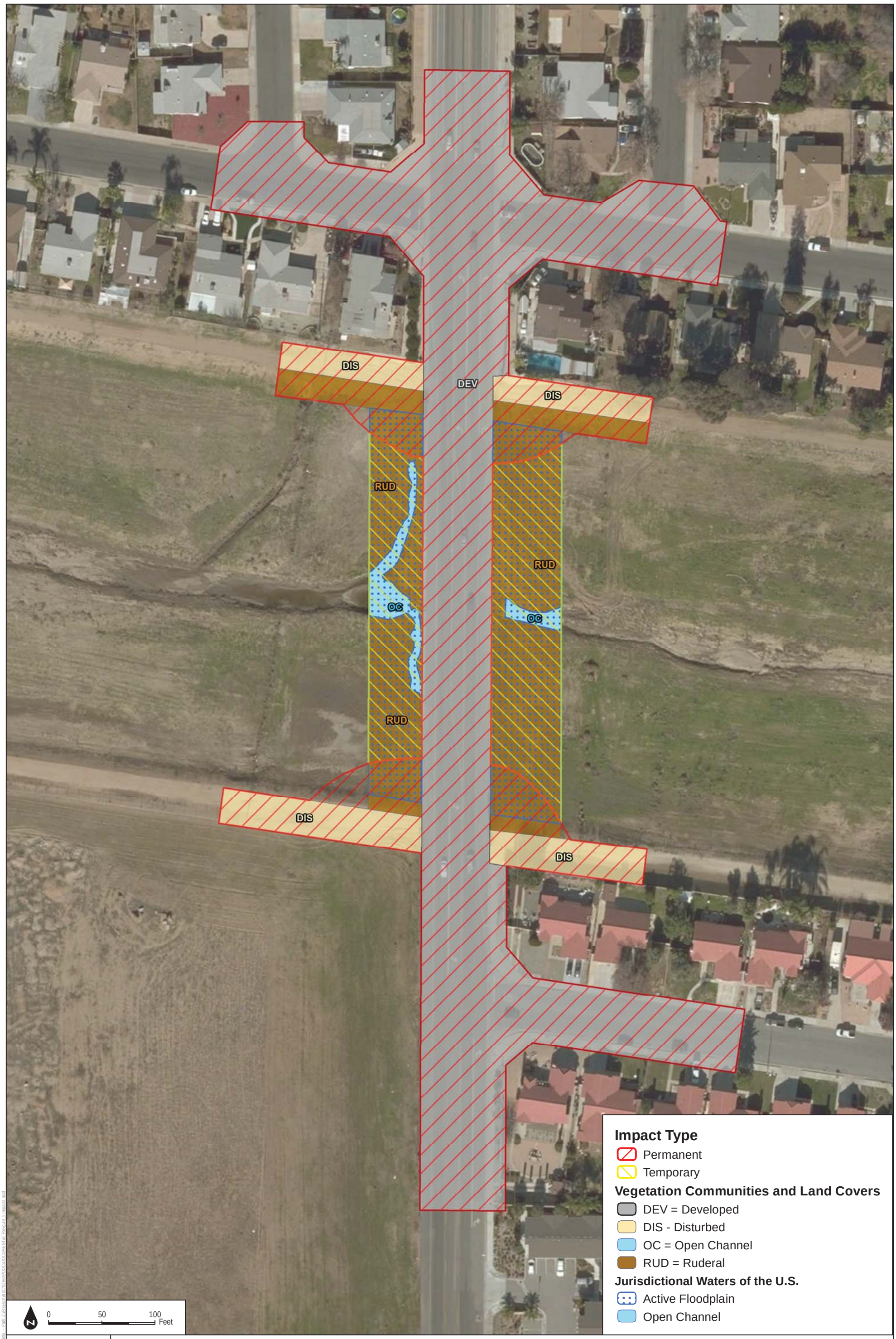
During construction activities, indirect edge effects may include dust, which could disrupt plant vitality in the short term, or construction-related soil erosion and water runoff. In the absence of best management practices (BMPs), construction-related minimization measures to control dust, erosion, and runoff, and compliance with National Pollutant Discharge Elimination System requirements, indirect impacts to on-site water features could occur. However, it is assumed that standard construction BMPs and construction-related minimization measures to control dust, erosion, and runoff, including, but not limited to, straw bales and silt fencing, will be implemented to minimize these adverse effects.

Areas immediately surrounding the project consist of developed, disturbed, and ruderal lands, which are not sensitive vegetation communities. Therefore, no significant indirect short- or long-term impacts to sensitive vegetation communities would occur.

5.2 Impacts to Special-Status Plants

5.2.1 Direct Impacts

No special-status plant species were identified on site during the site visits, and no NEPSSA 3 species have a moderate or high potential to occur. Therefore, the project would not result in direct impacts to NEPSSA species.



SOURCE: Bing Maps, 2016

DUDEK

FIGURE 5

Biological Resource Impacts Map

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5.2.2 Indirect Impacts

Construction-related dust, soil erosion, and water runoff can affect any potentially occurring narrow endemic plant species that may occur on site or adjacent to the site. However, no special-status plant species are expected to occur on site or adjacent to the site due to the extent of disturbed and developed lands; therefore, no significant indirect short-term or long-term impacts to special-status plant species would occur.

5.3 Impacts to Special-Status Wildlife

5.3.1 Direct Impacts

The project was designed and would be implemented to minimize impacts to special-status wildlife species. Burrowing owl is identified by the MSHCP as having potential to occur on site; however, the 2015 site visit determined the project site did not contain suitable habitat for burrowing owl. Therefore, no direct impacts to burrowing owl are anticipated.

5.3.2 Indirect Impacts

The project site is surrounded by residential development and more than half the site supports developed land uses including heavily traversed roadways and residential development. Substantial long-term impacts due to noise, lighting, vibration, and traffic collisions to nocturnal wildlife are not expected because the proposed project is an improvement to an existing roadway and bridge, and would not result in new or increased long-term indirect impacts.

5.4 Impacts to Regulated Trees

5.4.1 Direct Impacts

There are no trees within the project footprint that will be removed by the project.

5.4.2 Indirect Impacts

There are no regulated trees within or adjacent to the project footprint.

5.5 Impacts to Jurisdictional Wetlands and Waters

5.5.1 Direct Impacts

The project has been designed to avoid permanent impacts to the main, active low-flow channel and a majority of the active floodplain. Implementation of the proposed project would result in direct permanent impacts to 0.2 acres and direct temporary impacts to 0.8 acres of waters of the

United States/State as shown on Figure 5. These impacted resources are also considered riverine resources per Section 6.1.2 of the MSHCP.

5.5.2 Indirect Impacts

Indirect impacts to jurisdictional waters could result primarily from adverse indirect edge effects. Indirect edge effects are defined as side effects of the project that do not directly impact habitat, vegetation communities, species, or water quality, but might have an effect on the long-term vitality of these resources if left unmanaged. During construction activities, edge effects may include dust, which could disrupt water quality in the short-term or construction-related soil erosion and water runoff. With implementation of water quality BMPs, there would be no long-term indirect impacts to on-site or adjacent jurisdictional waters.

No long-term indirect impacts are anticipated because the proposed project improvements to an existing road and bridge would not result in new or increased long-term indirect impacts, such as increased pollutants or human disturbance in the active floodplain.

5.6 Impacts to Wildlife Corridors/Habitat Linkages

5.6.1 Direct Impacts

The project site is not located within a Western Riverside MSHCP core or linkage and is not within a wildlife movement corridor. Therefore, the project would not result in significant impacts to wildlife corridors/habitat linkages.

5.6.2 Indirect Impacts

The site is not part of, or close to, a corridor or linkage as identified in the Western Riverside MSHCP. Therefore, no long-term edge effects to a corridor or linkage, such as noise or lighting, would occur with project implementation. Thus, no significant indirect impacts to wildlife corridors or habitat linkages would occur.

5.7 Cumulative Impacts

Cumulative biological impacts due to construction of the project, in combination with other past, current, and future development or improvement projects, could adversely impact biological resources in the region. However, incorporation of similar project design features on a project-by-project basis, would reduce cumulative biological impacts to less than significant. Other past, current, and foreseeable future projects would have to mitigate for impacts to sensitive biological resources and comply with the same jurisdictional waters requirements.

Therefore, the project would not contribute to long-term cumulative impacts to biological resources.

6 SIGNIFICANT IMPACTS AND MITIGATION

6.1 Explanation of Findings of Significance

Impacts to special-status vegetation communities, plant and wildlife species, and jurisdictional waters, including wetlands, must be quantified and analyzed to determine whether such impacts are significant under CEQA. CEQA Guidelines Section 15064(b) states that an ironclad definition of "significant" effect is not possible, because the significance of an activity may vary with the setting. Appendix G of the CEQA Guidelines, however, does provide "examples of consequences which may be deemed to be a significant effect on the environment" (14 CCR 15064(e)). These effects include substantial effects on rare or endangered species of animal or plant or the habitat of the species. CEQA Guidelines Section 15065(a) is also helpful in defining whether a project may have "a significant effect on the environment." Under that section, a proposed project may have a significant effect on the environment if the project has the potential to: (1) substantially degrade the quality of the environment, (2) substantially reduce the habitat of a fish or wildlife species, (3) cause a fish or wildlife population to drop below self-sustaining levels, (4) threaten to eliminate a plant or animal community, (5) reduce the number or restrict the range of a rare or endangered plant or animal, or (6) eliminate important examples of a major period of California history or prehistory.

The following are the significance thresholds for biological resources provided in the CEQA Guidelines Appendix G Environmental Checklist, which states that a project could potentially have a significant affect if it:

- **Impact BIO-1.** Has a substantial adverse effect, either directly or through habitat modifications, on any species identified as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS
- **Impact BIO-2.** Has a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS
- **Impact BIO-3.** Has 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
- **Impact BIO-4.** Interferes substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impedes the use of native wildlife nursery sites

- **Impact BIO-5.** Conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- **Impact BIO-6.** Conflicts with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan

The evaluation of whether or not an impact to a particular biological resource is significant must consider both the resource itself and the role of that resource in a regional context. Substantial impacts are those that contribute to, or result in, permanent loss of an important resource, such as a population of a rare plant or animal species. Impacts may be important locally, because they result in an adverse alteration of existing site conditions, but considered not significant because they do not contribute substantially to the permanent loss of that resource regionally. The severity of an impact is the primary determinant of whether or not that impact can be mitigated to a level below significance.

The following significance determinations were made based on the impacts of the proposed project.

6.2 Impact BIO-1: Special-Status Species

6.2.1 Special-Status Plants

The MSHCP identifies special-status plant species survey areas through NEPSSAs or Criteria Area Species Survey Areas based on the presence of select soils, existing occurrence data for special-status plants, and personal communication with the USFWS and Fred Roberts, a botanist with extensive experience in Western Riverside County. Habitat type was also a consideration. These areas represent the portions of the plan area that the agencies determined to have moderate to high potential to occur. As described in Section 1.2, the project site is located within a NEPSSA and a habitat assessment concluded that the site does not have habitat that is suitable for the species identified in the NEPSSA. Because the MSHCP does not identify the area as suitable for other special-status plant species, there would be no direct impacts or indirect impacts to special-status plant species; therefore, there would be no significant impacts to special-status plants.

6.2.2 Special-Status Wildlife

Burrowing owl is not expected to occur on site due to the lack of suitable burrows and habitat; therefore, there would be no significant impacts to burrowing owl.

Birds protected under the Migratory Bird Treaty Act could be impacted if construction activities occur during the nesting season. MM-BIO-1 would reduce impacts to potential nesting birds through pre-construction nesting surveys.

MM-BIO-1 All vegetation removal and ground disturbance activities should be planned outside the nesting season for raptors (February 1 to August 15) and outside the peak nesting season for birds (March 1 to August 15) if practicable. If vegetation removal would occur during those time periods, a pre-construction survey for active nests shall be conducted by a qualified biologist no more than one week prior to the onset of ground-disturbing activities. If active nests are found on site, disturbance or removal of the nest shall be avoided until the young have fledged and the nest is no longer active. Depending on the species, site conditions, and the proposed construction activities near the active nest, a buffer distance may be prescribed, as determined by a qualified biologist.

6.3 Impact BIO-2: Sensitive Vegetation Communities or Land Covers

There are no sensitive vegetation communities or land covers in the project site.

6.4 Impact BIO-3: Jurisdictional Waters

The project would result in direct, permanent impacts to 0.2 acres and temporary impacts to 0.8 acres of jurisdictional waters of the United States/State and riverine habitat defined under the MSHCP, and potential short-term indirect impacts to the avoided areas, requiring mitigation. With implementation of measures MM-BIO-2, MM-BIO-3a, MM-BIO-3b, and MM-BIO-4, impacts to jurisdictional non-wetland waters and riverine habitat as defined by the MSHCP would be less than significant.

MM-BIO-2 To comply with the local, state, and federal regulations for permanent and temporary impacts to waters of the United States and state and riverine habitat defined under the MSHCP, the following agency permits and determinations are required, or verification that they are not required shall be obtained:

1. The riverine habitat impacts shall comply with the MSHCP and addressed in a Determination of Biologically Equivalent or Superior Preservation (DBESP).
2. A Clean Water Act, Section 401/404 permit issued by the California RWQCB and the ACOE for all project-related disturbances of waters of the United States.

3. A Section 1602 Streambed Alteration Agreement issued by the CDFW for all project-related disturbances to Salt Creek.

MM-BIO-3a To mitigate for the temporary disturbance of 0.8 acres of waters of the United States/State, all temporarily disturbed riverine resources will be restored in place to pre-construction contours and conditions following construction. The City will work with the RCA, ACOE, RWQCB, and CDFW to develop a native hydroseed mix that will be applied to the temporarily disturbed areas and monitored for a period of 12 months to confirm germination.

MM-BIO-3b Mitigation for direct, permanent impacts to 0.2 acres of non-wetland waters of the United States/State will be accomplished at a 3:1 ratio through the provision of a one-time fee for 0.6 acre of credits at an approved off site mitigation bank and/or in-lieu fee program to adequately compensate for no net loss of waters of the United States/State. At this time, the City is considering the purchase of riverine re-establishment credits from the Riverside-Corona Resource Conservation District (RCRCD) In-Lieu Fee Project Site (ILF Project), located adjacent to the main stem of the Santa Ana River, west of the Hamner Avenue Bridge over the Santa Ana River, near Norco/Eastvale, Riverside County, California. In the event this option is not available, the City will coordinate and work closely with the RCA, ACOE, RWQCB, and CDFW to identify an appropriate alternative.

MM-BIO-4 To minimize potential indirect impacts to jurisdictional waters, the following shall be implemented to the satisfaction of the City of Menifee Planning Department:

1. BMPs shall be implemented to avoid indirect impacts to jurisdictional waters, including:
   a. Vehicles and equipment shall not be operated in ponded or flowing water except as described in the permits.
   b. Water containing mud, silt, or other pollutants from grading or other activities shall not be allowed to enter jurisdictional waters or be placed in locations that may be subjected to high storm flows.
   c. Spoil sites shall not be located within locations that may be subject to high storm flows, where spoils might be washed back into drainages.
   d. Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil, or other petroleum products, or any other substances that could be hazardous to vegetation or wildlife resources, resulting from

project-related activities, shall be prevented from contaminating the soil and/or entering avoided jurisdictional waters.

e. No equipment maintenance shall occur within jurisdictional waters and no petroleum products or other pollutants from the equipment shall be allowed to enter these areas or enter any off-site state-jurisdictional waters under any flow.

6.5 Impact BIO-4: Wildlife Corridors and Migratory Routes

There are no wildlife corridors within the project site; therefore, there would be no impacts to wildlife corridors.

Project implementation would not interfere substantially with the movement of any native resident or migratory bird species. Trees associated with single-family residences has a limited potential to support nesting resident and migratory birds. The City will comply with all federal and state regulations that protect nesting and migratory bird species and will implement MM-BIO-1, avoiding nesting birds; therefore, there would be no significant impacts to migratory birds.

6.6 Impact BIO-5: Local Policies or Ordinances

The proposed project has been designed to comply with the City's General Plan Vision 2030 goals and policies.

6.7 Impact BIO-6: Habitat Conservation Plan

As described in Section 4.5, the project is consistent with the MSHCP.

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APPENDIX A

Plant Compendium

APPENDIX A
Plant Compendium

VASCULAR SPECIES

MONOCOTS

POACEAE—GRASS FAMILY

Distichlis spicata—saltgrass
Leptochloa fusca ssp. *uninervia*—Mexican sprangletop
Melica imperfecta—smallflower melicgrass
* *Cynodon dactylon*—Bermudagrass
* *Poa pratensis* ssp. *pratensis*—Kentucky bluegrass

EUDICOTS

ASTERACEAE—SUNFLOWER FAMILY

Ambrosia psilostachya—Cuman ragweed
Erigeron canadensis—Canadian horseweed
Helianthus annuus—common sunflower
Xanthium strumarium—rough cocklebur
* *Glebionis coronaria*—crowndaisy
* *Helminthotheca echioides*—bristly oxtongue

CHENOPODIACEAE—GOOSEFOOT FAMILY

* *Salsola tragus*—prickly Russian thistle

FABACEAE—LEGUME FAMILY

Acmispon americanus var. *americanus*—American bird's-foot trefoil

GERANIACEAE—GERANIUM FAMILY

* *Erodium cicutarium*—redstem stork's bill

MALVACEAE—MALLOW FAMILY

Malvella leprosa—alkali mallow

PLANTAGINACEAE—PLANTAIN FAMILY

* *Plantago lanceolata*—narrowleaf plantain

PORTULACACEAE—PURSLANE FAMILY

* *Portulaca oleracea*—little hogweed

* signifies introduced (non-native) species

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APPENDIX B

Wildlife Compendium

APPENDIX B
Wildlife Compendium

BIRD

FINCHES

FRINGILLIDAE—FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

Haemorhous mexicanus—house finch

FLYCATCHERS

TYRANNIDAE—TYRANT FLYCATCHERS

Sayornis nigricans—black phoebe

Sayornis saya—Say's phoebe

HAWKS

ACCIPITRIDAE—HAWKS, KITES, EAGLES, AND ALLIES

Buteo jamaicensis—red-tailed hawk

OLD WORLD SPARROWS

PASSERIDAE—OLD WORLD SPARROWS

* *Passer domesticus*—house sparrow

PIGEONS AND DOVES

COLUMBIDAE—PIGEONS AND DOVES

Zenaida macroura—mourning dove

INVERTEBRATE

BUTTERFLIES

NYMPHALIDAE—BRUSH-FOOTED BUTTERFLIES

Junonia coenia—common buckeye

MAMMAL

HARES AND RABBITS

LEPORIDAE—HARES AND RABBITS

Sylvilagus bachmani—brush rabbit

* signifies introduced (non-native) species

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APPENDIX C

Special-Status Plants Potential to Occur

APPENDIX C
Special-Status Plants Potential to Occur

Table C-1
Special-Status Plants Potential to Occur

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/Life Form/ Blooming Period/Elevation Range (feet amsl)	Potential to Occur
Allium munzii	Munz's onion	FE/CT/1B.1	Chaparral, cismontane woodland, coastal scrub, pinyon and juniper woodland, valley and foothill grassland/mesic, clay/perennial bulbiferous herb/Mar–May/974–3,510	Not expected to occur. The project site is primarily developed and disturbed with ruderal species and does not contain suitable vegetation communities to support this species.
Ambrosia pumila	San Diego ambrosia	FE/None/1B.1	Chaparral, coastal scrub, valley and foothill grassland, vernal pools/sandy loam or clay, often in disturbed areas, sometimes alkaline/perennial rhizomatous herb/Apr–Oct/66–1,362	Not expected to occur. The site is outside of the species' known elevation range.
Dudleya multicaulis	many-stemmed dudleya	None/None/1B.2	Chaparral, coastal scrub, valley and foothill grassland/often clay/perennial herb/Apr–Jul/49–2,592	Not expected to occur. The site is outside of the species' known elevation range.
Navarretia fossalis	spreading navarretia	FT/None/1B.1	Chenopod scrub, marshes and swamps (assorted shallow freshwater), playas, vernal pools/annual herb/Apr–Jun/98–2,149	Not expected to occur. The site is outside of the species' known elevation range.
Orcuttia californica	California Orcutt grass	FE/CE/1B.1	Vernal pools/annual herb/Apr–Aug/49–2,165	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Trichocoronis wrightii var. *wrightii*	Wright's trichocoronis	None/None/2B.1	Meadows and seeps, marshes and swamps, riparian forest, vernal pools/alkaline/annual herb/May–Sep/16–1,427	Not expected to occur. The site is outside of the species' known elevation range.

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APPENDIX C

Phase I Cultural Resource Inventory

DUDEK

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January 29, 2016 9227

Jack Abcarius
NV5
15092 Avenue of Science, Suite 200
San Diego, CA 92128

Subject: Phase I Cultural Resources Inventory for the Bradley Road Improvements at Salt Creek Project, City of Menifee, Riverside County, California

Dear Mr. Abcarius:

This letter documents the Phase I cultural resources inventory conducted by Dudek for the proposed Bradley Road Improvements at Salt Creek Project (Project), located in the City of Menifee, Riverside County, California. NV5 is proposing to construct a bridge at Bradley Road over Salt Creek. The City of Menifee (City) is the lead agency for planning purposes under the California Environmental Quality Act (CEQA). No previously recorded cultural resources were identified within the Project site as a result of an Eastern Information Center (EIC) records search. On December 8, 2015, Dudek requested that the Native American Heritage Commission (NAHC) check their Sacred Lands File (SLF) to determine if any such Native American resources are known to exist within the Project. The NAHC responded on January 5, 2016, stating that the SLF identified no Native American cultural resources within the Project. The NAHC also provided a list of tribal contacts. Dudek sent letters to each person and entity identified on the list; no responses have been received to date. Dudek surveyed the Project site for cultural resources (including both archaeological and historic built environment resources) in accordance with the standards and guidelines defined by CEQA. One newly identified built-environment resource, Bradley Road, was identified within the Project site as a result of the survey. The segment of the road included in the Project footprint was evaluated during this study and is not recommended as eligible for listing on the California Register of Historical Resources (CRHR) and will have no significant impacts by planned construction activities. Due to a lack of evidence for cultural resources within the Project, no further management recommendations are necessary beyond standard measures to address unanticipated discoveries of cultural resources and human remains.

PROJECT DESCRIPTION AND LOCATION

The proposed project is along Bradley Road where it crosses Salt Creek between Potomac Drive and Rio Vista Drive in the City of Menifee, California (Figure 1). The proposed project would elevate Bradley Road and construct a bridge to allow the conveyance of the 100-year flows while avoiding the inundation of the approaches. The proposed project includes improvements at the Potomac Drive and Rio Vista Drive intersections. The Project is situated in Sections 33 and 34 of Township 5 South Range 3 West of the Romoland 7.5-minute U.S. Geological Survey (USGS) quadrangle map (Figure 2).

REGULATORY FRAMEWORK

California Register of Historical Resources (CRHR)

In California, the term "historical resource" includes but is not limited to "any object, building, structure, 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." (PRC section 5020.1(j).) In 1992, the California legislature established the CRHR "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change." (PRC section 5024.1(a).) The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the National Register of Historic Places (NRHP), enumerated below. According to PRC Section 5024.1(c)(1–4), a resource is considered historically significant if it (i) retains “substantial integrity,” and (ii) meets at least one 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.

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are the state landmarks and points of interest. The CRHR also includes

properties designated under local ordinances or identified through local historical resource surveys.

California Environmental Quality Act

As described further below, the following CEQA statutes and CEQA Guidelines are of relevance to the analysis of archaeological, historic, and tribal cultural resources:

- PRC section 21083.2(g) defines "unique archaeological resource."
- PRC section 21084.1 and CEQA Guidelines section 15064.5(a) defines "historical resources." In addition, CEQA Guidelines section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource;" it also defines the circumstances when a project would materially impair the significance of an historical resource.
- PRC section 21074(a) defines "tribal cultural resources."
- PRC section 5097.98 and CEQA Guidelines section 15064.5(e): Set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- PRC sections 21083.2(b)-(c) and CEQA Guidelines section 15126.4: Provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures; preservation-in-place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context, and may also help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource." (PRC section 21084.1; CEQA Guidelines section 15064.5(b).) If a site is either listed or eligible for listing in the CRHR, or if it is included in a local register of historic resources, or identified as significant in a historical resources survey (meeting the requirements of PRC section 5024.1(q)), it is a "historical resource" and is presumed to be historically or culturally significant for purposes of CEQA. (PRC section 21084.1; CEQA Guidelines section 15064.5(a).) The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption. (PRC section 21084.1; CEQA Guidelines section 15064.5(a).)

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired." (CEQA Guidelines section 15064.5(b)(1); PRC section 5020.1(q).) In turn, the significance of an historical resource is materially impaired when a project:

(1) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or

(2) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

(3) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA.

(CEQA Guidelines section 15064.5(b)(2).) Pursuant to these sections, the CEQA inquiry begins with evaluating whether a Project site contains any "historical resources," then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance is materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (Section 21083.2[a], [b], and [c]).

Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

(1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

(2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.

(3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts to non-unique archaeological resources are generally not considered a significant environmental impact (PRC section 21083.2(a); CEQA Guidelines section 15064.5(c)(4).) However, if a non-unique archaeological resource qualifies as tribal cultural resource (PRC 21074(c); 21083.2(h)), further consideration of significant impacts is required.

CEQA Guidelines section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered.

ARCHIVAL RESEARCH

In 2014, a Draft Technical Memorandum was completed for the proposed project to determine; the size and cost of a bridge that would be capable of conveying the 100-year storm event to ensure that Bradley Road remains open, the size and cost of a bridge that would be capable of conveying a lesser storm event, and what storm event would a four-cell box culvert be capable of conveying and at what cost. Dudek prepared a cultural resources constraints analysis consisting of archival research for the project to identify any previously recorded cultural or built environment resources within the proposed project site that may be impacted during construction (Murray 2014). As the overall development footprint for the proposed project is similar to the preliminary Draft Technical Memorandum, the following archival research sections are adapted from the cultural resources constraints analysis (Murray 2014).

CHRIS Records Search

A California Historical Resources Information System (CHRIS) records search was conducted for the proposed project site and a half-mile radius by a Dudek archaeologist on March 27, 2014 at the Eastern Information Center (EIC), located on the campus of the University of California Riverside. This search included a review of all previously recorded prehistoric, historic, and built-environment resources located within the project area and a half-mile radius, including Department of Parks and Recreation (DPR) Site Records, technical reports, archival resources, and ethnographic references. Additional sources reviewed included the National Register of

Historic Places (NRHP), California Office of Historic Preservation (OHP) Historic Properties Data File, the Archaeological Determinations of Eligibility listings, California Points of Historical Interest, California Historical Landmarks, and the Caltrans Bridge Inventory.

Previously Conducted Studies:

The EIC records search results indicate that 11 previous investigations have been conducted within a half-mile of the project area (Table 1). Two of these studies (RI-03189 and RI-04375) have completely overlapped the project site, suggesting that the entirety of the project site has been previously surveyed for cultural resources. Neither of these studies identified cultural resources within the proposed project site. However, it is general practice that cultural resource surveys are considered valid for a period of no more than 10 years. None of the previous surveys conducted in the last 10 years fall within the proposed project.

Table 1. Previously Conducted Studies within 0.5-mile of the Project Site

EIC Report No.	Year	Author	Company	Title	Proximity to Project Area
RI-03189	1990	N/A	Peak and Associates	Cultural Resources Assessment of AT&T's Proposed San Bernardino to San Diego Fiber Optic Cable, San Bernardino, Riverside, and San Diego Counties, California	**Within**
RI-03201	1991	Keller, Jean	N/A	An Archaeological Assessment of Public Use Permit 716: 4.28 Acres of Land Near Sun City, Riverside County California	Outside 250 m south
RI-04221	1998	Williams, Scott	Applied Earthworks	Phase 1 Cultural Resources Survey and Assessment of Approximately 4.5 Acres, Prestige Assisted Living at Sun City Project, Sun City, Riverside County, California	Outside 320 m south
RI-04245	2000	Love et al.	CRM Tech	Cultural Resources report: Honing Investment Group Self-Storage Project Near the Intersection of Newport Road and Bradley Road, Menifee Valley, Riverside County, California	Outside 400 m south
RI-04375	1999	White, Robert S. and White, Laurie S.	L&L Environmental	An Archaeological Assessment of the Eastern Municipal Water District Menifee Desalter Project, Sun City and Menifee, Riverside County	**Within**
RI-04907	2003	Irish et al.	L&L Environmental	An Archaeological Survey Report for Menifee Site APN 338-150-031, Rezone LLC, Menifee, County of Riverside, California	Outside 50 m south
RI-05269	2005	Robinson, Mark	Great Lakes Research	Cultural Resources Survey and Assessment of 8.99 Acres: Bradley Paseo Project (New APN 336-180-013 & 014) Menifee, Riverside County, California	Outside 400 m south
RI-07278	2001	White, Robert S. and White, Laurie S.	Archaeological Associates	A Cultural Resources Assessment of a 60.5-Acre Parcel as Shown on Tentative Tract Map 30040, Sun City, Riverside County	Outside 300 m SW

EIC Report No.	Year	Author	Company	Title	Proximity to Project Area
RI-07279	2007	White, Robert S. and White, Laurie S.	Archaeological Associates	A Phase I Cultural Resources Assessment of the Paseo Verde Project Site, A 15 Acre Parcel Located West of the Intersection of Bradley Road and Rio Vista Drive, Sun City, Riverside County	Outside 50 m south
RI-07281	2007	White, Robert S. and White, Laurie S.	Archaeological Associates	A Phase I Cultural Resources Assessment of the 3 Acre Newport Commons Professional Center, Plot Plan 22262, Located West of the Intersection of Camino Delores and Cabrillo Drive, Sun City, Unincorporated Riverside County	Outside 550 m SE
RI-07627	2008	Lord, Kenneth	Michael Brandman Associates	Phase I Cultural Resources Assessment APN 338-170-025 Menifee Area, Riverside County, California	Outside 600 m SW

Previously Recorded Cultural Resources

No previously recorded cultural resources were identified within the proposed project site as a result of the records search. One resource was identified within the half-mile search radius, approximately 500 meters southwest of the project site (Table 2). This resource consists of an out-of-service water well situated atop a cement slab with well head, electric pump, and piping. The recorder notes that this well likely represents an early attempt to establish an irrigation system, however due to the brackish water conditions, the well likely failed (White 2001).

Table 2. Previously Recorded Resources within 0.5-mile of the Project Site

Primary No.	Year Recorded	Recorded By	Resource Type	Description	Proximity to Project Area
33-011177	2001	White, Robert S.	Historic	Water well	Outside – 500 meters southwest

Historic-period Map Review

The EIC had one historic topographic map of the project area on file. The 1953 USGS 7.5' Romoland Quadrangle shows that Sun City (north of the project area) was still largely undeveloped at this time. However, Bradley Road is depicted on the 1953 map, suggesting that Bradley Road is of historic-age (greater than 50 years). Additional historic map research was conducted on NETR Online (historicaerials.com). The 1901 1:250,000 Elsinore topographic sheet does depict Bradley Road, suggesting that the road has been in this location for over a century. The 1901 sheet does not depict Salt Creek, which presently runs beneath Bradley Road.

There is also a road that runs from present-day Bradley Road to the east, following the path of the creek. This road appears to have been removed in the late 1950s. Historic topographic maps from the years 1905, 1909, 1913, 1924, 1936, and 1941 indicate that very little change occurred within the project area during the first half of the twentieth century. The 1943 USGS 7.5' Quadrangle is the first map to show visible changes in and around the project area. The creek running beneath Bradley Road is depicted for the first time, and the roads noted on the earlier maps running east of the project area are no longer depicted. Interestingly, these roads are visible on the 1954 map, but disappear again from all subsequent topographic maps of the project area. The map review indicates that Interstate-15 was constructed through the Menifee area between 1948 and 1954, which coincides with the time in which the area started to undergo residential development.

Native American Coordination

Dudek initiated Native American coordination for the Project on December 8, 2015. As part of the process of identifying cultural resources within or near the Project, Dudek contacted the NAHC to request a review of the Sacred Lands File. The NAHC emailed a response on January 5, 2016 (Appendix B), and stated that the SLF search did not indicate the presence of Native American cultural resources within the immediate Project. The NAHC also provided a contact list of Native American individuals and/or tribal organizations who may have knowledge of cultural resources in or near the Project (Appendix B). Dudek sent letters to each of the persons and entities on the contact list, requesting information about cultural sites and resources in or near the Project. To date, Dudek has not received any responses from the Native American contacts. Any subsequent responses will be forwarded to the City. As the lead agency under CEQA, the City is responsible for formal government-to-government consultation with the Tribes under California Assembly Bill AB 52.

CULTURAL RESOURCES SURVEY

Methods

Dudek Archaeologist Adriane Dorrler conducted the intensive-level pedestrian survey on November 23, 2015 using standard archaeological procedures and techniques. All field practices met the Secretary of Interior's standards and guidelines for a cultural resources inventory. The intensive-level survey methods consisted of a pedestrian survey conducted in parallel transects spaced no more than 10 meters apart over the entire project site. Within each transect, the ground surface was examined for prehistoric artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock), soil discoloration that might

indicate the presence of a cultural midden, soil depressions, features indicative of the current or former presence of structures or buildings (e.g., standing exterior walls, post holes, foundations), and historic artifacts (e.g., metal, glass, ceramics, building materials). Ground disturbances such as burrows, cut banks, and drainages were also visually inspected for exposed subsurface materials. One newly identified built environment feature, Bradley Road, was identified within the project site.

Ms. Dorrler took detailed notes and photographs of the newly identified cultural resource Bradley Road and the surroundings. All fieldwork was documented using field notes, digital photography, a Global Positioning System (GPS) receiver with sub-meter accuracy, iPad technology with close-scale field maps, and aerial photographs. Location-specific photographs were taken using an Apple 3rd Generation IPAD equipped with 8 MP resolution and georeferenced PDF maps of the Project site. Accuracy of this device ranged between 3 meters and 10 meters. All field notes, photographs, and records related to the current study are on file at Dudek's Riverside, California office.

Documentation of Bradley Road complied with the Office of Historic Preservation (OHP) and Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44716-44740) and the California Office of Historic Preservation Planning Bulletin Number 4(a). Newly identified built environment resource Bradley Road was recorded on California Department of Parks and Recreation Form DPR 523 (Series 1/95), using the *Instructions for Recording Historical Resources* (Office of Historic Preservation 1995). The DPR Form will be submitted to the EIC and included in Confidential Appendix A.

Results

The project site is primarily Salt Creek and open lands adjacent to the creek. The project site also includes roads, including Bradley Road, Potomac Road, and Rio Vista Road, and some modern residential development. The majority of the project site consists of the 100-year floodplain of Salt Creek and modern built environment; and, as a result, there is little to no undisturbed native landscape to survey. Soils mapping for the project site from the U.S. Department of Agriculture (USDA) Soil Survey Geographic Database (USDA 2016) shows the project site consists of soils in the Traver-Domino-Willows soil association, which includes saline-alkali soils largely located along floodplain areas of the San Jacinto River and Salt Creek. Ground visibility within the Salt Creek floodplain was excellent with the majority of the study site disturbed and denude of native vegetation communities.

No new archaeological resources were identified during the intensive-level pedestrian survey. One built environment resource was identified as a result of the survey. This newly identified resource is a historic to modern period improved road known as Bradley Road. According to the current design plans, the historic-era road will be impacted during project construction. The segment of Bradley Road to be impacted was evaluated for historical significance during this study.

Bradley Road traverses Menifee for a total distance of 4-miles, spanning north south between the towns of Paloma Valley and Sun City. The subject segment of Bradley Road located within the Project site measures approximately 1,150-feet (0.22-mile) in length, spanning just north of Potomac Drive and just south of Rio Vista Drive. This segment of road is an asphalt-concrete two-lane road with turning lanes at Potomac Drive and Rio Vista Drive. The segment of road is bordered by residential development at the northern and southern terminus, although the majority of the road segment is bordered by Salt Creek open space. No historic artifacts were found in association with the road, but modern trash is found along the sides of the road.

No major historic event or individual is associated with this road and it was not a historic factor in the development of this area. The road segment retains its original alignment as mapped, but has been impacted by modern improvements (such as grading and paving) and alterations in response to historical flooding events. The segment of Bradley Road does not retain any integrity and is therefore found not eligible under state level eligibility criteria. As a result, the proposed Project would have a less than significant impact on historical resources under CEQA. The research potential of this site has been exhausted through recordation, and no further cultural resource considerations are recommended.

SUMMARY OF FINDINGS

Dudek's Phase I cultural resources inventory of the project site suggests that there is low potential for the inadvertent discovery of cultural resources during ground breaking activities. EIC records indicate that no cultural or built environment resources have been recorded within the project site. The results of the SLF check conducted through the NAHC SLF search were negative. Dudek sent letters to each tribal contact provided by the NAHC requesting information about known cultural resources within the Project site. To date, Dudek has not received any responses from the Native American contacts. The segment of Bradley Road included in the Project footprint was evaluated for historical significance during this study and was found not eligible for listing in the CRHR. This segment of Bradley Road is modernized and is no longer recognizable from its historical counterpart other than by its location on historic maps. Thus, no further cultural resource considerations are recommended for this resource.

MANAGEMENT RECOMMENDATIONS

Due to a lack of evidence for cultural resources within the project site, no further management recommendations are necessary beyond standard measures to address unanticipated discoveries of cultural resources and human remains (see below). The recommendation of no further archaeological work for the proposed project is presumed pending the return of Native American tribal correspondences. Should any Native American tribal correspondences result in the identification of Native American cultural resources within the project site, the City will work in cooperation with Native American tribal representatives to determine if Native American monitoring or other treatment measures are required. As the lead agency under CEQA, the City is responsible for formal government-to-government consultation with the Tribes under California Assembly Bill AB 52. If requested, Dudek will assist the City in that process.

Unanticipated Discovery of Cultural Resources

In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the proposed project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find, the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work such as preparation of an archaeological treatment plan, testing, or data recovery may be warranted.

Unanticipated Discovery of Human Remains

In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the remains are determined to be Native American, the Coroner shall notify the NAHC in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descended (MLD) from the deceased Native American. The MLD shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

Should you have any questions relating to this report and its findings please contact us at the email or phone numbers listed below.

Respectfully Submitted,

Adriane Dorrler
Archaeologist
DUDEK
Office: (760) 479- 4155
Email: adorrler@dudek.com

cc: Micah Hale, Dudek

Att: Figure 1. Regional Map
Figure 2. Vicinity Map
Appendix A: Confidential EIC Records Search Information
Appendix B: Tribal Communication Documentation

REFERENCES CITED

White, Robert. 2001. State of California Department of Parks and Recreation Series 523 Form for P-33-011177. On file at the Eastern Information Center.

HistoricAerials.com. 2016. Accessed January 2016. http://www.historicaerials.com/aerials.

Murray, Samantha. 2014. Negative Findings Letter Report for a Cultural Resources Study Conducted for the NV5 Bradley Road Bridge Project. Prepared by Dudek. Prepared for NV5 and the City of Menifee.

USDA (U.S. Department of Agriculture). 2016. Natural Resources Conservation Service (NRCS). "Web Soil Survey." Accessed January 2016. http://websoilsurvey.nrcs.usda.gov/ app/HomePage.htm.

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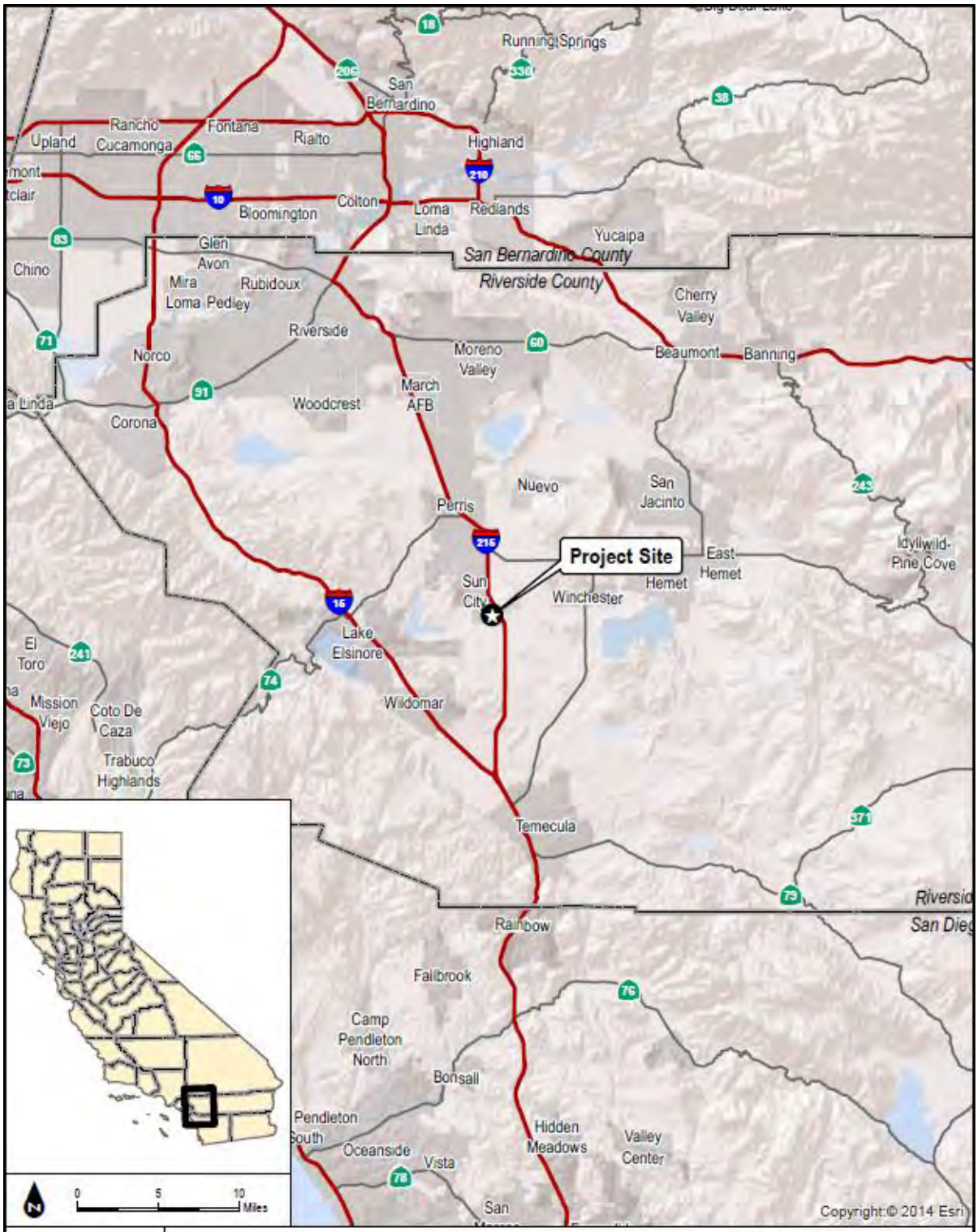
Project Site
Running Springs
San Bernardino
Rancho Cucamonga
Fontana
Rialto
Upland
Highland
Bloomington
Colton
Loma Linda
Redlands
Yucaipa
Glen Avon
Mira Loma
Pedley
Rubidoux
Chino
San Bernardino County
Riverside County
Cherry Valley
Riverside
Norco
Moreno Valley
Beaumont
Banning
Corona
Woodcrest
March AFB
Nuevo
San Jacinto
Perris
Sun City
Winchester
East Hemet
Hemet
Idyllwild-Pine Cove
Lake Elsinore
El Toro
Mission Viejo
Coto De Caza
Trabuco Highlands
Wildomar
Temecula
Rainbow
Fallbrook
Camp Pendleton North
Bonsall
Pendleton South
Oceanside
Vista
Hidden Meadows
Valley Center
San
Copyright:© 2014 Esri
0 5 10 Miles
DUDEK
FIGURE 1
Regional Map
Bradley Road

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DUDEK

SOURCE: USGS 7.5-Minute Series Romoland Quadrangle

Figure 2
Vicinity Map

Bradley Road

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APPENDIX A (CONFIDENTIAL)

EIC Records Search Results

APPENDIX B

Tribal Communication Documentation

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95501
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Bradley Road Bridge (9227-03)

County: Riverside

USGS Quadrangle

Name: Romoland

Township: 5 S Range: 3 W Section(s): 33 and 34

Company/Firm/Agency:

Dudek

Contact Person: Adriane Dorrler

Street Address: 3544 University Avenue

City: Riverside Zip: 92501

Phone: (760) 840-7556 Extension:

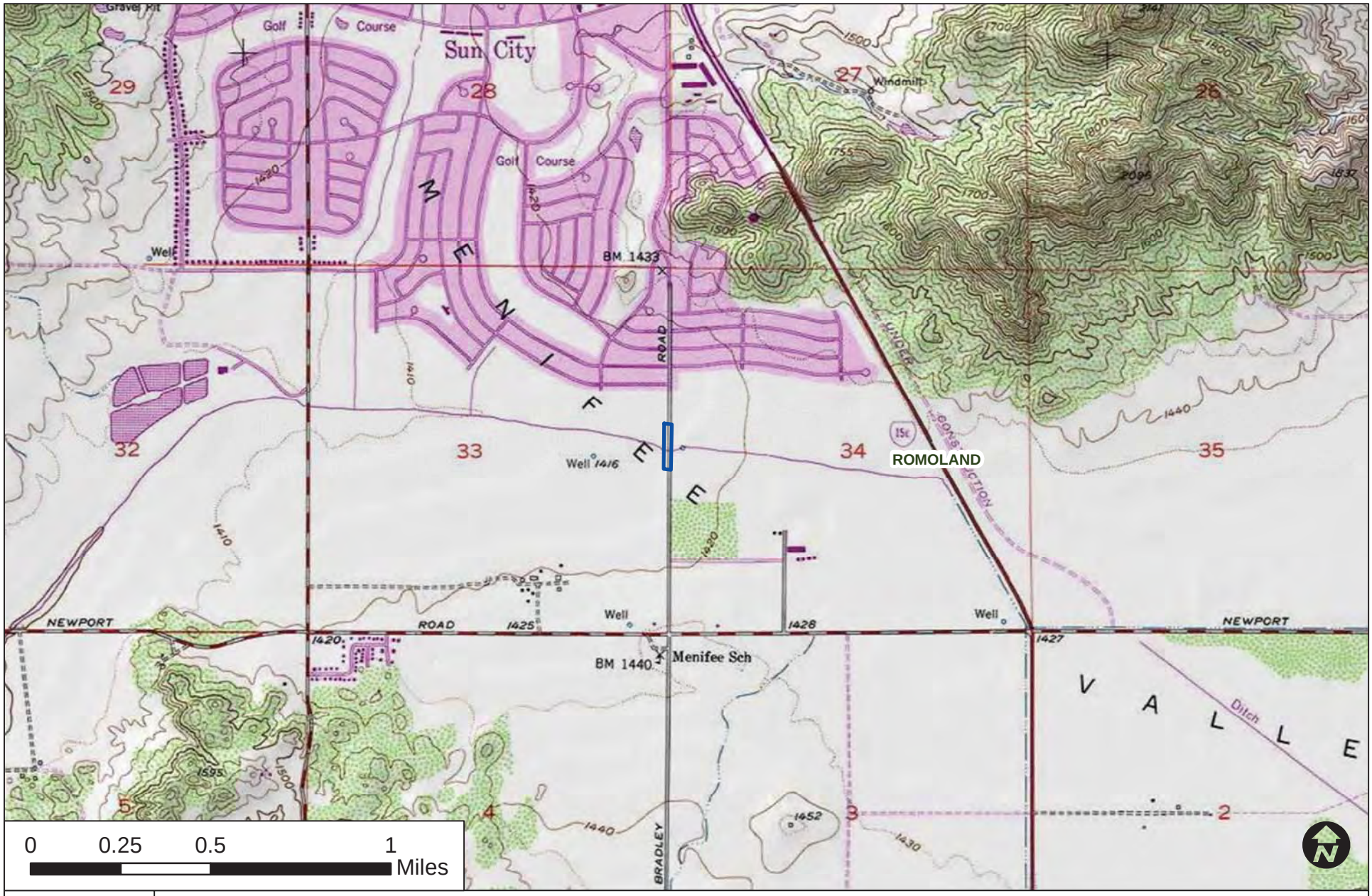
Fax: (760) 632-0164

Email: adorrler@dudek.com

Project Description:

The proposed project is along Bradley Road where it crosses Salt Creek between Potomac Drive and Rio Vista Drive in the City of Menifee, California. The proposed project would elevate Bradley Road and construct a bridge to allow the conveyance of the 100-year flows while avoiding the inundation of the approaches. The proposed project includes improvements at the Potomac Drive and Rio Vista Drive intersections.

☑ Project Location Map is attached



DUDEK

9227

Project Location

Quadrangle

Bradley Road Bridge Project Map

SOURCE: USGS Maps

Romoland USGS Quad; T5 S, R30 W; Sections 33, 34

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NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 FAX

January 5, 2016

Adriane Dorrier
Dudek
3544 University Avenue
Riverside, CA 92501

Sent by Email: ~~adorrier~~ adorrler@dudek.com
Number of Pages: 4

RE: Bradley Road Bridge (92237-03), City of Menifee, Riverside County

Dear Ms. Dorrier:

Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above referenced counties. Please note that the intent above reference codes is to mitigate impacts to tribal cultural resources, as defined, for California Environmental Quality Act (CEQA) projects.

As of July 1, 2015, Public Resources Code Sections 21080.1, 21080.3.1 and 21080.3.2 require public agencies to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose mitigating impacts to tribal cultural resources:

> Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section. (Public Resources Code Section 21080.1(d))

The law does not preclude agencies from initiating consultation with the tribes that are culturally and traditionally affiliated with their jurisdictions. The NAHC believes that in fact that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law.

In accordance with Public Resources Code Section 21080.1(d), formal notification must include a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation. The NAHC believes that agencies should also include with their notification letters information regarding any cultural resources assessment that has been completed on the APE, such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

   - A listing of any and all known cultural resources have already been recorded on or adjacent to the APE;
   - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
   - If the probability is low, moderate, or high that cultural resources are located in the APE.
   - Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the potential APE; and

- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

   - Any report that may contain site forms, site significance, and suggested mitigation measurers.

     All 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 pubic disclosure in accordance with Government Code Section 6254.10.

3. The results of any Sacred Lands File (SFL) check conducted through Native American Heritage Commission. A SFL search was completed with negative results.

4. Any ethnographic studies conducted for any area including all or part of the potential APE; and

5. Any geotechnical reports regarding all or part of the potential APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS is not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the case that they do, having the information beforehand well help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance we are able to assure that our consultation list contains current information.

If you have any questions, please contact me at my email address: rob.wood@nahc.ca.gov.

Sincerely,

Rob Wood

Rob Wood
Associate Environmental Planner

Native American Heritage Commission
Tribal Consultation List
Riverside County
January 5, 2016

Cabazon Band of Mission Indians
Doug Welmas, Chairperson
84-245 Indio Springs Parkway Cahuilla
Indio , CA 92203
(760) 342-2593

Soboba Band of Luiseno Indians
Rosemary Morillo, Chairperson; Attn: Carrie Garcia
P.O. Box 487 Luiseno
San Jacinto , CA 92581 Cahuilla
carrieg@soboba-nsn.gov
(951) 654-2765

Los Coyotes Band of Mission Indians
Shane Chapparosa, Chairman
P.O. Box 189 Cahuilla
Warner Springs , CA 92086
Chapparosa@msn.com
(760) 782-0712

Torres-Martinez Desert Cahuilla Indians
Mary Resvaloso, Chairperson
P.O. Box 1160 Cahuilla
Thermal , CA 92274
tmchair@torresmartinez.org
(760) 397-0300

Pala Band of Mission Indians
Shasta Gaughen, PhD, THPO
PMB 50, 35008 Pala Temecula Rd. Luiseno
Pala , CA 92059 Cupeno
sgaughen@palatribe.com
(760) 891-3515

Santa Rosa Band of Mission Indians
John Marcus, Chairman
P.O. Box 391820 Cahuilla
Anza , CA 92539
(951) 659-2700

Pauma & Yuima Reservation
Temet Aguilar, Chairperson
P.O. Box 369, Ext. 303 Luiseno
Pauma Valley , CA 92061
(760) 742-1289

Augustine Band of Cahuilla Mission Indians
Mary Ann Green, Chairperson
P.O. Box 846 Cahuilla
Coachella , CA 92236
(760) 398-4722
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Joseph Hamilton, Chairman
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Rincon Band of Mission Indians
Bo Mazzetti, Chairperson
1 West Tribal Road Luiseno
Valley Center , CA 92082
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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 applicable only for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed Bradley Road Bridge (92237-03), City of Menifee, Riverside County.

Native American Heritage Commission
Tribal Consultation List
Riverside County
January 5, 2016

San Luis Rey Band of Mission Indians
Tribal Council
1889 Sunset Drive Luiseno
Vista , CA 92081
cjmojado@slrmissionindians.org
(760) 724-8505

Agua Caliente Band of Cahuilla Indians THPO
Patricia Garcia-Plotkin Tribal Historic Perservation Officer
5401 Dinah Shore Drive Cahuilla
Palm Springs , CA 92264
ACBCI-THPO@aguacliente.net
(760) 699-6907

Agua Caliente Band of Cahuilla Indians
Jeff Grubbe, Chairperson
5401 Dinah Shore Drive Cahuilla
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(760) 699-6800

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Anza , CA 92539
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(760) 763-5549
(760) 763-2631Tribal EPA

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Robert Martin, Chairperson
12700 Pumarra Rroad Cahuilla
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PMB 50, 35008 Pala Temecula Rd. Luiseno
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Pechanga Band of Mission Indians
Mark Macarro, Chairperson
P.O. Box 1477 Luiseno
Temecula , CA 92593
mgoodhart@pechanga-nsn.
(951) 770-6100

Torres-Martinez Desert Cahuilla Indians
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Thermal , CA 92274
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(760) 399-0022, Ext. 1213

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Thomas Rodrigues, Chairperson
22000 Highway 76 Luiseno
Pauma Valley , CA 92061
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(760) 742-3771

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 applicable only for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed Bradley Road Bridge (92237-03), City of Menifee, Riverside County.

Sample Tribal Information Request Letter

DUDEK

3544 UNIVERSITY AVENUE
RIVERSIDE, CALIFORNIA 92501
T 951.300.2100 F 951.300.2105

February 15, 2016 9227

Mr. Temet Aguilar, Chairperson
Pauma & Yuima Reservation
P.O. Box 369
Pauma Valley, CA 92061

Subject: Bradley Road Improvements at Salt Creek Project, City of Menifee, Riverside County, California

Dear Mr. Aguilar:

Dudek has been retained by NV5 to prepare a Phase I cultural resources inventory for the proposed Bradley Road Improvements at Salt Creek Project (Proposed Project), located in the City of Menifee, Riverside County, California. The proposed project is along Bradley Road where it crosses Salt Creek between Potomac Drive and Rio Vista Drive in the City of Menifee, California. The proposed project would elevate Bradley Road and construct a bridge to allow the conveyance of the 100-year flows while avoiding the inundation of the approaches. The proposed project includes improvements at the Potomac Drive and Rio Vista Drive intersections. The Project is situated in Sections 33 and 34 of Township 5 South Range 3 West of the Romoland 7.5-minute U.S. Geological Survey (USGS) quadrangle map (attached map).

As part of the process of identifying cultural resources issues for this proposed project, Dudek contacted the California Native American Heritage Commission (NAHC) to request a Sacred Lands File (SLF) search and a list of Native American individuals and/or tribal organizations who may have knowledge of cultural resources in or near the proposed project site. The SLF search failed to indicate the presence of Native American cultural resources in the immediate project area.

A California Historical Resources Information System (CHRIS) records search was conducted for the proposed project site and a half-mile radius at the Eastern Information Center (EIC). The EIC has no record of prehistoric or historic archaeological sites within the proposed project site.

Dudek conducted a survey of the proposed project site on November 23, 2015. No new archaeological resources were identified during the intensive-level pedestrian survey. One built environment resource was identified as a result of the survey. This newly identified resource is a historic to modern period improved road known as Bradley Road.

The NAHC recommended that we consult with you directly regarding your knowledge of the presence of cultural resources that may be impacted by this project. If you have any knowledge of cultural resources that may exist within or near the proposed project site, please contact me directly at (760) 840-7556, adorrler@dudek.com, or at the above address within 30-days of receipt of this letter.

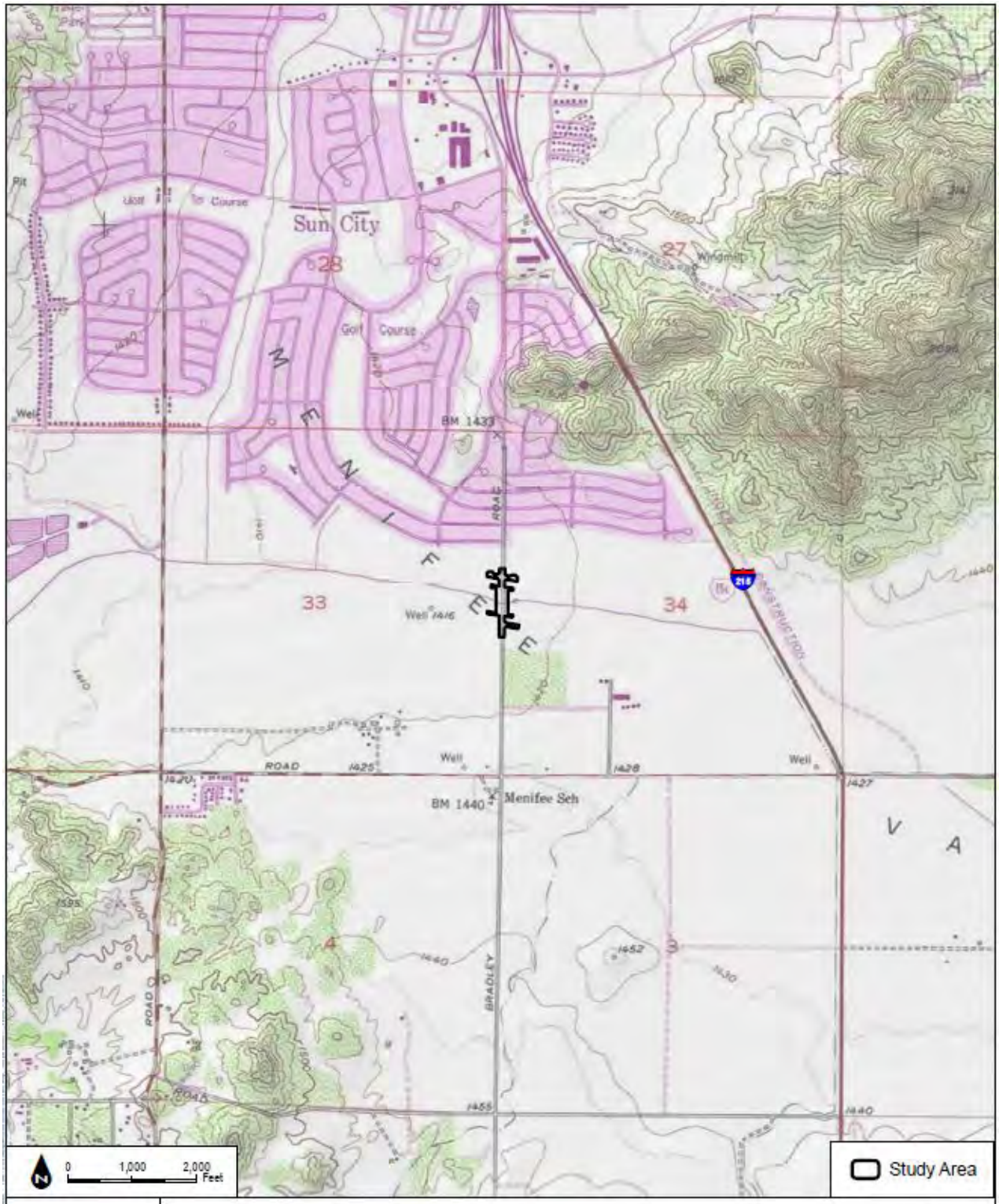
Please note that this letter does not constitute Assembly Bill (AB) 52 notification or initiation of consultation. AB 52 is a process between the lead agency and California Native American Tribes concerning potential impacts to tribal cultural resources. Tribes that wish to be notified of projects for the purposes of AB 52 must contact the lead agency, the City of Menifee, in writing (pursuant to Public Resources Code Section 21080.3.1 (b)).

Thank you for your assistance.

Sincerely,

Adriane Dorrler
Archaeologist

Attachment.: Project Location Map



DUDEK

SOURCE: USGS 7.5-Minute Series Romoland Quadrangle

Figure 1
Project Map

Bradley Road

APPENDIX D

Noise Model Output

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 3/11/2016
Case Descript Bradley Road Bridge - Grubbing / Land Clearing

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Resi'	Residential	60	55	50

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	30	0
Dozer	No	40		81.7	50	0
Dozer	No	40		81.7	50	0
Backhoe	No	40		77.6	30	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer	86.1	82.1	N/A	N/A	N/A	N/A
Dozer	81.7	77.7	N/A	N/A	N/A	N/A
Dozer	81.7	77.7	N/A	N/A	N/A	N/A
Backhoe	82	78	N/A	N/A	N/A	N/A
Total	86.1	85.4	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Farthest Resi'	Residential	60	55	50

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	430	0
Dozer	No	40		81.7	350	0
Dozer	No	40		81.7	350	0
Backhoe	No	40		77.6	430	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	

Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer		63	59	N/A	N/A	N/A	N/A
Dozer		64.8	60.8	N/A	N/A	N/A	N/A
Dozer		64.8	60.8	N/A	N/A	N/A	N/A
Backhoe		58.9	54.9	N/A	N/A	N/A	N/A
	Total	64.8	65.4	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Typical Distar	Residential	60	55	50

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	114	0
Dozer	No	40		81.7	114	0
Dozer	No	40		81.7	114	0
Backhoe	No	40		77.6	114	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer	74.5	70.5	N/A	N/A	N/A	N/A
Dozer	74.5	70.5	N/A	N/A	N/A	N/A
Dozer	74.5	70.5	N/A	N/A	N/A	N/A
Backhoe	70.4	66.4	N/A	N/A	N/A	N/A
Total	74.5	75.8	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report dat 3/11/2016
Case Descr Bradley Road Bridge - Grading and Excavation

---- Receptor #1 ----

Descriptio	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Re	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	30	0
Grader	No	40	85		50	0
Dozer	No	40	85		50	0
Backhoe	No	40		77.6	30	0
Front End Loader	No	40		79.1	30	0
Tractor	No	40	84		50	0

Results

	Calculated (dBA)		Noise Limits (dBA)					
			Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	85.1	81.2	N/A	N/A	N/A	N/A	N/A	N/A
Grader	85	81	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	85	81	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	82	78	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	83.5	79.6	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	84	80	N/A	N/A	N/A	N/A	N/A	N/A
Total	85.1	88	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Descriptio	Land Use	Baselines (dBA) Daytime	Evening	Night
Farthest R	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	430	0
Grader	No	40	85		350	0
Dozer	No	40	85		350	0
Backhoe	No	40		77.6	430	0

Front End Loader	No	40		79.1	430	0
Tractor	No	40	84		350	0

			Results					
	Calculated (dBA)		Noise Limits (dBA)					
			Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	62	58	N/A	N/A	N/A	N/A	N/A	N/A
Grader	68.1	64.1	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	68.1	64.1	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	58.9	54.9	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	60.4	56.4	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	67.1	63.1	N/A	N/A	N/A	N/A	N/A	N/A
Total	68.1	69.3	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

	Baselines (dBA)		
Descriptio Land Use	Daytime	Evening	Night
Typical Dis Residential	60	55	50

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Excavator	No	40		80.7	114	0
Grader	No	40	85		114	0
Dozer	No	40	85		114	0
Backhoe	No	40		77.6	114	0
Front End Loader	No	40		79.1	114	0
Tractor	No	40	84		114	0

			Results					
	Calculated (dBA)		Noise Limits (dBA)					
			Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	73.6	69.6	N/A	N/A	N/A	N/A	N/A	N/A
Grader	77.8	73.9	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	77.8	73.9	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	70.4	66.4	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	72	68	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	76.8	72.9	N/A	N/A	N/A	N/A	N/A	N/A
Total	77.8	79.4	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report dat 3/11/2016
Case Descr Bradley Road Bridge - Bridge Phase

---- Receptor #1 ----

Descriptio	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Re	Residential	60	55	50

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	30	0
Crane	No	16		80.6	50	0
Man Lift	No	20		74.7	50	0
Man Lift	No	20		74.7	30	0
Man Lift	No	20		74.7	30	0
Generator	No	50		80.6	50	0
Backhoe	No	40		77.6	30	0
Front End Loader	No	40		79.1	50	0
Tractor	No	40	84		30	0
Welder / Torch	No	40		74	50	0

Results

	Calculated (dBA)		Noise Limits (dBA)				
			Day		Evening		Night
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Excavator	85.1	81.2	N/A	N/A	N/A	N/A	N/A
Crane	80.6	72.6	N/A	N/A	N/A	N/A	N/A
Man Lift	74.7	67.7	N/A	N/A	N/A	N/A	N/A
Man Lift	79.1	72.1	N/A	N/A	N/A	N/A	N/A
Man Lift	79.1	72.1	N/A	N/A	N/A	N/A	N/A
Generator	80.6	77.6	N/A	N/A	N/A	N/A	N/A
Backhoe	82	78	N/A	N/A	N/A	N/A	N/A
Front End Loader	79.1	75.1	N/A	N/A	N/A	N/A	N/A
Tractor	88.4	84.5	N/A	N/A	N/A	N/A	N/A
Welder / Torch	74	70	N/A	N/A	N/A	N/A	N/A
Total	88.4	88	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Descriptio	Land Use	Baselines (dBA) Daytime	Evening	Night
Farthest R	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	430	0
Crane	No	16		80.6	350	0
Man Lift	No	20		74.7	350	0
Man Lift	No	20		74.7	430	0
Man Lift	No	20		74.7	430	0
Generator	No	50		80.6	350	0
Backhoe	No	40		77.6	350	0
Front End Loader	No	40		79.1	430	0
Tractor	No	40	84		430	0
Welder / Torch	No	40		74	350	0

Results

	Calculated (dBA)		Noise Limits (dBA)				
			Day		Evening		Night
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Excavator	62	58	N/A	N/A	N/A	N/A	N/A
Crane	63.6	55.7	N/A	N/A	N/A	N/A	N/A
Man Lift	57.8	50.8	N/A	N/A	N/A	N/A	N/A
Man Lift	56	49	N/A	N/A	N/A	N/A	N/A
Man Lift	56	49	N/A	N/A	N/A	N/A	N/A
Generator	63.7	60.7	N/A	N/A	N/A	N/A	N/A
Backhoe	60.7	56.7	N/A	N/A	N/A	N/A	N/A
Front End Loader	60.4	56.4	N/A	N/A	N/A	N/A	N/A
Tractor	65.3	61.3	N/A	N/A	N/A	N/A	N/A
Welder / Torch	57.1	53.1	N/A	N/A	N/A	N/A	N/A
Total	65.3	66.9	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

	Baselines (dBA)		
Descriptio Land Use	Daytime	Evening	Night
Typical Dis Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	114	0
Crane	No	16		80.6	114	0
Man Lift	No	20		74.7	114	0
Man Lift	No	20		74.7	114	0
Man Lift	No	20		74.7	114	0
Generator	No	50		80.6	114	0

Backhoe	No	40		77.6	114	0
Front End Loader	No	40		79.1	114	0
Tractor	No	40	84		114	0
Welder / Torch	No	40		74	114	0

			Results				
	Calculated (dBA)			Noise Limits (dBA)			
			Day		Evening		Night
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Excavator	73.6	69.6	N/A	N/A	N/A	N/A	N/A
Crane	73.4	65.4	N/A	N/A	N/A	N/A	N/A
Man Lift	67.5	60.6	N/A	N/A	N/A	N/A	N/A
Man Lift	67.5	60.6	N/A	N/A	N/A	N/A	N/A
Man Lift	67.5	60.6	N/A	N/A	N/A	N/A	N/A
Generator	73.5	70.5	N/A	N/A	N/A	N/A	N/A
Backhoe	70.4	66.4	N/A	N/A	N/A	N/A	N/A
Front End Loader	72	68	N/A	N/A	N/A	N/A	N/A
Tractor	76.8	72.9	N/A	N/A	N/A	N/A	N/A
Welder / Torch	66.8	62.9	N/A	N/A	N/A	N/A	N/A
Total	76.8	77.7	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report dat 3/11/2016
Case Descr Bradley Road Bridge - Utilities/Trenching/Subgrade

---- Receptor #1 ----

Descriptio	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Re	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	30	0
Concrete Mixer Truck	No	40		78.8	50	0
Paver	No	50		77.2	50	0
Dump Truck	No	40		76.5	30	0
Roller	No	20		80	30	0
Roller	No	20		80	50	0
Backhoe	No	40		77.6	30	0

Results

	Calculated (dBA)		Noise Limits (dBA)					
			Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Mixer Truck	83.2	79.3	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	78.8	74.8	N/A	N/A	N/A	N/A	N/A	N/A
Paver	77.2	74.2	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	80.9	76.9	N/A	N/A	N/A	N/A	N/A	N/A
Roller	84.4	77.4	N/A	N/A	N/A	N/A	N/A	N/A
Roller	80	73	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	82	78	N/A	N/A	N/A	N/A	N/A	N/A
Total	84.4	85.2	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Descriptio	Land Use	Baselines (dBA) Daytime	Evening	Night
Farthest R	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	430	0
Concrete Mixer Truck	No	40		78.8	350	0

Paver	No	50	77.2	350	0
Dump Truck	No	40	76.5	430	0
Roller	No	20	80	430	0
Roller	No	20	80	350	0
Backhoe	No	40	77.6	430	0

Results

	Calculated (dBA)		Noise Limits (dBA)					
			Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Mixer Truck	60.1	56.1	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	61.9	57.9	N/A	N/A	N/A	N/A	N/A	N/A
Paver	60.3	57.3	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	57.8	53.8	N/A	N/A	N/A	N/A	N/A	N/A
Roller	61.3	54.3	N/A	N/A	N/A	N/A	N/A	N/A
Roller	63.1	56.1	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	58.9	54.9	N/A	N/A	N/A	N/A	N/A	N/A
Total	63.1	64.5	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

	Baselines (dBA)		
Descriptio Land Use	Daytime	Evening	Night
Typical Dis Residential	60	55	50

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40	78.8	114	0	
Concrete Mixer Truck	No	40	78.8	114	0	
Paver	No	50	77.2	114	0	
Dump Truck	No	40	76.5	114	0	
Roller	No	20	80	114	0	
Roller	No	20	80	114	0	
Backhoe	No	40	77.6	114	0	

Results

	Calculated (dBA)		Noise Limits (dBA)					
			Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Mixer Truck	71.6	67.7	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	71.6	67.7	N/A	N/A	N/A	N/A	N/A	N/A
Paver	70.1	67.1	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	69.3	65.3	N/A	N/A	N/A	N/A	N/A	N/A
Roller	72.8	65.9	N/A	N/A	N/A	N/A	N/A	N/A
Roller	72.8	65.9	N/A	N/A	N/A	N/A	N/A	N/A

Backhoe	70.4	66.4	N/A	N/A	N/A	N/A	N/A	N/A
Total	72.8	75.1	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report dat 3/15/2016
Case Descr Bradley Road Bridge - Paving

---- Receptor #1 ----

Descriptio	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Re	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	30	0
Concrete Mixer Truck	No	40		78.8	50	0
Paver	No	50		77.2	50	0
Dump Truck	No	40		76.5	30	0
Roller	No	20		80	30	0
Roller	No	20		80	50	0
Backhoe	No	40		77.6	30	0

Results

	Calculated (dBA)		Noise Limits (dBA)					
			Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Mixer Truck	83.2	79.3	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	78.8	74.8	N/A	N/A	N/A	N/A	N/A	N/A
Paver	77.2	74.2	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	80.9	76.9	N/A	N/A	N/A	N/A	N/A	N/A
Roller	84.4	77.4	N/A	N/A	N/A	N/A	N/A	N/A
Roller	80	73	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	82	78	N/A	N/A	N/A	N/A	N/A	N/A
Total	84.4	85.2	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Descriptio	Land Use	Baselines (dBA) Daytime	Evening	Night
Farthest R	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	430	0
Concrete Mixer Truck	No	40		78.8	350	0

Paver	No	50	77.2	350	0
Dump Truck	No	40	76.5	430	0
Roller	No	20	80	430	0
Roller	No	20	80	350	0
Backhoe	No	40	77.6	430	0

Results

	Calculated (dBA)		Noise Limits (dBA)					
			Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Mixer Truck	60.1	56.1	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	61.9	57.9	N/A	N/A	N/A	N/A	N/A	N/A
Paver	60.3	57.3	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	57.8	53.8	N/A	N/A	N/A	N/A	N/A	N/A
Roller	61.3	54.3	N/A	N/A	N/A	N/A	N/A	N/A
Roller	63.1	56.1	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	58.9	54.9	N/A	N/A	N/A	N/A	N/A	N/A
Total	63.1	64.5	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

	Baselines (dBA)		
Descriptio Land Use	Daytime	Evening	Night
Typical Dis Residential	60	55	50

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40	78.8	114	0	
Concrete Mixer Truck	No	40	78.8	114	0	
Paver	No	50	77.2	114	0	
Dump Truck	No	40	76.5	114	0	
Roller	No	20	80	114	0	
Roller	No	20	80	114	0	
Backhoe	No	40	77.6	114	0	

Results

	Calculated (dBA)		Noise Limits (dBA)					
			Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Mixer Truck	71.6	67.7	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	71.6	67.7	N/A	N/A	N/A	N/A	N/A	N/A
Paver	70.1	67.1	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	69.3	65.3	N/A	N/A	N/A	N/A	N/A	N/A
Roller	72.8	65.9	N/A	N/A	N/A	N/A	N/A	N/A
Roller	72.8	65.9	N/A	N/A	N/A	N/A	N/A	N/A

Backhoe		70.4	66.4	N/A	N/A	N/A	N/A	N/A	N/A
	Total	72.8	75.1	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

APPENDIX E

Mitigation, Monitoring, and Reporting Program

MITIGATION MONITORING AND REPORTING PROGRAM

The California Public Resources Code, Section 21081.6, requires that a lead or responsible agency adopt a mitigation monitoring and reporting plan when approving or carrying out a project when a Mitigated Negative Declaration identifies measures to reduce potential environmental impacts. As lead agency for the project, the City of Menifee is responsible for adoption and implementation of the mitigation monitoring and reporting program.

Mitigation Measure	Time Frame of Mitigation				Monitoring Reporting Agency	Time Frame for Verification Frequency to		Date of Completion	Date of Verification
	Planning	*Pre-Construction*	*During Construction*	*Post-Construction*		*Monitor*	*Report*		
Biological Resources									
MM-BIO-1 All vegetation removal and ground disturbance activities should be planned outside the nesting season for raptors (February 1 to August ~~15~~31) and outside the peak nesting season for birds (March 1 to August ~~15~~31) if practicable. If vegetation removal would occur during those time periods, a pre-construction survey for active nests shall be conducted by a qualified biologist no more than 1 week prior to the onset of ground disturbance activities. If active nests are found on the site, disturbance or removal of the nest shall be avoided until the young have fledged and the nest is no longer active. Depending on the species, site conditions, and the proposed construction activities near the active nest, a buffer distance may be prescribed, as determined by a qualified biologist, to the satisfaction of the City of Menifee Community Development Department.	X	X	X		City of Menifee				

Mitigation Measure	Time Frame of Mitigation				Monitoring Reporting Agency	Time Frame for Verification Frequency to		Date of Completion	Date of Verification
	Planning	*Pre-Construction*	*During Construction*	*Post-Construction*		*Monitor*	*Report*		
MM-BIO-2a After completion of project construction, to mitigate for the temporary disturbance of 0.8 acre of waters of the U.S./state, all temporarily disturbed riverine resources shall be restored in place to pre-construction contours and conditions following construction. The City shall work with the RCA, ACOE, RWQCB, and CDFW to develop a native hydroseed mix that shall be applied to the temporarily disturbed areas and monitored for a period of 12 months to confirm germination., to the satisfaction of the City of Menifee Community Development Department.	X			X	City of Menifee				
MM-BIO-2b Mitigation for direct, permanent impacts to 0.2 acre of non-wetland waters of the U.S. /state shall accomplished at a 3:1 ratio through the provision of a one-time fee for 0.6 acre of credits at an approved off site mitigation bank and/or in-lieu fee program to adequately compensate for no net loss of waters of the U.S./State. At this time, the City is considering the purchase of riverine re-establishment credits from the Riverside-Corona Resource Conservation District (RCRCD) In-Lieu Fee Project Site (ILF Project), located adjacent to the main stem of the Santa Ana River, west of the Hamner Avenue Bridge over the Santa Ana River, near Norco/Eastvale, Riverside County, California. In the event this option is not available, the City shall coordinate and work closely with the RCA, ACOE, RWQCB, and CDFW to identify an appropriate alternative.	X			X	City of Menifee				
MM-BIO-3 To minimize potential indirect impacts to jurisdictional waters, the following shall be implemented during construction to the satisfaction of the City of Menifee Community Development Department: Best management practices shall be implemented to avoid indirect impacts to jurisdictional waters, including: a. Vehicles and equipment shall not be operated in ponded or flowing water		X	X		City of Menifee				

Mitigation Measure	Time Frame of Mitigation				Monitoring Reporting Agency	Time Frame for Verification Frequency to		Date of Completion	Date of Verification
	Planning	*Pre-Construction*	*During Construction*	*Post-Construction*		*Monitor*	*Report*		
except as described in the permits. b. Water containing mud, silt, or other pollutants from grading or other activities shall not be allowed to enter jurisdictional waters or be placed in locations that may be subjected to high storm flows. c. Spoil sites shall not be located within locations that may be subject to high storm flows, where spoils might be washed back into drainages. d. Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil, or other petroleum products, or any other substances that could be hazardous to vegetation or wildlife resources, resulting from project-related activities, shall be prevented from contaminating the soil and/or entering avoided jurisdictional waters. e. No equipment maintenance shall occur within jurisdictional waters and no petroleum products or other pollutants from the equipment shall be allowed to enter these areas or enter any off-site state-jurisdictional waters under any flow.									
Cultural Resources									
MM-CUL-1 If during ground disturbance activities, unique cultural resources are discovered that were not assessed by the archaeological report(s) and/or environmental assessment conducted prior to project approval, the following procedures shall be followed. Unique cultural resources are defined, for this condition only, as being multiple artifacts in close association with each other, but may include fewer artifacts if the area of the find is determined to be of significance due to its sacred or cultural importance as determined in consultation with the Native American Tribe(s). i. All ground disturbance activities within 100 feet of the discovered cultural resources shall be halted until a meeting is convened		X	X	X	City of Menifee				

Mitigation Measure	Time Frame of Mitigation				Monitoring Reporting Agency	Time Frame for Verification Frequency to		Date of Completion	Date of Verification
	Planning	*Pre-Construction*	*During Construction*	*Post-Construction*		*Monitor*	*Report*		
between the developer, the archaeologist, the tribal representative(s) and the Community Development Director to discuss the significance of the find. ii. At the meeting, the significance of the discoveries shall be discussed and after consultation with the tribal representative(s) and the archaeologist, a decision shall be made, with the concurrence of the Community Development Director, as to the appropriate mitigation (documentation, recovery, avoidance, etc.) for the cultural resources. iii. Grading of further ground disturbance shall not resume within the area of the discovery until an agreement has been reached by all parties as to the appropriate mitigation. iv. Treatment and avoidance of the newly discovered resources shall be consistent with the Cultural Resources Treatment and Monitoring Agreements entered into with the appropriate tribes. This may include avoidance of the cultural resources through project design, in-place preservation of cultural resources located in native soils and/or re-burial on the Project property so they are not subject to further disturbance in perpetuity. v. Pursuant to Calif. Pub. Res. Code § 21083.2(b) avoidance is the preferred method of preservation for archaeological resources and cultural resources. If the landowner and the Tribe(s) cannot agree on the significance or the mitigation for the archaeological or cultural resources, these issues will be presented to the City Community Development Director for decision. The City Community Development Director shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological									

	Mitigation Measure	Time Frame of Mitigation				Monitoring Reporting Agency	Time Frame for Verification Frequency to		Date of Completion	Date of Verification
		Planning	*Pre-Construction*	*During Construction*	*Post-Construction*		*Monitor*	*Report*		
	resources, recommendations of the project archeologist and shall take into account the cultural and religious principles and practices of the Tribe. Notwithstanding any other rights available under the law, the decision of the City Community Development Director shall be appealable to the City Planning Commission and/or City Council.									
	Noise									
MM-NOI-1	The following measures shall be incorporated into construction plans prior to the start of construction, to the satisfaction of the City of Menifee Community Development Department: 1. All noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with mufflers; air-inlet silencers where appropriate; and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specifications. Mobile or fixed "package" equipment (e.g., arc welders, air compressors) shall be equipped with shrouds and noise-control features that are readily available for that type of equipment. 2. Electrically powered equipment shall be used instead of pneumatic or internal-combustion-powered equipment, where feasible. 3. Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors. 4. The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.			X		City of Menifee				

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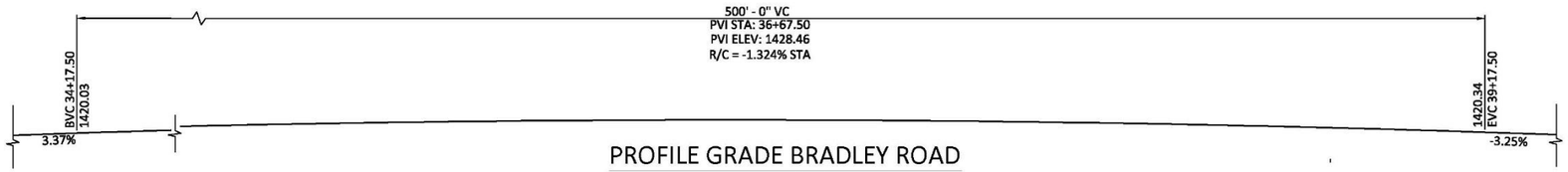
ATTACHMENT C

EXHIBITS

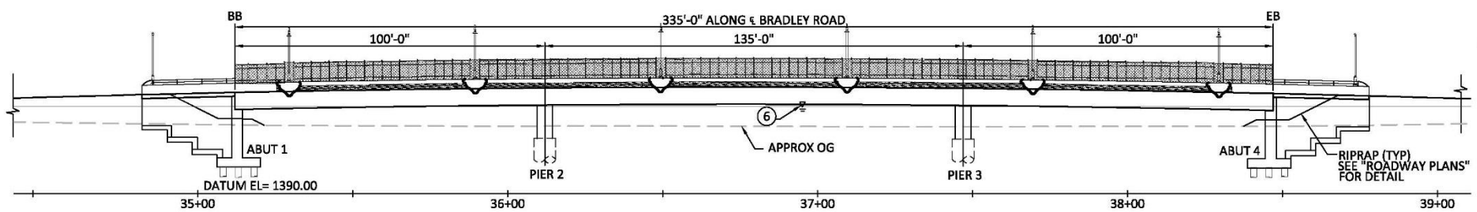
ATTACHMENT C

EXHIBITS



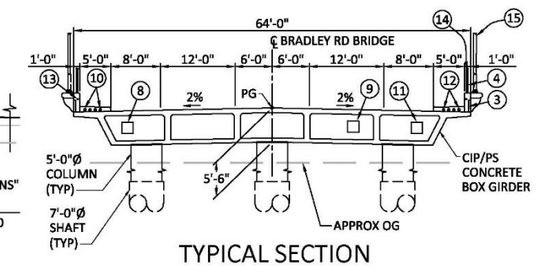
PROFILE GRADE BRADLEY ROAD

SCALE: 1"=20'



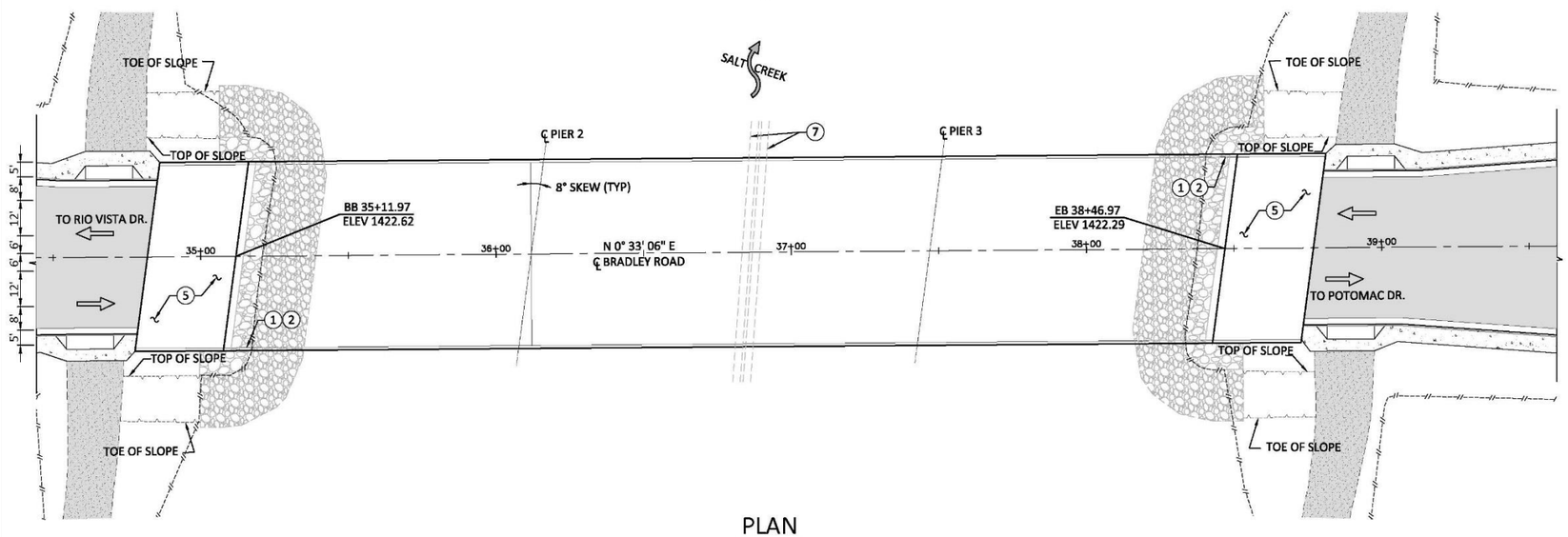
DEVELOPED ELEVATION

SCALE: 1"=20'



TYPICAL SECTION

SCALE: 1"=10'



PLAN

SCALE: 1"=20'

NOTES:

1. PAINT "BRIDGE NUMBER: 56C-XXX"
2. PAINT "BRADLEY ROAD BRIDGE"
3. CONCRETE BARRIER (TYPE 26) (MODIFIED)
4. TUBULAR HAND RAILING (TYP)
5. STRUCTURE APPROACH, TYPE N (30S)
6. 100 YEAR FLOOD WATER SURFACE ELEVATION = 1417.34
7. EXISTING DUAL 30" RCP CULVERTS TO BE REMOVED
8. UTILITY OPENING FOR 12" WATER LINE
9. UTILITY OPENING FOR 4" HIGH PRESSURE GAS LINE
10. 4 - 4" Ø CONDUITS TELEPHONE LINE/CABLE CONDUITS
11. UTILITY OPENING FOR FUTURE
12. 4 - 4" Ø CONDUITS FOR FUTURE UTILITIES
13. 1 - 2" Ø CONDUIT FOR ELECTRICAL LINE
14. METAL RAILING
15. BRIDGE LIGHTING, SEE "BRIDGE LIGHTING" PLAN

LEGEND:

⇦ INDICATES DIRECTION OF TRAFFIC

INDICATES DIRECTION OF FLOW

GRAPHIC SCALE
0' 10' 20' 30' 40' 60' 80'
SCALE 1"= 20'

REVISIONS				
⚠ SHT.	DESCRIPTION	DATE	BY	APRD

NV5
5500 AVENUE OF SCIENCE, SUITE 320 SAN DIEGO, CA 92115
858.386.5600 TEL 858.386.0400 FAX WWW.NV5.COM

REGISTERED PROFESSIONAL ENGINEER MUHAMMAD SARWAR No. 63399 CIVIL STATE OF CALIFORNIA

SCALE: FULL SIZE 34x22
DESIGN: MS
DRAWN: SD
CHECKED: DS
APPROVED:
DATE: JAN 19, 2016

CITY OF MENIFEE
ENGINEERING DEPARTMENT

JONATHAN G. SMITH RCE 61253 DATE
DIRECTOR OF PUBLIC WORKS/
CITY ENGINEER

RECOMMENDED BY: DATE

CITY OF MENIFEE
ENGINEERING DEPARTMENT

BRADLEY ROAD BRIDGE
OVER SALT CREEK

GENERAL PLAN

SHEET NO.
S-1
17 OF 43

PROJECT NO: 226815-00044

ATTACHMENT D

COMMENTS AND RESPONSES TO IS/MND

Comment Letter A

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

City of Menifee
JAN 17 2017
Received

January 11, 2017

Carlos E. Geronimo
City of Menifee
29714 Haun Road
Menifee, CA 92586

Subject: Bradley Road Bridge
SCH#: 2016121033

Dear Carlos E. Geronimo:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. The review period closed on January 10, 2017, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. A-1

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH#	**2016121033**
Project Title	Bradley Road Bridge
Lead Agency	Menifee, City of
Type	**MND** Mitigated Negative Declaration
Description	The city is proposing to replace this low-flow crossing with an all-weather crossing (bridge), effectively raising the roadway out of the floodplain. The total area of potential disturbance is approximately 4.39 acres. The limits of work include temporary siting and disturbance areas. Construction is estimated to begin in March 2017 and last approximately 18 months.

Lead Agency Contact

Name	Carlos E. Geronimo		
Agency	City of Menifee		
Phone	951-723-3722	*Fax*	
email			
Address	29714 Haun Road		
City	Menifee	*State* CA	*Zip* 92586

Project Location

County	Riverside		
City	Menifee		
Region			
Lat / Long	33° 41' 33.0" N / 117° 11' 18.9" W		
Cross Streets	Bradley Rd, Potomac Dr, Rio Vista Dr		
Parcel No.			
Township	*Range*	*Section*	*Base*

Proximity to:

Highways	215
Airports	
Railways	
Waterways	Salt Creek
Schools	Chester W. Morrison, Evans Ranch, Ridgemore, Paloma Valley
Land Use	Public ROW, recreation

Project Issues	Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Coastal Zone; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Growth Inducing; Landuse; Cumulative Effects; Other Issues
Reviewing Agencies	Resources Agency; Department of Fish and Wildlife, Region 6; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 8; Regional Water Quality Control Board, Region 8; Air Resources Board, Transportation Projects; Native American Heritage Commission

Date Received 12/12/2016 *Start of Review* 12/12/2016 *End of Review* 01/10/2017

Response to Comment Letter A

State Clearinghouse
Scott Morgan
Director
January 11, 2017

A-1 This letter acknowledges that the City has complied with the public review requirements for the Bradley Road Mitigated Negative Declaration (MND) pursuant to the California Environmental Quality Act (CEQA).

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Comment Letter B

PHILLIPS ENTERPRISES
ENVIRONMENTAL ADVISOR
EARL W. PHILLIPS, JR, REHS
29041 Hogan Dr., Menifee CA 92586-3125
Ph/Fax (951) 672-1072 EML: earlphillips@verizon.net

05 Jan 2017

CDR Earl W. Phillips, Jr., USNR (Ret), REHS

Mr. Carlos Geronimo, PE
Senior Civil Engineer, City of Menifee
29714 Haun Road
Menifee CA 92586

BRADLEY BRIDGE MITIGATED NEGATIVE DECLARATION COMMENTS

Preface

My views and comments as expressed herein are based on my research, and experience as a Registered Environmental Health Specialist (California) with over 25 years' experience (civilian & military) in environmental compliance and environmental project management.

I recognize the topics of concern in the Draft Mitigated Negative Declaration (draft) are broad and complex to the degree that any one of a wide range of responses may be appropriate. Therefore, some views and comments submitted herein may not include all possible responses to the mitigated negative declaration proposal.

My comments and suggestions are not to be construed as "show-stoppers" for approval of the MND, but to indicate possible vulnerabilities that may be addressed or challenged by local activists and other citizens.

No attempt therefore, is being made to imply or construe that the responses herein represent a complete and total final assessment of the draft. The comments submitted herein are to be construed as suggestions and recommendations for the evaluator's consideration. B-1

Caveat

The recommendations provided herein are intended to provide clarity and ease of understanding the material presented. These recommendations are not to be construed as criticism, attack, or otherwise impugning the efforts of the preparers of the document. The recommendations represent the author's views only.

Sincerely,

Earl W. Phillips, Jr., REHS

Registered Environmental Health Specialist
EARL W. PHILLIPS
No. 6994
Exp. 12/17
STATE OF CALIFORNIA

PHILLIPS ENTERPRISES
ENVIRONMENTAL ADVISOR
EARL W. PHILLIPS, JR, REHS
29041 Hogan Dr., Menifee CA 92586-3125
Ph/Fax (951) 672-1072 EML: earlphillips@verizon.net

Summary of Observations and Findings

1. The description of Salt Creek as a flood control channel is only partially accurate. Salt Creek is a USGS recognized "blue line" watercourse with its own flood plains. The watercourse was modified into distinct flood control channels, from its headwaters in proximity of the Santa Rosa Mountains down to the vicinity of the city's water reclamation/desal facility, where it resumes its natural course to the Canyon Lake portion of the Railroad Canyon Reservoir. B-2

2. The Biological Resources (Appendix B) Wildlife compendium fails to mention several species of migratory fowl (Canada Geese, Mallard Ducks) who seasonally occupy various sites in the watercourse, along with a variety of water fowl (herons, egrets, ducks, coots, etc) which have been observed in the vicinity of the Bradley Bridge watercourse. The occurrence of these species adds a uniqueness to the Salt Creek wildlife aesthetic that is not mentioned in the regulations. B-3

3. The nature of the project requires a significant disturbance of the watercourse in the vicinity of Bradley Road which would indicate a regulatory review of the effects of hydromodification per SWRCB guidance. Generally this requirement is addressed in the SWPPP, or the city's MS4 permit. This should be mentioned in the MND. B-4

4. The MND contains material not specifically relevant to the project, (i.e., a discussion of SCAQMD meetings). There seems to be an overload of unnecessary and redundant boiler plate in some sections. B-5

5. It should be considered that merely citing regulations alone does not ensure compliance. The statement(s) that compliance with state and local regs will ensure a CEQA condition will be met has no credibility without plan(s) of action with action steps to achieve the MND conclusion. These plans must be referenced in the MND to indicate how the condition will be met. B-6

6. The document needs to include a glossary of acronyms and terms to assist laypersons and non-technical reviewers in relating these acronyms and terms to common usage. B-7

7. There is an artist's conception of the constructed bridge. Add the artist's concept to the document preferably on the cover page, in front of the document, and in the Maps Section of Section 4, References and List of Preparers B-8

8. Add a "Maps Section" in Section 4 as Section 4.3 B-9

PHILLIPS ENTERPRISES
ENVIRONMENTAL ADVISOR
EARL W. PHILLIPS, JR, REHS
29041 Hogan Dr., Menifee CA 92586-3125
Ph/Fax (951) 672-1072 EML: earlphillips@verizon.net

GENERAL COMMENTS AND RECOMMENDATIONS

Section 1.1.1. Purpose and Need.

This document should have an "Executive Summary" which summarizes the contents. There should be a paragraph that explains the appendices, located within each appendix that provides details about the models, charts, graphs, et al contents. B-10

1. The description of Salt Creek is inaccurate. Salt Creek is a seasonal watercourse, defined by the USGS as a "blue Line" watercourse, originating in the vicinity of the Santa Rosa Mountains (part of the San Jacinto Mountains) and ending in the Canyon lake portion of the Railroad Canyon reservoir. B-11
2. Salt Creek has its own flood plains, which removes it from the section 1.1.1 definition as a flood control channel (County of Riverside General Plan-Sun City Area Plan, page 9, Unique Features, *Salt Creek*), (City of Menifee General Plan EIR, Section 5.9.1 Environmental Setting, Regional Drainage, Local Surface Waters and Drainage, p 5.9.1) and (The Riverside County Flood Control and Water Conservation District, Master Drainage Plan) B-12
3. According to the Salt Creek Master Drainage Plan, most of the flood plain's local vulnerabilities were modified into flood control channels, with sections left open where feasible. The channel reverts to its natural state in south west Menifee, ending in the Canyon Lake section of Railroad Canyon Reservoir. B-13
4. Syntax: Syntax errors, confusing language, and "fuzzy assumptions" are throughout the document. B-14
   - Section 1.2, sentence 2: replace "an MND" with "a MND". The convention is that "an" precedes a vowel while "a" precedes a consonant.
5. Section 1.1.3.3. The existing title "Operation" [p3] should be changed to "Operation and Maintenance (O&M)" to conform to the actual life cycle of the project.

   Revise sentence 3 of ¶ 1 to read, "O & M "along with routine and specific maintenance, will include work in the watercourse channel (debris removal, erosion control, graffiti removal, etc) as well as paving, striping, pothole and patching repairs and general cleanliness of the bridge itself." B-15
6. Section 1.2 California Environmental Quality Act Compliance. While CEQA is the overall governing reg, there are other state and local regs that add additional requirements in support of, and in supplementing CEQA Guidance. These should be mentioned in a paragraph (SWRCB, SCAQMD, etc) B-16

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7. Page 10. The signature in the signature block is illegible. The Responsible City Representative who is making the determination needs to add his/her name in print along with their title and signature. B-17

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Add the observation, "These birds enjoy a "special status" because they are highly visible and unique to the Salt Creek ecosystem and therefore need to be included in the MND discussion." This recommendation expands on ¶ 3 discussions. B-26 Cont.

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    The ecological definition of "edge effects" includes disturbances which may divide or change the natural boundaries of an ecosystem. In the case of this project, no ecosystem boundaries will be divided or changed, or overly disturbed because the project consists of building a bridge, with as little disturbance of the Salt Creek ecosystem as practicable. B-27

    Revise ¶ 3 to read, "Standard construction best management practices (BMPs) including a SWPPP will be implemented to minimize/mitigate construction-related impacts to the local ecosystem.

18. Item "c", p 32. Less Than Significant with Mitigation Incorporated. Add "in proximity to the project site" to sentence 1. Salt Creek has more than one vulnerable flood plain area and more than one active low-flow channel in the watercourse within the city's jurisdiction. B-28

19. Item "c", ¶ 3, p32. Less Than Significant with Mitigation Incorporated. Replace "indirect edge effects" with "construction boundary impacts". Refer to item 17 above. B-29

20. Item "c", ¶ 3, p32. Remove the reference to "onsite or adjacent jurisdictional waters", and replace with "jurisdictional waters". This eliminates the confusion that two conditions apply. The proposed project crosses one defined jurisdictional (Federal & State) water. B-30

21. Mitigation Measures, p33. MM-BIO-2b. Recommend this measure be removed or strongly contested. The imposition of a 'fee' for a project that (1) is not in proximity to the site, and (2) will not incur a net-loss to current flow conditions does not make any sense. (Opinion) This is a little more than a bureaucratic bribe since it does not provide a benefit to the city or the hydro ecology in or near the city's jurisdiction. B-31

22. Item "d", p 34, ¶ 4. Revise sentence 2 to read The project site has limited potential to support nesting resident and migratory birds, though significant impacts may occur. B-32

23. Topic "Additional Survey Requirements (MSHCP Section 6.3.2) ",p37, ¶ 1. Revise sentence 3 to read, "based on this survey", the project is consistent with the MSHCP Additional Survey Requirements. B-33

24. Native American Coordination. ¶ 2, p39. The last sentence in ¶ 2 should end with a colon as this sentence transitions to an itemization of summary statements. Recommend the paragraphs referred to under this item (¶ ¶ 3-6) be numbered or itemized. B-34

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25. Item "a", p 40. Question, "*Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5*"?

    Insert the complete citation, "CEQA § 15064.5" which is more accurate. The MND contains numerous regulatory citations. Even though the MND is under CEQA, the more appropriate format would be to use the complete regulatory title in the citation. (An exclusion would apply if the current format is caveated as being abbreviated to denote the referenced citation.) B-35

    ❖ Pls note: This recommendation applies throughout the MND document.

26. Item "a" Less Than Significant Impact, ¶ 2. Change "environment" to "environmental" in sentence 2. B-36
    - Revise sentence 5 in ¶ 1 to read, "Although the project site is not associated with an Alquist-Priolo earthquake fault zone, the proposed project would be designed and built to the latest seismic requirements which would minimize adverse effects from strong seismic activity ".

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28. Topic: Existing Setting, p47. Revise ¶ 3 to address determining the actual emissions and the existing guidance applicable to address the findings. The fluff of what the governing agencies did or did not do has no bearing on the local conditions and what measures. The MND speaks to the conditions, and what needs to be done to address those conditions using specific and applicable regulatory guidance. B-38

29. Revise ¶ 4, p48, to eliminate agency actions as the project is concerned with the guidance produced by the agencies. B-39

30. Topic: status of proposed SCAQMD Thresholds, p48-50. Eliminate this topic in its entirety. It has no bearing on the project, the emissions at the project, or the MND's intent. Revise the discussion pertaining to table 7 and construe it as the best available guidance to be used in meeting the MND criteria. B-40

31. Item "b", p 51, Less than Significant Impact. Eliminate ¶ 1. It has no bearing on the project nor does it address the CEQA criteria for mitigating the conditions known or projected to exist for the project. B-41

Comment Letter A

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

City of Menifee
JAN 17 2017
Received

January 11, 2017

Carlos E. Geronimo
City of Menifee
29714 Haun Road
Menifee, CA 92586

Subject: Bradley Road Bridge
SCH#: 2016121033

Dear Carlos E. Geronimo:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. The review period closed on January 10, 2017, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. A-1

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH#	**2016121033**
Project Title	Bradley Road Bridge
Lead Agency	Menifee, City of
Type	**MND** Mitigated Negative Declaration
Description	The city is proposing to replace this low-flow crossing with an all-weather crossing (bridge), effectively raising the roadway out of the floodplain. The total area of potential disturbance is approximately 4.39 acres. The limits of work include temporary siting and disturbance areas. Construction is estimated to begin in March 2017 and last approximately 18 months.

Lead Agency Contact

Name	Carlos E. Geronimo		
Agency	City of Menifee		
Phone	951-723-3722	*Fax*	
email			
Address	29714 Haun Road		
City	Menifee	*State* CA	*Zip* 92586

Project Location

County	Riverside		
City	Menifee		
Region			
Lat / Long	33° 41' 33.0" N / 117° 11' 18.9" W		
Cross Streets	Bradley Rd, Potomac Dr, Rio Vista Dr		
Parcel No.			
Township	*Range*	*Section*	*Base*

Proximity to:

Highways	215
Airports	
Railways	
Waterways	Salt Creek
Schools	Chester W. Morrison, Evans Ranch, Ridgemore, Paloma Valley
Land Use	Public ROW, recreation

Project Issues	Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Coastal Zone; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Growth Inducing; Landuse; Cumulative Effects; Other Issues
Reviewing Agencies	Resources Agency; Department of Fish and Wildlife, Region 6; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 8; Regional Water Quality Control Board, Region 8; Air Resources Board, Transportation Projects; Native American Heritage Commission

Date Received 12/12/2016 *Start of Review* 12/12/2016 *End of Review* 01/10/2017

Response to Comment Letter A

State Clearinghouse
Scott Morgan
Director
January 11, 2017

A-1 This letter acknowledges that the City has complied with the public review requirements for the Bradley Road Mitigated Negative Declaration (MND) pursuant to the California Environmental Quality Act (CEQA).

INTENTIONALLY LEFT BLANK

Comment Letter B

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05 Jan 2017

CDR Earl W. Phillips, Jr., USNR (Ret), REHS

Mr. Carlos Geronimo, PE
Senior Civil Engineer, City of Menifee
29714 Haun Road
Menifee CA 92586

BRADLEY BRIDGE MITIGATED NEGATIVE DECLARATION COMMENTS

Preface

My views and comments as expressed herein are based on my research, and experience as a Registered Environmental Health Specialist (California) with over 25 years' experience (civilian & military) in environmental compliance and environmental project management.

I recognize the topics of concern in the Draft Mitigated Negative Declaration (draft) are broad and complex to the degree that any one of a wide range of responses may be appropriate. Therefore, some views and comments submitted herein may not include all possible responses to the mitigated negative declaration proposal.

My comments and suggestions are not to be construed as "show-stoppers" for approval of the MND, but to indicate possible vulnerabilities that may be addressed or challenged by local activists and other citizens.

No attempt therefore, is being made to imply or construe that the responses herein represent a complete and total final assessment of the draft. The comments submitted herein are to be construed as suggestions and recommendations for the evaluator's consideration. B-1

Caveat

The recommendations provided herein are intended to provide clarity and ease of understanding the material presented. These recommendations are not to be construed as criticism, attack, or otherwise impugning the efforts of the preparers of the document. The recommendations represent the author's views only.

Sincerely,

Earl W. Phillips, Jr., REHS

Registered Environmental Health Specialist
EARL W. PHILLIPS
No. 6994
Exp. 12/17
STATE OF CALIFORNIA

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Summary of Observations and Findings

1. The description of Salt Creek as a flood control channel is only partially accurate. Salt Creek is a USGS recognized "blue line" watercourse with its own flood plains. The watercourse was modified into distinct flood control channels, from its headwaters in proximity of the Santa Rosa Mountains down to the vicinity of the city's water reclamation/desal facility, where it resumes its natural course to the Canyon Lake portion of the Railroad Canyon Reservoir. B-2

2. The Biological Resources (Appendix B) Wildlife compendium fails to mention several species of migratory fowl (Canada Geese, Mallard Ducks) who seasonally occupy various sites in the watercourse, along with a variety of water fowl (herons, egrets, ducks, coots, etc) which have been observed in the vicinity of the Bradley Bridge watercourse. The occurrence of these species adds a uniqueness to the Salt Creek wildlife aesthetic that is not mentioned in the regulations. B-3

3. The nature of the project requires a significant disturbance of the watercourse in the vicinity of Bradley Road which would indicate a regulatory review of the effects of hydromodification per SWRCB guidance. Generally this requirement is addressed in the SWPPP, or the city's MS4 permit. This should be mentioned in the MND. B-4

4. The MND contains material not specifically relevant to the project, (i.e., a discussion of SCAQMD meetings). There seems to be an overload of unnecessary and redundant boiler plate in some sections. B-5

5. It should be considered that merely citing regulations alone does not ensure compliance. The statement(s) that compliance with state and local regs will ensure a CEQA condition will be met has no credibility without plan(s) of action with action steps to achieve the MND conclusion. These plans must be referenced in the MND to indicate how the condition will be met. B-6

6. The document needs to include a glossary of acronyms and terms to assist laypersons and non-technical reviewers in relating these acronyms and terms to common usage. B-7

7. There is an artist's conception of the constructed bridge. Add the artist's concept to the document preferably on the cover page, in front of the document, and in the Maps Section of Section 4, References and List of Preparers B-8

8. Add a "Maps Section" in Section 4 as Section 4.3 B-9

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GENERAL COMMENTS AND RECOMMENDATIONS

Section 1.1.1. Purpose and Need.

This document should have an "Executive Summary" which summarizes the contents. There should be a paragraph that explains the appendices, located within each appendix that provides details about the models, charts, graphs, et al contents. B-10

1. The description of Salt Creek is inaccurate. Salt Creek is a seasonal watercourse, defined by the USGS as a "blue Line" watercourse, originating in the vicinity of the Santa Rosa Mountains (part of the San Jacinto Mountains) and ending in the Canyon lake portion of the Railroad Canyon reservoir. B-11
2. Salt Creek has its own flood plains, which removes it from the section 1.1.1 definition as a flood control channel (County of Riverside General Plan-Sun City Area Plan, page 9, Unique Features, *Salt Creek*), (City of Menifee General Plan EIR, Section 5.9.1 Environmental Setting, Regional Drainage, Local Surface Waters and Drainage, p 5.9.1) and (The Riverside County Flood Control and Water Conservation District, Master Drainage Plan) B-12
3. According to the Salt Creek Master Drainage Plan, most of the flood plain's local vulnerabilities were modified into flood control channels, with sections left open where feasible. The channel reverts to its natural state in south west Menifee, ending in the Canyon Lake section of Railroad Canyon Reservoir. B-13
4. Syntax: Syntax errors, confusing language, and "fuzzy assumptions" are throughout the document. B-14
   - Section 1.2, sentence 2: replace "an MND" with "a MND". The convention is that "an" precedes a vowel while "a" precedes a consonant.
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    ❖ Pls note: This recommendation applies throughout the MND document.

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OPINION

The fluff of agency interactions, such as who did what and who proposed what, does not pertain to or address the project's evaluating criteria. A discussion of what the CEQA check list query asks should be definitively responded to using the best available guidance to mitigate the condition addressed by the query. B-42

32. Item "a", p 53. Replace the text "sensitive environments" with "sensitive receptors", in sentence 3 (of paragraph) the latter being more inclusive and specific in discussing environmental impacts. B-43

33. Item "b", p 53. Less than Significant Impact. Revise this paragraph to specifically address the CEQA query. B-44

OPINION

Citing regulations does not ensure compliance will take place. Regulations contain guidance and mandates, not actions. Statement(s) that compliance with state and local regs will ensure a CEQA condition will be met has no credibility without plan(s) of action with action steps to achieve the MND conclusion. These plans must be referenced in the MND to indicate how the queried condition will be met. B-45

- Revise item "b", p 53 (recommendation #33) to read, "The project will include plans of action and action steps that address issues regarding hazardous materials".

34. Item "d", p 58. Revise sentence 2, ¶ 1, to read, "The elevation of Bradley Road (bridge construction) above the water course would alleviate road closure due to flooding events". This is a more accurate description of the project's objective. B-46

35. Appendix 3: Include Canada geese, egrets, herons, and other migratory waterfowl as wildlife "species of interest" to the Salt Creek Ecosystem. This should be a separate paragraph discussed in the appendix. B-47

36. Add a Glossary of acronyms, phrases, and terminology to assist the reader(s) in reading the document. B-48

37. Add a paragraph explaining the topics in each of the appendices to clarify and inform the readers of what the appendix contains, how the data was derived and used, and the intended focus of the appendix. B-49

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REFERENCES

1. City of Menifee. City of Menifee General Plan, Section 5, Environmental Analysis.
2. USGS: Geological Maps of Murrieta, Romoland, San Jacinto Mountains, Winchester, and Hemet
3. Riverside County Flood Control and Water Conservation District. Salt Creek Master Drainage Plan
4. Geology of California's Imperial Valley, Chapter 18: The San Andreas Fault System
5. Southern California Coastal Water Research Project. Hydromodification Assessment and Management in California.
6. Google Earth. Bradley Road, Menifee CA. Photographs were modified to address task requirements on behalf of City Councilman Greg August.
7. August, Greg. City of Menifee City Council Member. Artist's Conceptual Drawings of the Bradley Road Bridge.
8. County of Riverside General Plan. Sun City/Menifee Area Plan

B-50

NOTE

1. References cited are in addition to those mentioned in the Draft Mitigated Negative Declaration.

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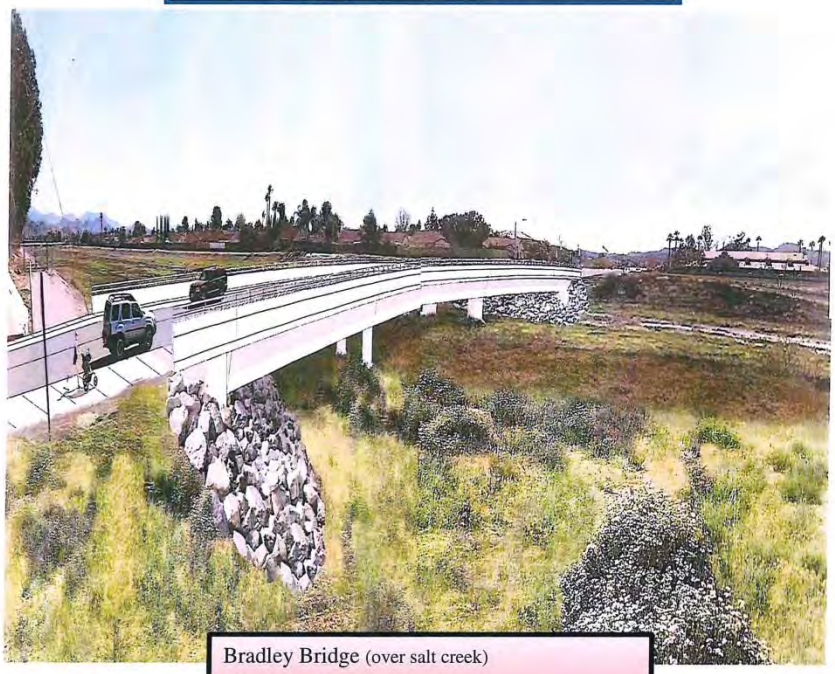
Appendix 1 Artist conception of the Bradley Bridge and Photographs of the Proposed Project



Bradley Bridge (over salt creek)

Artist conception

Page 1

B-50
Cont.

PHILLIPS ENTERPRISES
ENVIRONMENTAL ADVISOR
EARL W. PHILLIPS, JR, REHS
29041 Hogan Dr., Menifee CA 92586-3125
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Bradley Bridge (over salt creek)

Page 2

B-50
Cont.

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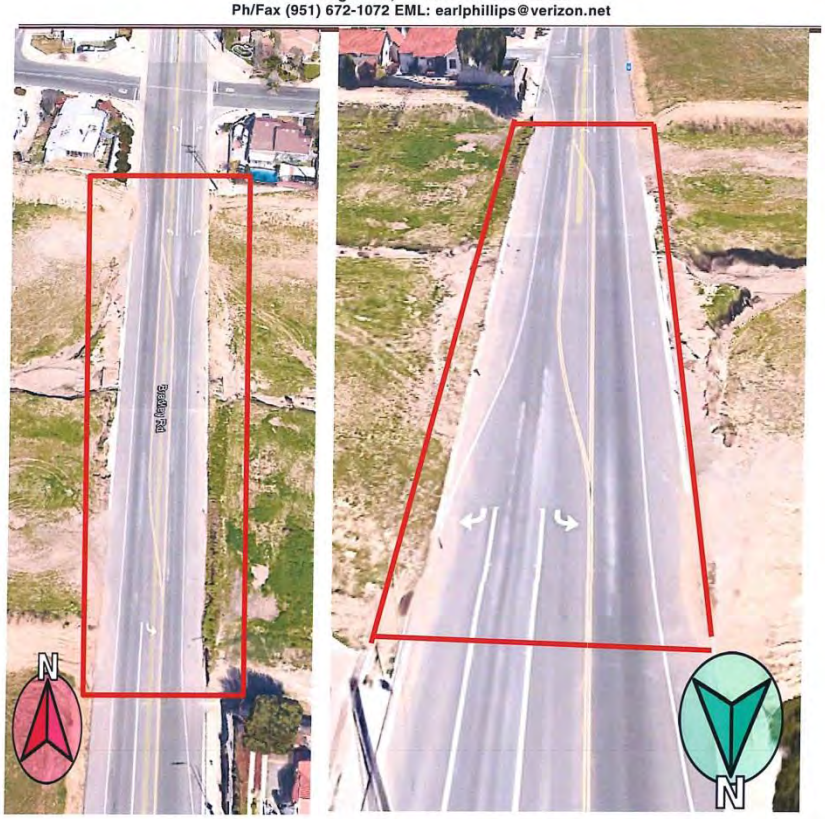

Existing Views of the proposed Bradley Bridge location

Page 3 of 3

B-50 Cont.

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Response to Comment Letter B

Earl W. Phillips, Jr., REHS
January 5, 2017

B-1 The City appreciates the commenter for providing comments on the Draft MND. This comment is introductory in nature and specific issues related to the adequacy of the environmental analysis in the MND is provided later in the letter.

B-2 It is true that Salt Creek is a blue-line stream which has been designed with steep, engineered channel banks and, in many areas, is a maintained floodplain. Salt Creek was originally channelized and engineered to retain flows up to a 100-year storm event and reduce flooding, although, due to the lack of periodic maintenance and continuous sediment transport over the years, there are some areas along the creek that are no longer capable of maintaining the 100-year flows within the banks. In response to this comment, Section 1.1.1, Purpose and Need, has been revised to include additional characterization of Salt Creek as suggested by the commenter.

The City has made revisions and clarifications to the MND. These revisions to the MND are presented in ~~strikeout~~-underline format. To the extent these changes and additions to the MND provide new information that may clarify or amplify information already found in the MND, and do not raise important new issues about significant effects on the environment, such changes are not considered a substantial revision as the term is used in Section 15073.5 of the CEQA Guidelines.

B-3 Comment noted and appreciated. The wildlife compendium represents a list of wildlife species observed during the October 2015 and August 2016 surveys and is not intended to include species that may frequent the site during other times of the year. In general, there are understandable limitations to the general wildlife surveys conducted for the project primarily due to seasonal and daytime-only constraints. Many early spring and summer migrants that may use habitats in the study area would not have been observed because the surveys were conducted were done in October 2015 and August 2016. Further, surveys were conducted during the daytime to maximize visibility for the detection of plants and most animals. Birds represent the largest component of the vertebrate fauna, and because most are active in the daytime, diurnal surveys maximize the number of observations of this group. In contrast, daytime surveys usually result in few observations of mammals, reptiles, and amphibians, many of which may be more active at night. Nighttime surveys were not warranted because no high sensitivity species (e.g., state- and/or federally listed) potentially occurring in the study area are nocturnal. The general wildlife surveys were conducted according to commonly accepted, standard scientific practices and procedures.

B-4 Please refer to Section 3.9, Hydrology and Water Quality, of the MND for a discussion of potential hydrology impacts as well as related items such as State Water Resources Control Board (SCRWB) compliance and the requirement for a Stormwater Pollution Prevention Plan (SWPPP).

B-5 Comment noted and appreciated. The Draft MND provides background information relevant to understanding analysis as necessary in order to provide sufficient context to the reader.

B-6 The City is required to comply with all applicable laws, regulations, ordinances, and plans as they relate to the proposed project. Such details regarding compliance are provided where applicable. The City will condition the project to comply with applicable laws and regulations to ensure compliance. Additionally, a Mitigation, Monitoring, and Reporting Program is included as Appendix E to the MND to ensure compliance with all required mitigation measures.

B-7 The City understands that the MND uses numerous acronyms and terms. It should be noted that all acronyms are spelled out at first usage. Additionally, the MND was available electronically, allowing for ease of searching for acronyms throughout the document.

B-8 The City appreciates the commenter's input regarding artistic renderings of the proposed project. In response to this comment, a cover page with artistic renderings has been incorporated into the MND.

B-9 Comment noted and appreciated. The location of the figures provided in the Draft MND is indicated in the Table of Contents near the beginning of the document.

B-10 Comment noted and appreciated. According to Section 15071 of the CEQA Guidelines, an executive summary is not a required component of an MND. Please note that a brief summary of impacts is provided in Section 2 of the Draft MND.

B-11 Comment noted and appreciated. Please refer to Response to Comment B-2.

B-12 Please refer to Response to Comment B-2.

B-13 Please refer to Response to Comment B-2.

B-14 Comment noted and appreciated. In response to this comment, all instances of "a MND" in Section 1.2, California Environmental Quality Act Compliance, of the MND have been revised to state "an MND." It should be noted that this revision is contrary to the comment; "an MND" is grammatically correct due to the pronunciation of "MND" beginning with a vowel sound.

The City has made revisions and clarifications to the MND. These revisions to the MND are presented in ~~strikeout~~-underline format. To the extent these changes and additions to the MND provide new information that may clarify or amplify information already found in the MND, and do not raise important new issues about significant effects on the environment, such changes are not considered a substantial revision as the term is used in Section 15073.5 of the CEQA Guidelines.

B-15 In response to this comment, the operational and maintenance characteristics in Section 1.1.3.3 of the MND have been revised to include additional suggested maintenance activities.

The City has made revisions and clarifications to the MND. These revisions to the MND are presented in ~~strikeout~~-underline format. To the extent these changes and additions to the MND provide new information that may clarify or amplify information already found in the MND, and do not raise important new issues about significant effects on the environment, such changes are not considered a substantial revision as the term is used in Section 15073.5 of the CEQA Guidelines.

B-16 Section 1.2, California Environmental Quality Act Compliance, discusses the project's compliance with CEQA, as is the intent of the subsection. Any other applicable laws, regulations, ordinances, and plans are described throughout the analysis as necessary to provide context to the reader.

B-17 Comment noted and appreciated. The information regarding the City staff member responsible for the MND will be included in the public record and submittal package.

B-18 The specific location for the suggested revision is unclear, therefore, no revision has been made. Please note that Section 1.1.2, Project Location and Setting, along with Figures 1-3, provide specific details regarding the project's location in relation to Salt Creek.

B-19 Comment noted and appreciated. The City is required to provide sufficient evidence for the disclosure of a "No Impact" conclusion to agricultural and forestry resources. Therefore, the discussion provided in Section 3.2, Agricultural and Forestry Resources, of the Draft MND remains unchanged.

B-20 Comment noted and appreciated. Please refer to Response to Comment B-5. The discussion presented in the Draft MND provides all information necessary to substantiate the significance conclusions of the environmental analysis and provide sufficient context to the reader.

B-21 Comment noted and appreciated. Please refer to Response to Comment B-20.

B-22 Comment noted and appreciated. Please refer to Response to Comment B-20.

B-23 Comment noted and appreciated. Please refer to Response to Comment B-20.

B-24 Comment noted and appreciated. Please refer to Response to Comment B-20.

B-25 Section 3.4, Biological Resources, Threshold A, correctly provides analysis relevant to the potential impacts to any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

B-26 Comment noted and appreciated. Egrets, Canada geese, and herons, while potentially enjoyed by the public, are not special-status wildlife as defined under CEQA. Endangered, rare, or threatened species, as defined in CEQA Guideline 15380(b) (14 CCR 15000 et seq.), are referred to as "special-status species" and include (1) endangered or threatened species recognized in the context of the California Endangered Species Act and the federal Endangered Species Act; (2) California Species of Special Concern and Watch List species, as designated by the CDFW; (3) mammals and birds that are Fully Protected species, as described in Fish and Game Code, Sections 4700 and 3511; (4) Birds of Conservation Concern, as designated by the USFWS; and (5) wildlife species that are "covered" under the Western Riverside County MSHCP.

It would be incorrect to categorize these species as "special-status" in the MND as they are not afforded special-status protection under state and federal law. The protection of these species from project-related impacts would occur under the Migratory Bird Treaty Act, which protects nesting bird populations from construction-related impacts (please refer to mitigation measure MM-BIO-1).

B-27 Comment noted and appreciated. The definition of edge effects presented in the Draft MND is consistent with the Final Western Riverside County Multiple Species Habitat Conservation Plan (MHSCP), which defines an edge effect as a change in the "conditions or species composition within an otherwise uniform habitat as one approaches a boundary with a different habitat." Edge effects at the boundary between natural lands and human-occupied lands ("urban edge effects") arise due to human-related intrusions or construction-related impacts such as lighting, noise, invasive species, exotic predators (dogs, cats, and opossums), hunting, trapping, off-road activities, dumping, construction-related dust and other forms of recreation and disturbance. The City acknowledges that the only possible edge effect, in the absence of Best Management Practices (BMPs), would be construction-related dust as crews establish a temporary work area to construct the bridge in the creek floodplain. Construction-related dust can adversely affect plant species not just on-site in the impact footprint but in off-site areas that aren't directly impacted by the project.

B-28 Comment noted and appreciated. The impact analysis and recommended mitigation is intended to address the portion of Salt Creek within the project site that is directly impacted by the project. To state that the project has been designed to avoid direct, permanent impacts to the main, active low-flow channel and a majority of the active floodplain "in proximity to the project site" would be an incorrect representation of the impacts.

B-29 Comment noted and appreciated. Please refer to Response to Comment B-27.

B-30 Comment noted and appreciated. The distinction between on-site and off-site jurisdictional waters is necessary to demonstrate that indirect effects to off-site, as well as on-site, habitats outside of the work area would not be significantly impacted by the project. This distinction is retained in the Draft MND to show that the project would not adversely contribute to the degradation of jurisdictional waters both on-site and off-site.

B-31 Comment noted and appreciated. Mitigation Banks and In-Lieu Fee Programs are generally the preferred mitigation option (by the U.S. Army Corps of Engineers) because they tend to consolidate financial and technical resources and they involve much more intensive strategic planning, design, and scientific expertise to ensure success. Additionally, mitigation banks and in-lieu fee programs help consolidate small, fragmented wetland mitigation projects into large contiguous sites that have much higher wildlife habitat values with a well-funded management source and resource agency oversight and regulation. The City is mitigating for temporary and permanent impacts through a combination of on-site restoration and the off-site purchase of credits at a 3:1 ratio. The increased ratio is intended to compensate for not only temporal loss but for the distance between the impact site and the in-lieu fee site.

B-32 Comment noted and appreciated. The existing text sufficiently describes and discloses potential impacts to nesting and migratory birds.

B-33 Comment noted and appreciated. The existing text sufficiently describes and discloses compliance with the MSHCP.

B-34 In response to this comment, the formatting of text regarding Native American outreach and coordination has been revised.

The City has made revisions and clarifications to the MND. These revisions to the MND are presented in ~~strikeout~~-<u>underline</u> format. To the extent these changes and additions to the MND provide new information that may clarify or amplify information already found in the MND, and do not raise important new issues about

significant effects on the environment, such changes are not considered a substantial revision as the term is used in Section 15073.5 of the CEQA Guidelines.

B-35 The text of Threshold A of Section 3.5, Cultural Resources, of the MND is directly quoted from Appendix G of the CEQA Guidelines. The City appreciates the suggested revision regarding regulatory citations throughout the MND.

B-36 In response to this comment, the grammatical error and characterization of seismic activity has been revised.

The City has made revisions and clarifications to the MND. These revisions to the MND are presented in ~~strikeout~~-underline format. To the extent these changes and additions to the MND provide new information that may clarify or amplify information already found in the MND, and do not raise important new issues about significant effects on the environment, such changes are not considered a substantial revision as the term is used in Section 15073.5 of the CEQA Guidelines.

B-37 In response to this comment, the suggested subheading has been inserted into the discussion regarding climate background in Section 3.7, Greenhouse Gas Emissions, of the MND.

The City has made revisions and clarifications to the MND. These revisions to the MND are presented in ~~strikeout~~-underline format. To the extent these changes and additions to the MND provide new information that may clarify or amplify information already found in the MND, and do not raise important new issues about significant effects on the environment, such changes are not considered a substantial revision as the term is used in Section 15073.5 of the CEQA Guidelines.

B-38 Comment noted and appreciated. Please refer to Response to Comment B-20.

B-39 Comment noted and appreciated. Please refer to Response to Comment B-20.

B-40 Comment noted and appreciated. Please refer to Response to Comment B-20.

B-41 Comment noted and appreciated. Please refer to Response to Comment B-20.

B-42 Comment noted and appreciated. Please refer to Response to Comment B-20.

B-43 Comment noted and appreciated. The existing text in the Draft MND adequately characterizes and captures the extent of potential impacts.

B-44 Comment noted and appreciated. The existing text in the MND adequately answers the threshold question as it relates to reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

B-45 Please refer to Response to Comment B-6. The existing analysis presented in the MND under Section 3.8, Hazards and Hazardous Material, Threshold B, includes sufficient discussion regarding hazardous material safety and requirements during construction. Please note that the discussion refers the reader to Section 3.8, Hazards and Hazardous Material, Threshold A, which includes information regarding what type of plans and protocols required during construction of the proposed project.

B-46 In response to this comment, Section 3.9, Hydrology and Water Quality, Threshold D, of the MND has been revised.

The City has made revisions and clarifications to the MND. These revisions to the MND are presented in ~~strikeout~~-underline format. To the extent these changes and additions to the MND provide new information that may clarify or amplify information already found in the MND, and do not raise important new issues about significant effects on the environment, such changes are not considered a substantial revision as the term is used in Section 15073.5 of the CEQA Guidelines.

B-47 Comment noted and appreciated. Refer to Response to Comment B-3.

B-48 Comment noted and appreciated. Refer to Response to Comment B-7.

B-49 Comment noted and appreciated. The titles of each technical report provided as an appendix to the Draft MND clearly describe the contents of each report. Additionally, for each section of analysis that utilizes an appendix to support the analysis provides information necessary, including contents and methodology, from each appendix. Additionally, each appendix was made available for review during public review of the Draft MND.

B-50 Comment noted and appreciated. Please refer to Response to Comment B-8.

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Comment Letter C

JASON E. UHLEY
General Manager-Chief Engineer

1995 MARKET STREET
RIVERSIDE, CA 92501
951.955.1200
FAX 951.788.9965
www.rcflood.org

RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT

January 10, 2017

EMAILED THIS DATE TO: cgeronimo@cityofmenifee.us

Mr. Carlos E. Geronimo, PE
City of Menifee
29714 Haun Road
Menifee, CA 92586

Dear Mr. Geronimo:

Re: Notice of Intent to Adopt a Mitigated Negative Declaration for the Bradley Road Bridge over Salt Creek Project

This letter is written in response to the Notice of Intent to Adopt a Mitigated Negative Declaration (MND) for the Bradley Road Bridge over Salt Creek Project (project). The proposed project consists of the construction of an all-weather crossing over Salt Creek in order to raise the roadway out of the floodplain. The bridge would have a 12-foot median, two 12-foot travel lanes (one in each direction), 8-foot shoulders on both sides and 5-foot pedestrian sidewalks with tubular hand railings on both sides. The existing dual pipe culvert would be removed as part of the project. At its highest point, the bridge would be raised approximately 12 feet above Salt Creek. Based on our review of the documents that were provided, the District has the following comments: C-1

1. Please be advised that any work that involves District rights of way, easements, or facilities will require an encroachment permit from the District. As part of the encroachment permit process, the applicant will be required to submit a series of documents including, but not limited to: C-2

   a. CEQA Compliance: As proposed, the project would affect existing facilities within the District's right of way. As such, the District is considered to be a Responsible Agency. Upon completion of the final environmental document, please submit a copy of the approved document to the District for consideration. Please be sure to include all appendices that were used to support the conclusions found in the environmental document.

   b. Regulatory Permits: As stated in the MND, impacts to waters will require regulatory permits (404, 401, 1602) to be obtained. Prior to issuance of the encroachment permit the District will need proof of applicable regulatory permits or documentation that these permits are not required to be submitted for review. The District will need to verify that the permits cover temporary construction impacts as well as permanent impacts. Regulatory permits may be submitted as part of your submittal for an encroachment permit. Please be sure to include plans and exhibits that indicate the specific location of where temporary and permanent impacts will occur. C-3

   c. Nesting Bird Plan: Impacts to nesting birds are proposed to be reduced by requiring a nesting bird survey to be conducted by a qualified biologist within 30 days of the initiation of project construction if ground disturbance will occur between February 1st and August 31st. If a nesting bird survey is conducted, please submit a copy of the results to the District. C-4

Mr. Carlos E. Geronimo -2- January 10, 2017
Re: Notice of Intent to Adopt a
Mitigated Negative Declaration for the
Bradley Road Bridge over
Salt Creek Project

To obtain further information on encroachment permits, contact Amy McNeill of the Encroachment Permit Section at 951.955.1266. C-4 Cont.

2. The Initial Study (IS) states that a habitat assessment was conducted and no suitable habitat for burrowing owls was found. As a result, no focused surveys were conducted and no further action was recommended in the IS. Please be advised that burrowing owls are known to be present throughout Salt Creek Channel. Due to their high rate of mobility, owls may begin to inhabit the project site before construction commences. Therefore, it may be necessary to conduct additional pre-construction surveys to ensure the site is still clear of burrowing owls before work is allowed within the District's right of way. C-5

3. Mitigation Measure BIO-2a discusses mitigation for temporary disturbances within Salt Creek Channel. Specifically, the measure commits the City to restoring riverine resources to pre-construction contours and conditions and development of a native hydroseed mix to be applied to temporarily disturbed areas. The measure commits the City to restoring those areas that are temporarily disturbed to the City's satisfaction. Please note that all plans for mitigation within the District's right of way should be coordinated with and approved by the District. Please contact Kamyar Ghods of the District's Operations Engineering Section to further discuss mitigation options. C-6

4. The Bradley Road crossing of Salt Creek Channel is located on Flood Insurance Rate Map 06065C-2055H in a Zone AE floodplain. Please be advised that modifications to the existing bridge may require a Conditional Letter of Map Revision and a Letter of Map Revision to be prepared to show the associated changes to the floodplain that may be caused as a result of the bridge reconstruction. C-7

Thank you for the opportunity to review the MND. Please forward any subsequent environmental documents regarding the project to my attention at this office. Please refer any questions regarding this letter to Kevin Cunningham at 951.955.1526 or me at 951.955.8581. C-8

Very truly yours,

KRIS FLANIGAN
Engineering Project Manager

ec: Amy McNeill

KCC:mcv
P8\210125

Response to Comment Letter C

Riverside County Flood Control and Water Conservation District
Kris Flanigan
Engineering Project Manager
January 10, 2017

C-1 Comment noted. This comment is introductory in nature and does not raise specific issues related to the adequacy of the environmental analysis in the Draft MND.

C-2 Comment noted. The City will provide all necessary documents for the encroachment permit application process to the Riverside county Flood Control and Water Conservation District (District) prior to any work within the District's right-of-way.

C-3 Please refer to Response to Comment C-2.

C-4 Please refer to Response to Comment C-2. In response to this comment, mitigation measure MM-BIO-1 has been revised to extend nesting bird season from August 15th to August 31st.

The City has made revisions and clarifications to the MND. These revisions to the Final MND are presented in ~~strikeout~~ underline format. To the extent these changes and additions to the MND provide new information that may clarify or amplify information already found in the MND, and do not raise important new issues about significant effects on the environment, such changes are not considered a substantial revision as the term is used in Section 15073.5 of the CEQA Guidelines.

C-5 Please refer to Response to Comment C-2. The City will require a pre-construction survey for burrowing owls prior to the start of work within the District's right-of-way.

C-6 Please refer to Response to Comment C-2.

C-7 The City will provide all necessary documents for any required revisions to applicable Flood Insurance Rate Maps for which the project is located in coordination with the Federal Emergency Management Agency (FEMA).

C-8 Comment noted. This comment concludes the letter and does not raise specific issues related to the adequacy of the environmental analysis in the MND.

ATTACHMENT E

PUBLIC HEARING NOTICE

NOTICE OF PUBLIC HEARING
and
INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

TIME OF HEARING:	7:00 p.m. or as soon as possible thereafter.
DATE OF HEARING:	February 8, 2017
PLACE OF HEARING:	***MENIFEE CITY COUNCIL CHAMBERS*** ***29714 HAUN ROAD*** ***MENIFEE, CA 92586***

A PUBLIC HEARING has been scheduled, pursuant to the City of Menifee Municipal Code, before the **CITY OF MENIFEE PLANNING COMMISSION** to consider the project shown below:

Project Title: **Bradley Road Bridge Project over Salt Creek Channel**

Project Location: The Bradley Road Bridge Project (proposed project) is located within the City of Menifee, County of Riverside, California. This segment of Bradley Road is located between Potomac Drive to the north and Rio Vista Drive to the south, though the limits of work would extend beyond these streets.

Project Proposal: Bradley Road crosses Salt Creek in a north-to-south direction, generally at equal elevation to Salt Creek. Due to this design, Bradley Road is prone to flooding during rain events, which has historically presented hazards to motorists and resulted in the closure of the roadway. The City of Menifee (City) is proposing to replace the low-flow crossing with an all-weather crossing (bridge), effectively raising the roadway out of the floodplain. The proposed bridge would span approximately 335 feet across Salt Creek and would be approximately 64 feet wide. The bridge would have a 12-foot median, two 12-foot travel lanes (one in each direction), 8-foot shoulders on both sides (which serve as Neighborhood Electric Vehicle (NEV)/Class II bicycle lanes), and 5-foot pedestrian sidewalks on both sides with tubular hand railings. The bridge would consist of a three-span cast-in-place post-tensioned concrete box girders supported by two intermediate piers consisting of three columns each (six columns total), and two open ended abutments. The two bridge abutments would be constructed north of the Rio Vista Drive intersection and south of the Potomac Drive intersection. The existing dual pipe culvert would be removed. The bridge would be raised approximately 12 feet above Salt Creek at the bridge's highest point. Shielded, downward facing lighting would be installed along the length of the bridge.

The project is being funded by the City with no federal funding involved.

Environmental Information: The City of Menifee Community Development Department has determined that the above project will not have a significant effect on the environment and has recommended adoption of a Mitigated Negative Declaration. The Menifee Planning Commission will consider the proposed project and the proposed Mitigated Negative Declaration, at the public hearing. In addition, the project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (California Department of Toxic Substances Control list of various hazardous sites).

The Initial Study (with Proposed) Mitigated Negative Declaration (IS/MND) was circulated for public review from December 12, 2016 to January 11, 2017. The document was made available for review at the City of Menifee City Hall Front Counter, Paloma Valley Library, and Sun City Library. The document was also made available on the City's website online. Notices regarding the document availability were published in the Press Enterprise and PE online (the Press Enterprise website) on December 12, 2016. A total of three comment letters/emails were received during the availability period for the Draft IS/MND.

Any person wishing to comment on the proposed project may do so in writing between the date of this notice and the public hearing; or, may appear and be heard at the time and place noted above. All comments must be received prior to the time of the public hearing. All such comments will be submitted to the Planning Commission, and the Planning Commission will consider such comments, in addition to any oral testimony, before making a decision on the proposed project.

If this project is challenged in court, the issues raised in court may be limited to those raised at the public hearing, described in this notice, or in written correspondence delivered to the Planning Commission at, or prior to, the public hearing. Be advised that as a result of public hearings and comment, the Planning Commission may amend, in whole or in part, the proposed project. Accordingly, the designations, development standards, design or improvements, or any properties or lands within the boundaries of the proposed project, may be changed in a way other than specifically proposed.

For further information regarding this project, please contact Carlos E. Geronimo, at (951) 672-6777 or e-mail cgeronimo@cityofmenifee.usmailto:rbrady@cityofmenifee.usmailto:rfowler@cityofmenifee.us, or go to the City of Menifee's agenda web page at http://www.cityofmenifee.us.

The case file for the proposed project may be viewed Monday through Friday, from 8:00 A.M. to 5:00 P.M. at the Community Development Department office, located at 29714 Haun Road, Menifee, CA 92586.

Please send all written correspondence to:

CITY OF MENIFEE PUBLIC WORKS DEPARTMENT
Attn: Carlos E. Geronimo, Senior Civil Engineer.
29714 Haun Road
Menifee, CA 92586

CITY OF MENIFEE

SUBJECT:	Planning Commission Interpretation No. 2017-028
MEETING DATE:	February 8, 2017
TO:	Planning Commission
PREPARED BY:	Lisa Gordon, Planning Manager
APPROVED BY:	Jeff Wyman, Interim Development Director

RECOMMENDED ACTION

1. Provide a Planning Commission Interpretation confirming that assisted living or similar facilities are considered a residential use in the Economic Development Corridor Zone (Menifee Municipal Code Chapter 9.28) and would count towards the percentage of residential uses allowed within the zone as specified in Chapter 9.28.090 (E).

DISCUSSION

At the December 14, 2016 Planning Commission Meeting, Chair Karwin requested an item be brought before the Commission regarding the classification (residential or commercial) of assisted living facilities. Commissioner Thomas seconded the request.

Background

Assisted Living Facilities

Assisted living facilities are a type of residential care for the elderly. They typically provide room, board, housekeeping, supervision, and personal care assistance with basic activities like personal hygiene, dressing, eating and walking.[1] The Department of Social Services is responsible for the licensing of these facilities and defines a residential care facility for the elderly to be inclusive of assisted living facilities:

> **"Residential Care Facility for the Elderly** - A residential home for seniors aged 60 and over who require or prefer assistance with care and supervision. Residential Care Facilities for the Elderly may also be known as **Assisted Living facilities**, retirement homes and board and care home."[2]

This level of care and supervision is targeted towards people who are unable to live by themselves but who do not need 24 hour nursing care. Assisted living facilities are

[1] California Advocates for Nursing Home Reform (CANHR) website. http://www.canhr.org/RCFE/rcfe_what.htm [Accessed 1/24/17]

[2] Department of Social Services website. http://www.ccld.ca.gov/PG4872.htm Accessed [1/24/17]

considered non-medical and are not required to have nurses, certified nursing assistants or doctors on staff.[3]

Neither the City's General Plan nor the Zoning Code contains a definition for assisted living facilities.

Recently, there has been an increase in the number of developers conducting due diligence on and/or submitting applications for assisted living facilities. There are currently two (2) active applications for assisted living facilities (Del Oro Plot Plan on Holland Road and Sun City Senior Care on McCall Blvd.). Possible locations developers have approached the City regarding the siting of an assisted living facility include: 1) the Junction Site (Haun and Scott Roads); 2) Southwest corner of Haun and Holland Roads; and 3) various locations along McCall Blvd.

Economic Development Corridor General Plan Land Use Designation
With the City's adoption of a new General Plan on December 18, 2013, it established areas within the City designated as Economic Development Corridor (EDC). This General Plan Land Use designation was further subdivided into five (5) subareas, as listed below, each with its unique characteristics and future potential for the community.

Northern Gateway (EDC–NG)
McCall Boulevard (EDC–MB)
Community Core (EDC–CC)
Newport Road (EDC–NR)
Southern Gateway (EDC–SG)

As noted in the adopted General Plan, the EDC designation is intended to provide economic vitality and flexibility in land use options to promote economic development along the City's major corridors. Individual EDC subareas are generally located in the large, undeveloped areas adjacent to I-215 and along the City's major corridors (such as Newport, Scott and Ethanac Roads, and McCall Boulevard). The General Plan notes that the majority of the City's new development, development not already planned as part of an approved specific plan, will be located in these EDC areas, to promote infill development and to preserve the rural areas that are an integral part of Menifee's heritage and community character.

In general, areas designated EDC are envisioned to develop primarily as nonresidential uses, with residential uses having a secondary or supporting role. Overall, residential uses are limited to no more than **fifteen (15) percent** of the total **EDC acreage** and are not to be allowed on parcels or properties directly adjacent to the freeway. The General Plan limits the maximum residential density permitted to twenty-four (24) dwelling units per acre.

Each subarea has a preferred mix of lands uses as described in General Plan Exhibit LU-b2: Economic Development Corridors Subareas (See Attachment A). The preferred mix of land uses identifies a percentage to different types of land uses allowed within the subarea (60% commercial, 20% office, 10% industrial, or 10% residential).

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[3] CANHR website. http://www.canhr.org/RCFE/rcfe_what.htm Accessed [1/24/17]

Analysis
The Commission requested that staff bring back a discussion item to clarify the classification of assisted living facilities. Staff reviewed the General Plan, Menifee Municipal Code Chapter 9.28 "Economic Development Corridors" and reviewed information regarding assisted living facilities to interpret the intent of the General Plan.

General Plan
The General Plan Land Use Designation descriptions do not include a reference to assisted living facilities.

The General Plan Land Use Background Document & Definitions do not contain a definition on residential uses, but the description for the McCall Boulevard EDC Subarea states the following:

> "Envisioned as a mix of office, medical, **and residential uses (assisted living, senior apartments, townhomes, etc.)** that would be compatible with the Regional Medical Center and would provide...."

Within the Housing Element of the General Plan, assisted living facilities are described as a type of housing for the residential care of the elderly.

Zoning
Ordinance 348 does not contain a definition of residential or commercial uses.

The EDC zone contains the same language under the description of the McCall Boulevard EDC Subarea as is found in the General Plan. However, assisted living facilities are under "Institutional Uses" in the table of allowed uses.

Housing and Community Development
Staff contacted the Department of Housing and Community Development (HCD) to determine if it had any guidance regarding the classification of assisted living as a residential or commercial use. Unfortunately, HCD has not prepared anything on the topic; however, HCD did provide information regarding the definitions of housing from the United States Census Bureau. Per the United States Census Bureau, assisted living facilities are considered a residential unit if they are constructed and meet the definition of a housing units as defined by the Census Bureau. This would imply that assisted living facilities do constitute a residential use.

CONCLUSION
Areas designated EDC are envisioned to develop primarily as nonresidential uses, with residential uses having a secondary or supporting role. The McCall Blvd. subarea description clearly noted assisted living facilities as a residential use. Assisted living facilities are also defined by the Department of Social Services as a residential care facility. Therefore, due to the language in the General Plan, zoning ordinance, definitions from the United States Census Bureau and the Department of Social Services, it is staff's belief that assisted living facilities are considered a residential use.

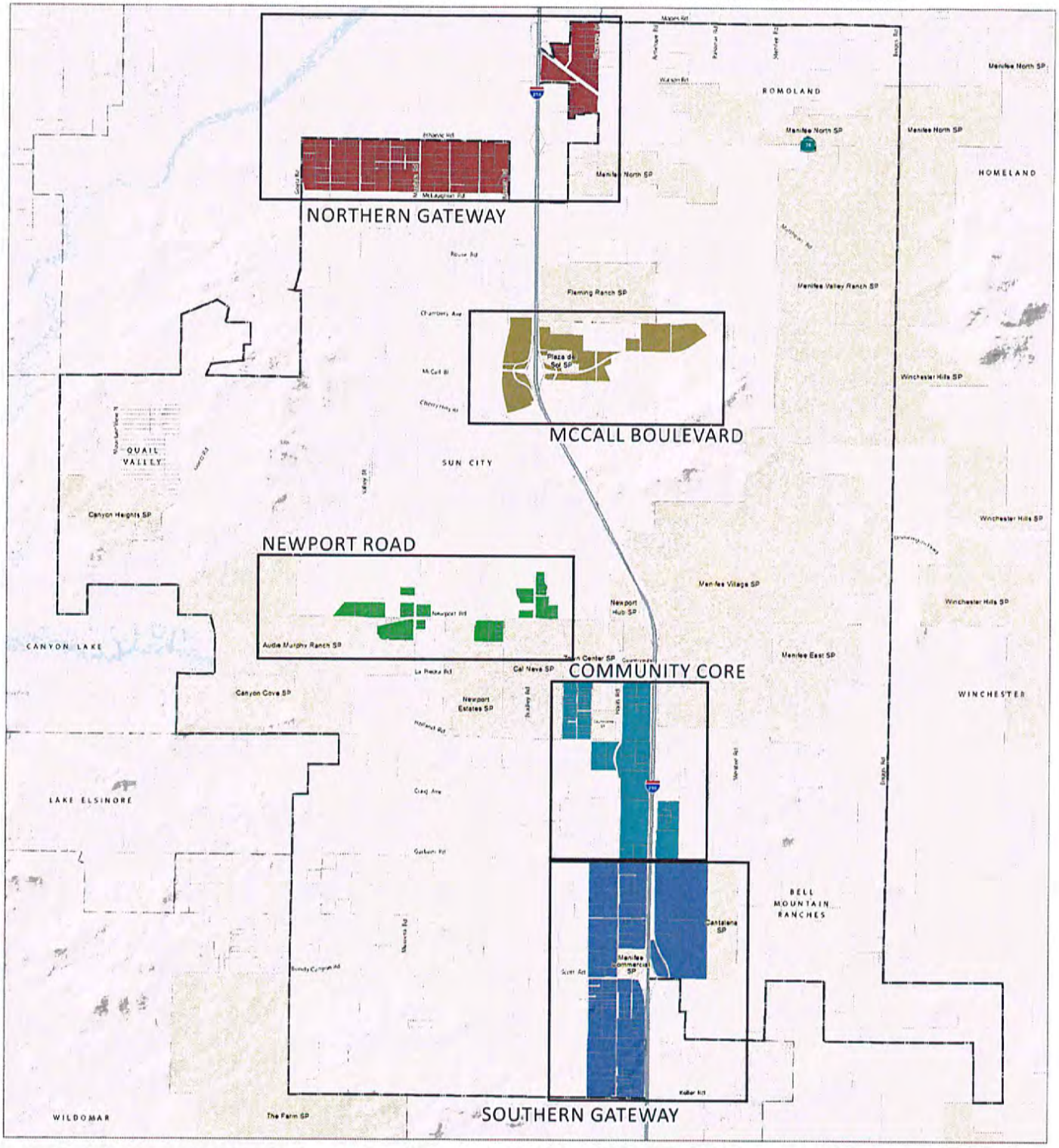
As neither the General Plan nor Zoning Code contain a definition for assisted living facilities, the City will utilize the definition provided on Pages 1 and 2 of this staff report,

with the Planning Commission's concurrence.

ATTACHMENTS

A. Exhibit LU-b2: Economic Development Corridors Subareas
B. United States Census Bureau Housing Unit Definitions
C. Assisted Living Information/Definitions

Exhibit LU-B2A: Economic Development Corridor Subareas



Preferred Mix of Land Uses in EDC

Residential	15%
Commercial Retail	15%
Commercial Office	10%
Business Park	60%

The intent of the Economic Development Corridor (EDC) designation is to identify areas where a mixture of residential, commercial, office, industrial, entertainment, educational, and/or recreational uses, or other uses is planned. Both horizontal and vertical mixed uses are permitted. In general, areas designated as EDC are envisioned to develop primarily as nonresidential uses with residential uses playing a supporting role.

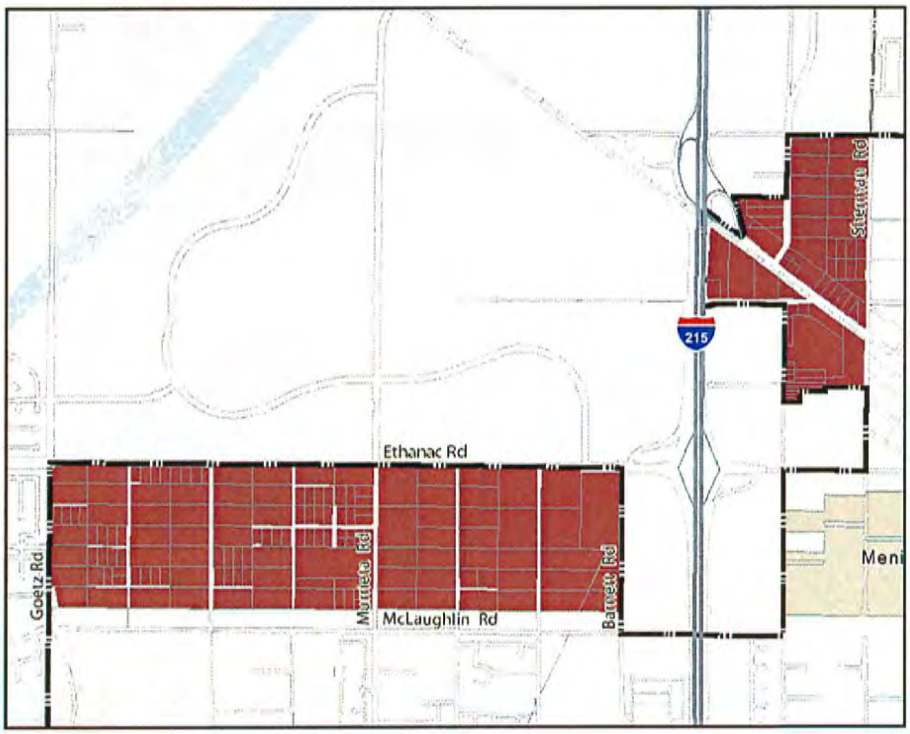
In addition to identifying a citywide preferred land use mix for all property designated as EDC (see left), the General Plan will also identify a preferred mix of uses desired for each of the City's five EDC subareas (see above). Each subarea has a unique identity and plays a specific role in the City of Menifee. The General Plan will use these subareas to focus policy direction in the Land Use and Community Design elements.

Exhibit LU-b2b: EDC Northern Gateway (594 acres)

Preferred Mix of Land Uses

Residential	5%
Industrial	95%

Envisioned as an employment center at Menifee's northern gateway that focuses on providing opportunity for business park development and more traditional industrial (less office) than envisioned for the Southern Gateway (Scott Road) EDC area. Limited residential development may be appropriate between new business park uses and existing single-family homes, or in places where residential projects have already been approved. Emphasis should be on job creation and creating connections to regional transportation corridors, including I-215 and the railroad.



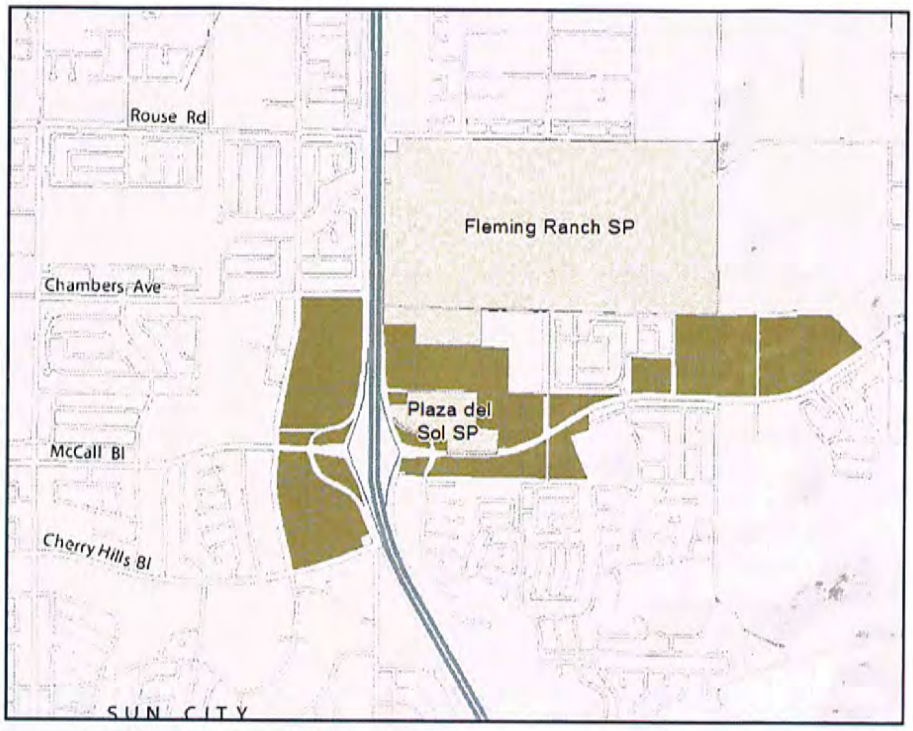
These images illustrate the types of uses envisioned for this EDC area and do not represent specific architecture or amenities, which will be determined as part of final project approval.

Exhibit LU-B2c: EDC McCall Boulevard (257 acres)

Preferred Mix of Land Uses

Residential	20%
Commercial Retail	60%
Commercial Office	20%

Create a mixed-use district along McCall Boulevard, east and west of I-215, that is anchored by the Menifee Valley Medical Center and the Sun City Shopping Center. Strengthen Sun City's existing commercial center by introducing new single-family attached and multifamily residential opportunities along the corridor and adjacent to the medical center. Provide additional retail and office opportunities to serve the medical center's employees, patients, and visitors. Draw upon proximity to I-215 and existing amenities including the Sun City library and community association.



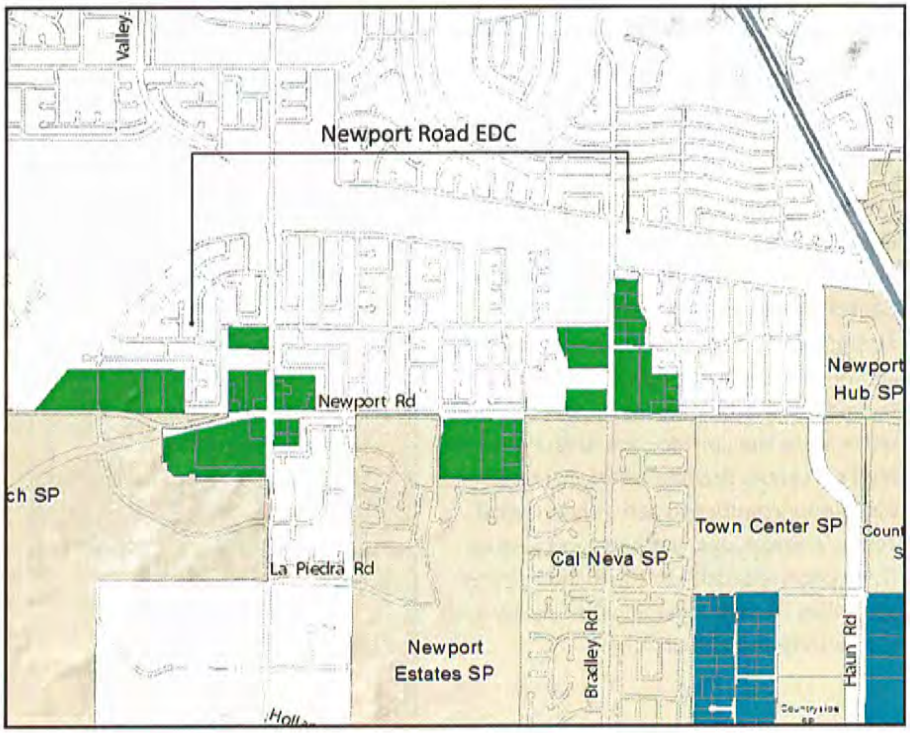
These images illustrate the types of uses envisioned for this EDC area and do not represent specific architecture or amenities, which will be determined as part of final project approval.

Exhibit LU-B2D: EDC Newport Road (156 acres)

Preferred Mix of Land Uses

Residential	30%
Commercial Retail	60%
Commercial Office	5%
Business Park	5%

Create a dynamic east-west corridor by adding neighborhood-oriented commercial uses to support residential development and grow the City's tax base. Focus on opportunities to add new single-family attached and detached residences. Projects should be oriented toward the street and complement existing single-family neighborhoods on both the north and south sides of Newport Boulevard. Some limited business park or offices uses may be appropriate if developed adjacent to existing similar uses.



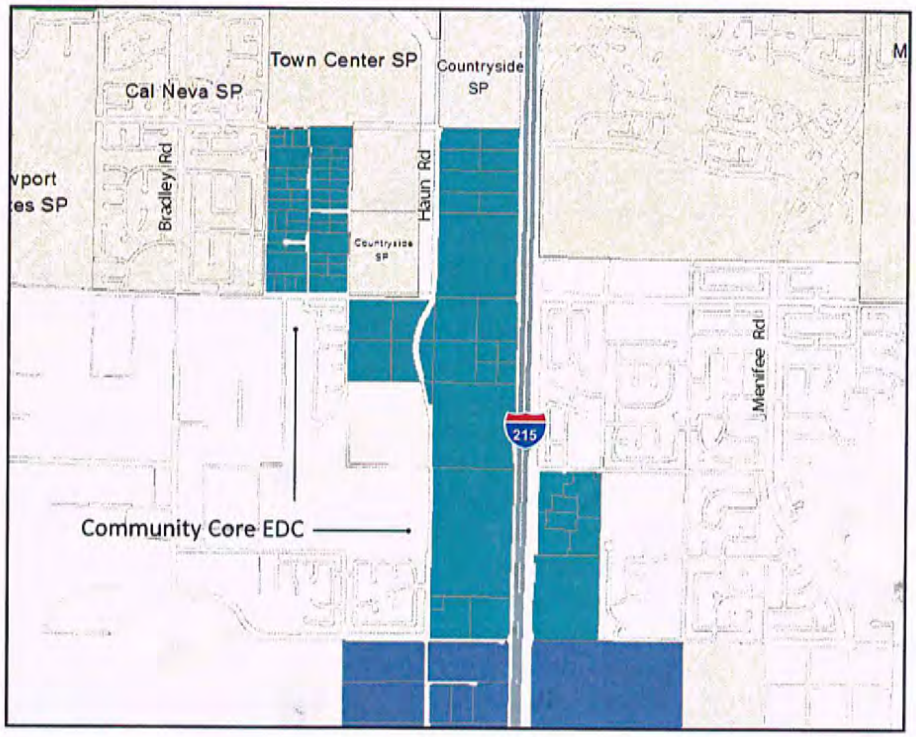
These images illustrate the types of uses envisioned for this EDC area and do not represent specific architecture or amenities, which will be determined as part of final project approval.

Exhibit LU-b2e: EDC Community Core (392 acres)

Preferred Mix of Land Uses

Residential	25%
Commercial Retail	10%
Commercial Office	35%
Business Park	30%

Development in the community core is anticipated to be a relatively balanced mix of residential, commercial retail, commercial office, and business park uses. Development that supports and complements existing specific plans and the City's future Town Center is especially encouraged. Special attention should be paid to Increased walkability and connections to San Jacinto College and future transit nodes. A range of single-family attached and detached housing is appropriate, so long as it supports an active city center and helps to create a sense of place. Avoid placement of residential units directly adjacent to the freeway.



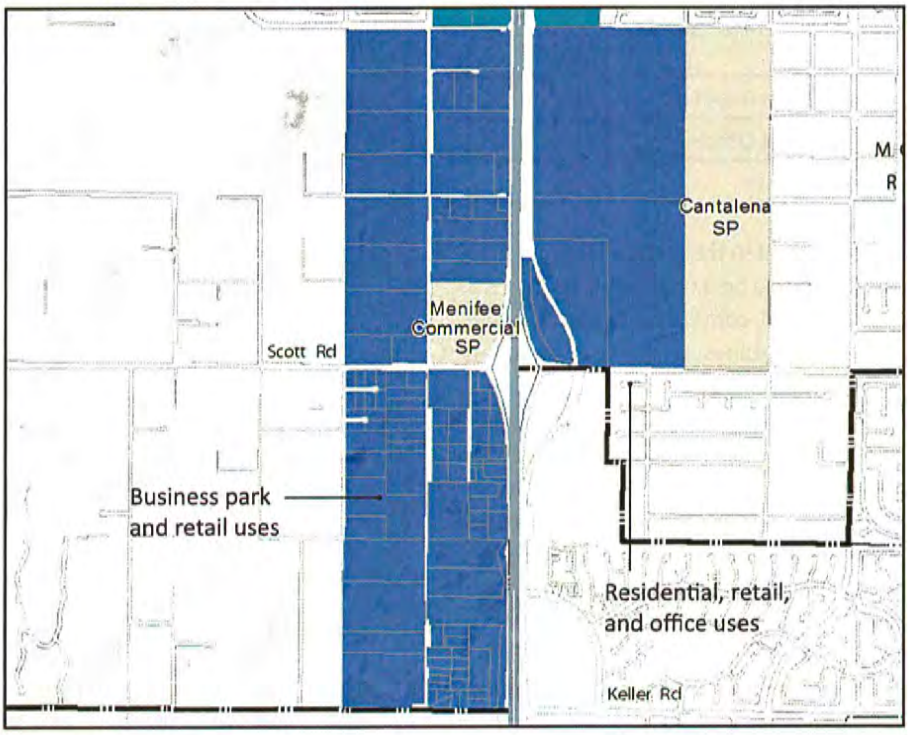
These images illustrate the types of uses envisioned for this EDC area and do not represent specific architecture or amenities, which will be determined as part of final project approval.

Exhibit LU-b2f: EDC: Southern Gateway (832 acres)

Preferred Mix of Land Uses

Residential	10%
Commercial Retail	10%
Commercial Office	10%
Business Park	70%

Envisioned as business park (predominantly light industrial and office uses) and limited support commercial uses. The EDC area east of the I-215 and north of Scott Road is envisioned to be a mix of commercial uses near the interchange and transitioning to office and residential extending north toward Mount San Jacinto College. On the west side of I-215, north of Scott Road, the EDC area provides an opportunity for commercial, residential and office uses with a high level of freeway accessibility as a transitional area to the Town Center located to the north. Avoid placement of residential units directly adjacent to the freeway.



These images illustrate the types of uses envisioned for this EDC area and do not represent specific architecture or amenities, which will be determined as part of final project approval.

2010 Census Summary File 1

Issued June 2011

2010 Census of Population and Housing

SF1/10-2 (RV)

Technical Documentation

United States Census Bureau

U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU

to be referred to as the noninstitutionalized population. Noninstitutional group quarters are facilities that house those who are primarily eligible, able, or likely to participate in the labor force while a resident.

As of Census 2000, the Census Bureau dropped the rule of classifying ten or more unrelated people living together as living in noninstitutional group quarters. This rule was used in the 1990 and 1980 Censuses. In the 1970 Census, the criteria was six or more unrelated people.

College/University student housing—In the 2010 Census, residence halls and dormitories, which house college and university students in a group living arrangement, may be owned, leased, or managed either by a college, university, or seminary or by a private entity or organization. In Census 2000, these types of facilities had to be owned by the college or university.

Military quarters—In 1960 data products, people in military barracks were shown only for men. Starting in 1970 and to the present, data are available for both men and women in military barracks. What were classified as "transient quarters for temporary residents (military or civilian)" in Census 2000 data products no longer include the civilian population, and the military residents are tabulated in "military quarters" in 2010 Census data products.

Other noninstitutional facilities—In the 2010 Census, "workers group living quarters and Job Corps centers" are comprised of the following Census 2000 group quarters types: "agriculture workers' dormitories," "other workers' dormitories," "Job Corps and vocational training facilities," and "dormitories for nurses and interns in hospitals (general and military)." As in Census 2000 and also in 1990, workers' dormitories were classified as group quarters regardless of the number of people sharing the dormitory. In 1980, ten or more unrelated people had to share the dorm for it to be classified as a group quarters.

In the 2010 Census, "emergency and transitional shelters (with sleep facilities) for people experiencing homelessness" includes the Census 2000 categories "emergency and transitional shelters" and "shelters for children who are runaways, neglected, or without conventional housing."

In the 2010 Census, "religious group quarters" are combined with "shelters for abused women (or shelters against domestic violence)" to make the category "religious group quarters and domestic violence shelters."

In the 2010 Census data products, the category "group homes intended for adults (non-correctional)" consists of the following group quarters types (as listed in Census 2000): "homes for the mentally ill," "homes for the mentally retarded," "homes for the physically handicapped," "residential care facilities providing protective oversight," and "other group homes." "Homes or halfway houses for drug/alcohol abuse" are categorized as "residential treatment centers for adults (non-correctional)."

The following group quarters types that were included in Census 2000 are no longer classified as group quarters in the 2010 Census: "military hotels/campgrounds," "transient locations," and "other household living situations '–dangerous encampments.'"

Like in Census 2000, rooming and boarding houses are classified as housing units in the 2010 Census. In the 1990 Census, these were considered group quarters.

Housing Units

A housing unit is a living quarters in which the occupant or occupants live separately from any other individuals in the building and have direct access to their living quarters from outside the building or through a common hall. Housing units are usually houses, apartments, mobile homes, groups of rooms, or single rooms that are occupied as separate living quarters. They are residences for single individuals, groups of individuals, or families who live together. A single individual or a group living in a housing unit is defined to be a household. Additional details about housing for the elderly population and group homes are provided in the section "Housing for the Older Population."

For vacant housing units, the criteria of separateness and direct access are applied to the intended occupants whenever possible. Nontraditional living quarters such as boats, RVs, and tents are considered to be housing units **only** if someone is living in them and they are either the occupant's usual residence or the occupant has no usual residence elsewhere. These nontraditional living arrangements are not considered to be housing units if they are vacant.

Housing units are classified as being either occupied or vacant.

Occupied Housing Unit—A housing unit is classified as occupied if it is the usual place of residence of the individual or group of individuals living in it on Census Day, or if the occupants are only temporarily absent, such as away on vacation, in the hospital for a short stay, or on a business trip, and will be returning.

The occupants may be an individual, a single family, two or more families living together, or any other group of related or unrelated individuals who share living arrangements.

Occupied rooms or suites of rooms in hotels, motels, and similar places are classified as housing units only when occupied by permanent residents; that is, occupied by individuals who consider the hotel their usual place of residence or who have no usual place of residence elsewhere. However, when rooms in hotels and motels are used to provide shelter for people experiencing homelessness, they are not housing units. Rooms used in this way are considered group quarters.

Vacant Housing Unit—A housing unit is classified as vacant if no one is living in it on Census Day, unless its occupant or occupants are only temporarily absent—such as away on vacation, in the hospital for a short stay, or on a business trip—and will be returning.

Housing units temporarily occupied at the time of enumeration entirely by individuals who have a usual residence elsewhere are classified as vacant. When housing units are vacant, the criteria of separateness and direct access are applied to the intended occupants whenever possible. If that information cannot be obtained, the criteria are applied to the previous occupants.

Boats, RVs, tents, caves, and similar shelter that no one is using as a usual residence are **not** considered living quarters and therefore are not enumerated at all.

Housing for the Older Population—Housing specifically for the older population has become more and more prevalent and is being identified by many different names. Living quarters in these facilities, unless they meet the definition of skilled nursing facilities, are housing units, with each resident's living quarters considered a separate housing unit if it meets the housing unit definition of direct access. These residential facilities may be referred to as senior apartments, active adult communities, congregate care, continuing care retirement communities, independent living, board and care, or assisted living. People may have to meet certain criteria to be able to live in these facilities, but once accepted as residents they have unrestricted access to and from their units to the outside.

Housing units and group quarters may coexist under the same entity or organization and in some situations, actually share the same structure. An assisted living facility complex may have a skilled nursing floor or wing that meets the definition of a nursing facility and is, therefore, a group quarters, while the rest of the living quarters in the facility are considered to be housing units. Congregate care facilities and continuing care retirement communities often consist of several different types of living quarters, with varying services and levels of care. Some of the living quarters in these facilities and communities are considered to be housing units and some are considered to be group quarters, depending on which definition they meet.

Comparability—The first Census of Housing in 1940 established the "dwelling unit" concept. Although the term became "housing unit" and the definition was modified slightly in succeeding censuses, the housing unit definition remained essentially comparable between 1940 and 1990. Since 1990, two changes were made to the housing unit definition.

The first change eliminated the concept of "eating separately." The elimination of the eating criterion is more in keeping with the United Nations' definition of a housing unit that stresses the entire concept of separateness rather than the specific "eating" element. Although the "eating separately" criterion previously was included in the definition of a housing unit, the data needed to distinguish whether the occupants ate separately from any other people in the building were not collected. (Questions that asked households about their eating arrangements have not been included in the census since 1970.) Therefore, the current definition better reflects the information that is used in the determination of a housing unit.

The second change for Census 2000 and the 2010 Census eliminated the "number of nonrelatives" criterion; that is, "9 or more people unrelated to the householder" which caused a conversion of housing units to group quarters. This change was prompted by the following considerations: 1) there were relatively few such conversions made as a result of this rule in 1990; 2) household relationship and housing data were lost by converting these units to group quarters; and 3) there was no empirical support for establishing a particular number of nonrelatives as a threshold for these conversions.

In 1960, 1970, and 1980, vacant rooms in hotels, motels, and other similar places where 75 percent or more of the accommodations were occupied by permanent residents were counted as part of the housing inventory. However, an evaluation of the data collection procedures prior to the 1990 Census indicated that the concept of permanency was a difficult and confusing procedure for enumerators to apply correctly. Consequently, in the 1990 Census, vacant rooms in hotels, motels, and similar places were not counted as housing units. In Census 2000 and the 2010 Census, we continued the procedure adopted in 1990.

HOUSING CHARACTERISTICS

Household Size

This question is based on the count of people in occupied housing units. All people occupying the housing unit are counted, including the householder, occupants related to the householder, and lodgers, roomers, boarders, and so forth.

Average Household Size of Occupied Unit—The average household size of an occupied unit is a measure obtained by dividing the number of people living in occupied housing units by the total number of occupied housing units. This measure is rounded to the nearest hundredth.

Average Household Size of Owner-Occupied Unit—The average household size of an owner-occupied unit is a measure obtained by dividing the number of people living in owner-occupied housing units by the total number of owner-occupied housing units. This measure is rounded to the nearest hundredth.

Average Household Size of Renter-Occupied Unit—The average household size of a renter-occupied unit is a measure obtained by dividing the number of people living in renter-occupied housing units by the total number of renter-occupied housing units. This measure is rounded to the nearest hundredth.

Tenure

Tenure was asked at all occupied housing units. All occupied housing units are classified as either owner-occupied or renter-occupied.

Owner-Occupied—A housing unit is owner-occupied if the owner or co-owner lives in the unit even if it is mortgaged or not fully paid for. The owner or co-owner must live in the unit and usually is Person 1 on the questionnaire. The unit is "Owned by you or someone in this household with a mortgage or loan" if it is being purchased with a mortgage or some other debt arrangement, such as a deed of trust, trust deed, contract to purchase, land contract, or purchase agreement. The unit is also considered owned with a mortgage if it is built on leased land and there is a mortgage on the unit.

A housing unit is "Owned by you or someone in this household free and clear (without a mortgage or loan)" if there is no mortgage or other similar debt on the house, apartment, or mobile home, including

Department of
SOCIAL SERVICES

Adult And Senior Care Program - Centralized Application Unit

The Centralized Applications Unit (CAU) was established to effectively gain consistency and standardization in the Adult and Senior Care facility applications in a timely and efficient manner. Expectations for completing the entire application process are 90 to 120 days. The CAU will process applications for Adult Day Programs (ADP), Adult Residential Facilities (ARF), Adult Residential Facilities for Persons with Special Health Needs (ARFPSHN), Residential Care Facilities for the Elderly (RCFE), Residential Care Facilities for the Elderly-Continuing Care Retirement Community (RCFE-CCRC), Residential Care Facilities for the Chronically Ill (RCFCI), and Social Rehabilitation Facilities (SRF).

RCFE Licensees - Update your e-mail address here.

Definition of facility types:

Adult Day Program - Any community based facility or program that provides care to persons 18 years of age or older in need of personal services, supervision, or assistance essential for sustaining the activities of daily living or for the protection of these individuals on less than a 24-hour basis.

Adult Residential Care Facility - A residential home for adults ages 18 through 59 with mental health care needs or who have physical or developmental disabilities and require or prefer assistance with care and supervision.

Adult Residential Facility for Persons with Special Health Needs - A residential home that provides 24-hour services for up to five adults with developmental disabilities who have special health care and intensive support needs and who would otherwise need to reside in an institution.

Residential Care Facility for the Elderly - A residential home for seniors aged 60 and over who require or prefer assistance with care and supervision. Residential Care Facilities for the Elderly may also be known as Assisted Living facilities, retirement homes and board and care homes.

Residential Care Facilities for the Elderly-Continuing Care Retirement Community - A Residential Care for the Elderly facility that offers a long-term continuing care contract that provides for housing, residential services, and nursing care, usually in one location, and usually for a resident's lifetime.

Residential Care Facilities for the Chronically Ill - A facility that provides care and supervision to adults who have a terminal illness, Acquired Immune Deficiency Syndrome (AIDS) or the Human Immunodeficiency Virus.

Social Rehabilitation Facilities - A facility that provides 24-hour-a-day non-medical care and supervision in a group setting to adults recovering from mental illnesses who temporarily need assistance, guidance, or counseling.

Steps to obtaining a license involve:

1. For a new licensee, completion of a three-part component process, consisting of:
   - Orientation for a specific facility category and obtaining a certificate for completion
   - Component II is conducted by the reviewing analyst one-on-one with the applicant once the application is submitted and reviewed
   - Component III is category specific training and discussion in areas not often understood by new licensees intended to promote successful facility operation. Component III is conducted prior to licensure.
2. Submission of an application, with appropriate fee. This fee is not refundable. Applicant **must** retain a copy for their own records.

- Initial Application
- Change of Facility Location Application
- Adding or Changing a Management Company Application
- Change within a Corporate Structure

3. Applicant and other identified persons named in the application are required to obtain a criminal record clearance.
4. Applicant must identify the local fire authority so that a fire clearance can be ordered by CAU.
5. For certain facility types, determining if there are overconcentration issues.
6. A review of the application documents.
7. Financial verification to ensure sufficient start-up funds.
8. A review of the applicant's credit history.
9. A review of the applicant's prior compliance history, if any.
10. For larger facilities, ensuring that a conditional use permit is obtained.
11. A pre-licensing inspection is conducted.

Fee Schedule (effective January 1, 2015)

FREQUENTLY ASKED QUESTIONS

THINGS TO REMEMBER!

- It is the responsibility of the licensee and administrator to possess adequate knowledge of the governing statutes and regulations and the skill to effectively operate the type of facility they are applying for.
- Make sure to retain a copy of the application documents for your records.
- Make sure the application is complete with all required documents including the orientation certificate, administrator certificate and appropriate application fee.
- Make sure you are ready for licensure prior to submitting the application (i.e., construction is completed, facility start-up funds have been secured, conditional use permit obtained).
- Be sure to verify the local fire authority information such as the correct mailing address, fax and phone contact.
- Be sure to provide a good daytime contact number and email.
- Do not place application documents in sheet protectors.
- Submit applications directly to the Centralized Application Unit.

Centralized Application Unit
Community Care Licensing
Adult and Senior Care Program
744 P Street, MS 8-3-91
Sacramento, CA 95814
Phone: (916) 657-2600
Fax: (916) 651-7916

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Overview of Assisted Living/Residential Care Facilities for the Elderly (RCFEs)

What is Residential Care for the Elderly?

Residential Care Facilities for the Elderly (RCFEs) — sometimes called "Assisted Living" (e.g., 16+ beds) or "Board and Care" (e.g., 4 to 6 beds) — are non–medical facilities that provide room, meals, housekeeping, supervision, storage and distribution of medication, and personal care assistance with basic activities like hygiene, dressing, eating, bathing and transferring. Residential Care Facilities for the Elderly (RCFEs) serve persons 60 years of age and older.

This level of care and supervision is for people who are unable to live by themselves but who do not need 24 hour nursing care. They are considered non-medical facilities and are not required to have nurses, certified nursing assistants or doctors on staff.

How Does a Residential Care Facility for the Elderly Differ From an Assisted Living Facility?

From a licensing standpoint, there is no difference. In California, facilities describing themselves as assisted living and offering personal care and supervision are licensed as Residential Care Facilities for the Elderly.
Residential Care Facilities for the Elderly are dominated by smaller (i.e., 6 to 15 beds), locally owned facilities with shared rooms. Larger facilities usually offer private apartments and tend to be corporately owned. Many larger facilities have different fee options depending on the type of care needed.

Are Residential Care Facilities for the Elderly Regulated?

Yes. Residential Care Facilities for the Elderly or Assisted Living Facilities must meet care and safety standards set by the State and are licensed and inspected by the Department of Social Services, Community Care Licensing (CCL).

Senior housing complexes, retirement villages or retirement hotels that provide only housing, housekeeping and meals are not required to be licensed as Residential Care Facilities for the Elderly.

Are Residential Care Facilities for the Elderly Required to Have Liability Insurance?

Beginning on July 1, 2015, all RCFEs are required to maintain liability insurance in the amount of at least $1,000,000 per occurrence and $3,000,000 annually to cover injuries to residents or guests caused by the negligence of the facility owner or employees. (California Health and Safety Code, Section 1569.605.)

Can a Residential Care Facility for the Elderly Care for Persons with Dementia?

Maybe. Some facilities offer special services to persons with dementia if they meet certain licensing requirements. Make sure that the facility has experience in providing dementia care and meets all of the state licensing standards to provide dementia care.

Will a Residential Care Facility for the Elderly Accept or Retain Someone Who Needs Medical Care?

It will depend on the type and severity of the medical condition(s) and whether the facility meets the state licensing standards for "restricted" health conditions. Some medical conditions are not allowed in a Residential Care Facility for the Elderly (e.g., tube feeding, or treatment of open bedsores). The facility must inform residents in writing at or before the time of admission of any resident retention limitations set by the state or facility such as whether the facility can serve persons who need help in leaving the building in case of emergency (i.e., non-ambulatory) or with certain medical conditions (e.g., hospice waiver). (California Health and Safety Code, Section 1569.269.)

What If My Medical Needs Increase, Can I Stay?

Maybe. Since a residential care facility is not licensed as a "medical" facility, persons requiring tube feeding, treatment of open bedsores or 24-hour nursing care are not permitted to reside in RCFEs. However, some RCFEs have permission to care for persons on hospice.

What Are The Qualifications For Staff?

Minimal Training: *Administrators* must take a 40–hour certification program, pass a simple state exam, and obtain 40 hours of continuing education every two years. *Staff* must receive at least 10 hours of training at the facility within 4 weeks of employment, and at least 4 hours annually thereafter. For facilities advertising dementia care, staff must have 6 hours of orientation specific to dementia care within the first 4 weeks, and at least 8 hours annually of in–service training.

Beginning January 1, 2016, training requirements for Administrators and Staff will increase significantly. The certification program for Administrators will increase to 80 hours (from 40), and the state-proctored exam will increase to 100 questions (from 40). Staff training requirements will be increased to 40 hours of training in the first year (currently 10 hours in the first 4 weeks), and 20 hours of ongoing training each following year. Dementia care training requirements will be increased, and required for all RCFE Staff (and not just for those RCFEs that advertise dementia care). Training requirements for Staff who assist residents with the self-administration of medication also will be increased. (California Health and Safety Code, Sections 1569.23, 1569.616, 1569.62, 1569.69.)

Minimal Qualifications: *Administrators* must be 21 years of age and possess a high school diploma or equivalent for facilities of 15 beds or less — these comprise over 80% of all RCFEs. For facilities of 16 to 49 beds, the administrator needs 15 college credits; and for facilities of 50+ beds, 2 years of college or 3 years experience, or equivalent education and experience. *Staff* must only be 18 years of age and pass the criminal background check. Note: Because RCFEs are non–medical facilities, there is no requirement for RNs, LVNs or CNAs or any medically–trained personnel. Check on the qualifications of the administrator and key staff.

Are There Staff Ratios?

There is not any specific staff to resident ratio for assisted living/residential care facilities. California law requires that facility personnel shall at all times be sufficient in numbers, qualifications, and competency to provide the services necessary to meet resident needs, and to ensure their health, safety, comfort, and supervision. (California Health and Safety Code, Sections 1569.269(a)(6), 1569.618(c); CCR, Title 22, Section 87411.)

There must be at least one administrator or designated substitute with qualifications adequate to be responsible for the management and administration of the facility be on premises 24 hours per day. (California Health and Safety Code, Section 1569.618(b).) The facility must also have at least one staff member trained in CPR and first aid on duty and on the premises at all times. (California Health and Safety Code, Section1569.618(c).)

In regards to night supervision, for facilities with 15 or fewer residents, there must be one "qualified" person on call and on the premises; in facilities with 16–100 residents, there must be one person awake and on the premises, and another on call and capable of responding within 10 minutes. (CCR, Title 22, Section 87415.)

What Does Residential Care for the Elderly or Assisted Living Cost?

The cost depends on a variety of factors such as the type of accommodations (e.g., apartment, private room, shared room), the range of services needed, and the geographic area. The median monthly cost in California is $3,750, with costs ranging from a low of around $1,000 a month for a resident on Supplemental Security Income (SSI) to a high of $9,000 a month. Specialized services like dementia or hospice care are more costly.

Is There a Limit on How Much Facilities Can Raise Private Pay Rates?

No. Since residential care is a private business, providers will charge what the market will bear. However, facilities must issue 60–day notices to increase rates, but can raise charges for level of care changes immediately and provide notice within 2 working days. (See CANHR's fact sheet on **Admission Agreements.**)

Can Facilities Charge a Pre–Admission Fee?

Yes. Some providers charge nothing or a minimum amount to cover costs of conducting an assessment, obtaining medical records and setting up files. Others charge fees of thousands of dollars. Demand a written description of what the fees cover. Negotiate the amount if too high, or look for another facility. Facilities are prohibited from charging security deposits. (See fact sheet on **Admission Agreements.**)

Who Pays the Bill for Residential Care for the Elderly or Assisted Living?

Most people must pay privately for care. Long-term care insurance only covers a very small percentage of people. There is very limited public funding through Supplemental Security Income (SSI) for RCFE residents who qualify for this program (see CANHR's fact sheet on **SSI in a RCFE**). Unfortunately, the SSI rate is so low that fewer and fewer facilities will accept persons on SSI.

Aid and Attendance is a benefit paid by Veterans Affairs (VA) to veterans, veteran spouses or surviving spouses that may help pay for residential care. To learn more about Aid and Attendance benefits, see CANHR's Fact sheet on **Aid and Attendance.**

Will Medicare or Medi–Cal Pay?

No. Because these are not medical facilities, neither Medicare nor Medi–Cal pays directly for residential care/assisted living. There is a special program in 14 counties (Alameda, Contra Costa, Fresno, Kern, Los Angeles, Orange, Riverside, Sacramento, San Bernardino, San Diego, San Joaquin, San Mateo, Santa Clara and Sonoma) — the Assisted Living Waiver Program— in which Medi–Cal pays for eligible residents assessed to need nursing home level care to live in an RCFE or public housing. (For more information, see CANHR's fact sheet on **Assisted Living Waiver (ALW)**).

How do I Find Out About the Track Record of a Facility?

Upon request, a facility must show you the most recent copy of its latest inspection report; and a copy of any substantiated complaints within the past year. (Note: The frequency of RCFE inspections will be increasing to once every 3 years by January 2017, once every 2 years by 2018, and annually by 2019.) The state regulatory agency, the Department of Social Services, Community Care Licensing Division (CCL), posts only recent compliance information on its **website**. The only way to view the complete facility record to is go to one of the district offices of CCL and request to see the public record of the facility.

How Do I Find Out More About Residential Care for the Elderly?

You can contact the local District Office of Community Care Licensing to receive a listing of facilities. Some Ombudsman Programs also have listings, offer pre-placement services, and provide access to licensing reports.

For more information, see CANHR's RCFE **fact sheets** and **Residential Care Guide** — a listing of all Residential Care Facilities for the Elderly in California. The Guide also provides helpful information on services, staffing and costs for a growing number of facilities that have responded to CANHR's RCFE Questionnaire.

Page Last Modified: December 9, 2016

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Chapter 3. Assisted Living Defined

Environmental Scan of Instruments to Inform Consumer Choice in Assisted Living

Introduction

The term "assisted living" denotes a type of residential long-term care setting known by nearly 30 different names (Hawes, Mor, Wildfire, et al., 1995; Hawes, Rose, and Philips, 1999; InterRAI, 2005). Assisted living settings offer various levels and combinations of services, care, and privacy. This wide array of assisted living terminology and structure is accompanied by similar variations in definitions. In a report to the United States Senate Special Committee on Aging, the Assisted Living Workgroup (2003) noted that:

- Assisted living provides or coordinates oversight and services to meet residents' individualized scheduled needs, based on the residents' assessments and service plans and their unscheduled needs as they arise (p.12).
- The Assisted Living Federation of America (ALFA) defines assisted living as: "...a special combination of housing, personalized supportive services, and health care designed to meet the needs—both scheduled and unscheduled—of those who need help with activities of daily living" (go to http://www.alfa.org/i4a/pages/index.cfm?pageid=3285).
- A report for the U.S. Department of Health and Human Services describes it as: "...a basic level of services provided in an assisted living environment to include 24-hour staff oversight, housekeeping, provision of at least two meals a day, and personal assistance with at least two of the following: bathing, dressing, or medications" (Hawes, Rose, and Phillips, 1999; available at http://www.aspe.hhs.gov/daltcp/reports/facres.htm).

Experts consider that the key tenets of assisted living include 24-hour service and oversight, services that meet scheduled and unscheduled needs, and care/services that promote independence, with an emphasis on dignity, autonomy, choice, privacy, and home-like environment (Hawes, Rose, and Phillips, 1999).

The popularity of assisted living increased considerably in the early 1990s, and by 1996, it accounted for over half of all senior housing construction in the United States (Applebaum, Straker, and Geron, 2000). The first licensure requirements for assisted

living were developed in 1989 in Oregon (Hawes, Rose, and Phillips, 1999). While the lack of a standard definition of assisted living makes it difficult to measure the size of the market precisely, the most widely accepted definition provides a count of approximately 36,000 assisted living residences in the United States serving more than 900,000 people (GAO, 2004) and fueling a multi-billion dollar industry. *The MetLife Market Survey of Assisted Living Costs* (2003) cites a 48 percent increase in the number of assisted living facilities in the United States between 1998 and 2002, showing continued popularity of this type of housing. However, in recent years the top assisted living chains have faced an oversupply of beds and lower occupancy rates (Vickery, 2004). In addition, the growth rate in the number of licensed facilities was flat between 2002 and 2004 (Mollica and Johnson-Lamarche, 2005). Even so, a study done in 1998 documented an undersupply of facilities in rural areas, where typically fewer services are offered (Hawes, Phillips, Holan, et al., 2005).

For the most part, expenses associated with assisted living services are not covered by insurance and must be paid for privately by individuals and their families (GAO, 1999). While monthly charges vary by facility and location, the *Met Life Market Survey* (2003) estimates an average monthly cost for 2004 of $2,524, representing a $145 increase over the 2003 estimate. Extra fees are often assessed for services such as medication management, dementia care, laundry, and transportation (Hawes, Phillips, and Rose, 2000b).

As of 2004, a total of 41 States reimbursed for assisted living services through the Medicaid Home and Community Based Waiver (Mollica and Johnson-Lamarche, 2005). The purpose of the Medicaid waiver is to help those who need long-term care services to remain in a community setting, such as an assisted living facility. This program pays for services that are typically covered in a nursing home, such as nutritionist services, emergency care, and transportation. The number of beneficiaries receiving Medicaid funds for assisted living grew more slowly from 2002 to 2004, from 102,000 to approximately 121,000 (Mollica and Johnson-Lamarche, 2005). Although this Medicaid waiver option exists, assisted living housing remains largely unaffordable for elderly individuals of moderate or low income (Hawes, Rose, and Phillips, 1999).

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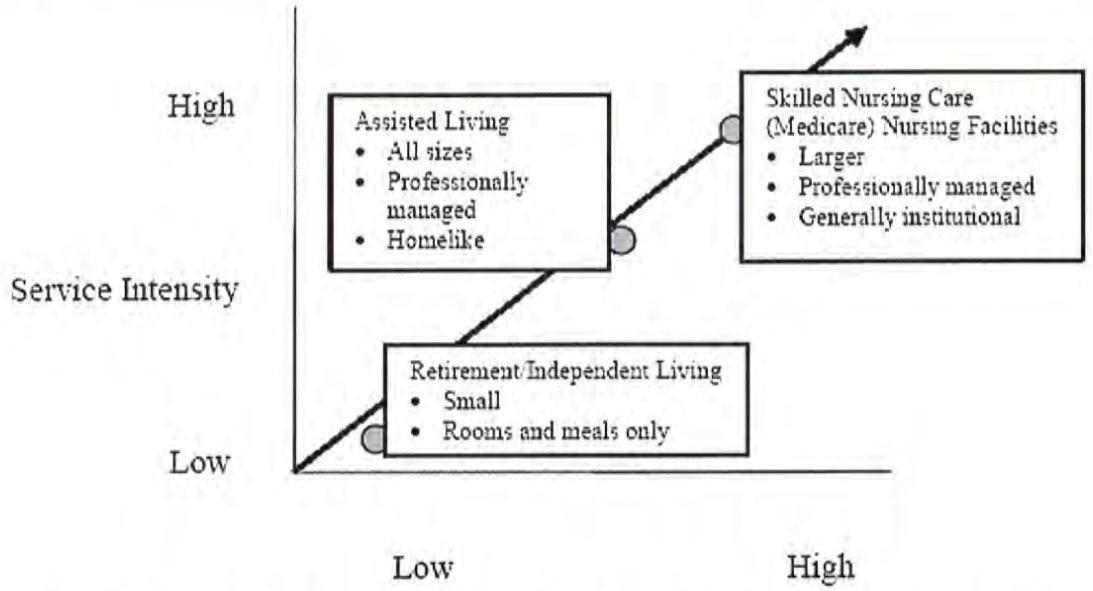
Differences Between Assisted Living and Nursing Home Care

The National Center for Assisted Living (NCAL) depicts assisted living (go to Figure) on a continuum of long-term care as a step between total independent living and skilled nursing home care (Kraditor, Dollard, Hodlewsky, et al., 2001). In contrast to a nursing home, which is based largely on a medical model, assisted living is considered a social model that combines personal services with health care in a home-like setting (Marsden, 2001; Thayer, 2003).

Figure. Resident Level of Need



Source: Kraditor K, Dollard KJ, Hodlesky R, et al. *Facts and Trends: The Assisted living Sourcebook.* Washington, DC: National Center for Assisted Living; 2001. Used with permission.

In recent years, there has been a trend toward higher acuity levels in assisted living facilities. Market changes that have affected nursing homes, such as changes in entitlement systems and managed care policies, have forced higher levels of acuity, which in turn filters down to assisted living facilities (Moore, 2001). Despite the differences between assisted living and nursing home care—including regulatory environment, staffing, and underlying philosophy (Franks, 2004)—examining instruments and tools

used to measure nursing home resident perspectives of care and satisfaction (which are included in this report) can help inform the development of tools for consumer choice in assisted living.

Resident Characteristics

The typical assisted living resident is a white female, 80+ years old, who is mobile but requires assistance with some activities of daily living (ADLs) (ALFA, 2005; NCAL, 2005). Generally, residents of assisted living facilities are less impaired than those in nursing home facilities, who typically require more assistance with ADLs and need daily nursing care or monitoring (Applebaum, Straker, and Geron, 2000; Hawes, Phillips, and Rose, 2000b).

The majority of assisted living residents move directly from their homes or from other settings of less formal care, such as retirement apartments or other assisted living settings, while relatively few are admitted directly after a hospital stay (Reinardy and Kane, 2003). The reported average length of stay for assisted living is 1.5 to 3 years (Golant, 2004). Residents typically move from assisted living to a higher level of care such as a nursing home (Phillips, Munoz, Sherman, et al., 2003), although some assisted living facilities accommodate a range of residents' needs, including services typically delivered in a nursing home.

Assisted living residents have better perceived health and lower prevalence of chronic diseases than do nursing home residents; however, most residents need help with medications (Wilson, 2003). At the same time, they have some significant health concerns. Moderate to severe cognitive impairment, usually associated with Alzheimer's disease, is the most common serious chronic condition and affects between one-quarter and one-third of the resident population (Hawes, Phillips, and Rose, 2000b; Sloane, Zimmerman, Hanson, et al., 2003; Spillman, Liu, and McGilliard, 2002). However, some research suggests that the proportion of assisted living residents with cognitive impairment may be higher, since in one study a significant percentage of assisted living residents with cognitive impairment were underdiagnosed (Magsi and Malloy, 2005; Rosenblatt, Samus, Steele, et al., 2004). In a four-State study of more than 2,000 residents in nearly 200 assisted living facilities, 13 percent were classified as depressed (Watson, Garrett, Sloane, et al., 2003). Assisted living residents use hospital care frequently; 32 percent are admitted for inpatient hospitalization, and 24 percent use emergency services annually (Hawes, Phillips, and Rose, 2000a.

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Philosophical Framework

Despite the significant variation in terminology and definitions, assisted living facilities are thought to adhere to a universal philosophy that emphasizes choice, dignity, autonomy, independence, privacy, and other "normal life" characteristics (Reinardy and Kane, 2003). In theory, it is this shared notion of a consumer-focused philosophy that sets assisted living apart from other residential long-term care settings (Utz, 2003). In the late 1990s, the Assisted Living Quality Coalition maintained that "assisted living, more than any other type of long-term care service, must be driven by a philosophy that emphasizes personal dignity, autonomy, independence, and privacy in the least restrictive environment" (Hawes, Rose and Phillips, 1999).[2]

In reality, despite the philosophy of assisted living and the adherence of facilities to the words, there is tremendous diversity among places known as assisted living. A national study completed in the late 1990s found that nearly four out of five ALFs (57%) offered relatively low services and low privacy environments (Hawes, Phillips, Rose, et al., 2003). Another study conducted in four States also found significant variability among facilities (Zimmerman, Gruber-Baldini, Sloane, et al., 2003). Indeed, this variability among facilities in services and accommodations grew as some States reclassified all residential care facilities as "assisted living" (Mollica, 2002). This variability among places known as assisted living makes improved consumer education and information systems even more critical to assist potential residents and their families in selecting a facility that meets their needs and preferences.

In theory, the basic tenet of creating a home-like environment with a focus on autonomy and individuality (Hawes, Rose, and Phillips, 1999) is designed to provide care based on a social model rather than a medical model. Even the vocabulary used in assisted living reinforces the distinction between a home-like setting and an institutional setting. The marketing terms used by the assisted living industry aim to evoke choice and independence. For example, assisted living terms for admission and discharge are move-in/move-out; their location within the facility may not be a bed or a room but could be an apartment or unit (Carder, 2002). Again, however, the majority of residents live in rooms, not apartments (Hawes, Phillips, and Rose, 2000b; Hawes, Phillips, Rose, et al., 2003).

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Aging in Place

An additional concept that is frequently associated with the philosophy of assisted living is that of aging in place. Bernard, Zimmerman, and Eckert (2001) define aging in place as "the phenomenon of growing older within a specific environmental setting" (p. 224). A primary concern for many seniors is whether they must move from one facility to another as they age. It is

often difficult for residents to understand what services are provided to match their current needs, as well as how these services will change to adapt to their needs as they age. According to the GAO report (1999), consumers may be provided with marketing materials that promote an aging-in-place philosophy, but they often are not given a true picture of the facility's ability (e.g., organizational policies and procedures) to accommodate to residents' changing needs. Frequently cited problems from the GAO report (1999) include issues related to admissions and discharge: less than one-third of assisted living residents were informed about retention and discharge policies (Hawes, Phillips, and Rose, 2000a. Some States, such as Oregon, regulate what has to be disclosed to the residents of assisted living, such as admission, discharge, and transfer criteria and procedures (NCAL, 2004). Only 20 States require facilities to include information about their criteria for admission, discharge, and transfer (Mollica and Johnson-Lamarche, 2005). For a detailed listing of information that states are required to provide in residency agreements, see *State Residential Care and Assisted Living Policy: 2004* (Mollica and Johnson-Lamarche, 2005).

This considerable variation in residents' ability to age in place in an assisted living facility is the result of several factors (Bernard, Zimmerman, and Eckert (2001)). At the community level, the influencing factors include State regulations (Chapin and Dobbs-Kepper, 2001). At the facility level, factors such as the size and accessibility of the facility influence aging in place, since not all facilities can accommodate wheelchairs. Also, the presence of a registered nurse on staff reduces the likelihood of moving to a nursing home (Hawes, Phillips, and Rose, 2000b; Phillips, Munoz, Sherman, et al., 2003). At the individual level, health and socioeconomic status are factors that can determine whether an individual can age in place (Zimmerman, Sloan, Eckert, et al., 2001). In general, once a resident requires assistance with transfers (e.g., from bed to chair) or develops significant cognitive impairment or behavioral problems, the ability to reside in most assisted living facilities is greatly reduced. Under these conditions, most facility policies specify discharge (Hawes, Phillips, and Rose, 2000b; Hawes, Phillips, Rose, et al., 2003).

Having a negotiated risk agreement or liability waiver in place may help a resident remain in an assisted living facility. These contracts allow the resident to remain in the facility by balancing the residents' values of autonomy and control with the provider's protection from risk (Kapp and Wilson, 1995). Although they are included in some States' rules, these liability waivers are controversial from both the legal and the quality of care perspectives (Carlson, 2003; Kissam, Gifford, Mor, and Patry et al., 2003). Fifteen States and the District of Columbia have regulations that allow for the negotiation of such contracts (Mollica and Johnson-Lamarche, 2005). Although States use different terms for the agreement, there are common features in the requirements, one of which is for the contract to be written and signed by the resident (or, in some States, a surrogate or sponsor) and the appropriate facility administrator (Mollica and Johnson-Lamarche, 2005). According to Mollica and Johnson-Lamarche, (2005, "State regulations typically require that the agreement describe the possible consequences of the resident's actions, the specific concerns of the facility, and options that will both minimize the risk and respect resident's choices. They also generally require documentation of the negotiation process, and agreement or lack thereof, and the decision reached by the resident after consideration of the facility's concerns" (p.1-17). Among the States that do allow for these agreements, State licensing officials reported that the negotiated risk process is not widely used (Mollica and Johnson-Lamarche, 2005).

These philosophical goals held by many assisted living pioneers are not necessarily embraced by all facilities that self-define themselves as assisted living facilities, nor are all these goals necessarily being met by all facilities in practice. Therefore, it is important to be able to go beyond the rhetoric and to measure how well facilities meet each of these goals, which would help consumers better understand and evaluate the quality of services that the facilities provide.

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Facility Characteristics

Most assisted living residences are freestanding facilities, but they can also exist within continuing care retirement communities, independent living complexes, or nursing homes (Utz, 2003). Living spaces can be individual rooms, apartments, or shared quarters, with some States specifying specific square footage and number of bathrooms per a certain number of residents (NCAL, 2004). Hawes, Rose, and Phillips (1999) note that the average assisted living facility has 53 beds with 84 percent occupancy. Facilities have been grouped by the level of privacy offered (high and low/minimal), with high privacy meaning that 80 to 100 percent of the units are private, which represents approximately 73 percent of all resident units (Hawes, Rose, and Phillips, 1999; Hawes, Phillips, and Rose, 2000a).[3]

Large for-profit facilities make up only a segment of the market; most assisted living facilities are smaller, independent for-profit and not-for-profit organizations (Newcomer and Maynard, 2002). Some facilities are specialized, such as those that serve Alzheimer's residents.

Assisted living facilities increasingly are viewed as an optimal setting for Alzheimer's care. According to ALFA, nearly 24 percent of facilities have designated Alzheimer's units. There are two models for Alzheimer's units, a residential social model of care and a medical model. The residential social model is appropriate for those residents in early stage dementia, who are in basically good physical health and need low to moderate assistance with ADLs (Moore, 2001). For those Alzheimer's patients who have more advanced disease and complex health problems, a medical model is more appropriate. The aim of these specialized units is to adapt to the residents' changing mental and physical needs, maximize orientation and awareness, including opportunities for socialization, and importantly, ensure a safe and secure environment (Moore, 2001). It is important to note, however, that half of the facilities' stated discharge criteria stipulate moderate to severe cognitive impairment, and the vast majority would not accept or retain residents with any behavioral symptoms, such as wandering (Hawes, Rose, and Phillips, 1999 and Hawes, Rose, Phillips, et al., 2003).

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Services Provided in Assisted Living

Assisted living facilities vary in the level of services they provide. States generally specify a minimum level of services that must be provided, but assisted living facilities determine the range of services offered, from those that are extremely limited (offer one meal a day) to comprehensive services that can accommodate a high acuity level (skilled nursing care). Hawes, Phillips, Rose, et al., (2003) differentiated assisted living facilities by the number and type of services provided. In that definition, a high service facility provided 24-hour oversight, housekeeping, at least two meals a day, and personal assistance with at least two of the following: medications, bathing, or dressing. In addition, the facility must have at least one full-time registered nurse (RN) on staff and nursing services provided by staff who are facility employees. However, most (65%) of the places known as assisted living did not meet the criteria of a full-time RN on staff and provision of nursing care or monitoring as needed with staff (Hawes, Phillips, Rose, et al., 2003).

According to the Assisted Living Working Group's (ALWG, 2003) definition of assisted living, the range of services to be offered or coordinated, according to State law requirements and regulation, includes the following:

- A staff that is on duty 24-hours-a-day to provide oversight and meet scheduled and unscheduled needs.
- Provision and oversight of personal and supportive services (assistance with activities of daily living and instrumental activities of daily living).
- Health related services, such as medication management.
- Social services.
- Recreation/activities.
- Meals.
- Housekeeping and laundry.
- Transportation.

As a core principle, the ALWG notes that facilities should "provide resident-centered services with an emphasis on the particular needs of the individual and his/her choice of lifestyle incorporating creativity, variety, and innovation" (ALWG, 2003, p.20).

Staffing

A fundamental component of assisted living care is 24-hour-awake staff to provide oversight and meet scheduled and unscheduled needs. For example, according to a GAO report (2004), consumers need to know if a facility provides full 24-hour service to address care needs such as administering medication in contrast to a facility whose staff is available at night only to deal with emergencies. More than half of assisted living facilities surveyed in 1999 had either a full- or part-time RN on staff, and nearly three-quarters had an RN or licensed practical or vocational nurse (LPN/LVN). Approximately 20 percent did not provide any licensed staff (Hawes, Rose, and Phillips, 1999). A national survey cited the median staffing level in assisted living facilities as 14 residents for each caregiver and noted that most staff who provided personal care assistance were also responsible for other tasks, such as meal preparation, housekeeping, and laundry (Hawes, Phillips, and Rose, 2000b). Some States regulate staff-to-resident ratios, as well as the type of staff education and training required (NCAL, 2004).[4]

Personal and Supportive Services

Supportive and personal services typically offered in assisted living facilities include help with bathing and dressing; more than 90 percent of assisted living facilities provide assistance for these early-loss activities of daily living (Hawes, Rose, and Phillips, 1999). Assisted living facilities also provide other supportive services, which include instrumental activities of daily living (such as assistance with medication management and transportation).

Medication Management

According to experts, up to 96 percent of assisted living residents need help with medications (Thompson, 2001). These residents take an average of 5 to 10 different medications (Sloane, Zimmerman, Brown, et al., 2002). Staff in assisted living facilities also have to deal with medicines that have been inappropriately prescribed or medicines proven to decrease morbidity that have not been prescribed (Sloane, Zimmerman, Brown, et al., 2002; Sloane, Gruber-Baldini, Zimmerman, et al., 2004; Gray, Hedrick, Rhinard, et al., 2003; Spore, Mor, Larrat, et al., 1996). One State found an overall error rate of 3.62 percent (Hyde, Segelman, Feldman, et al., 1998).

State regulations are unique in defining medication assistance, including who can assist with medications, who can administer medications, and the extent of staff training, supervision, and licensure required (NCAL, 2004). Consequently, assisted living services that are provided in the context of "medication assistance" vary. However, in a 1999 GAO study, the majority of facilities reported providing or arranging for medication reminders (91 percent) and central storage of medication and other assistance (87 percent) (Hawes, Rose, and Phillips, 1999).

In a GAO (1999) report, medication administration was cited as a service that was of "most concern" by researchers, inspector advocates, and residents' families. According to reports from 46 States and the District of Columbia, 61 percent of respondents noted that problems with medications occur frequently or very often, an increase over a 2-year period from 51 percent in 2002 (Mollica and Lamarche, 2005). The ALWG (2003) cited medication management as an important issue and challenge facing the assisted living industry and noted that the consumer should understand the services provided.

Social Services

The ALWG addressed the social aspects of assisted living services in their core principles by noting that the facility should "foster a social climate that allows the resident to develop and maintain relationships with the facility and the community at large" (ALWG, 2003, p. 20). Carder (2002b) notes that certain practices promote the social model of care in assisted living, such as providing a home-like environment where the resident has choice and independence, as well as respect and dignity for privacy and individuality.

Recreation/Activities

Key components of the assisted living environment are the kind and number of activities that the facility offers. Residents reported that 45 percent were involved in activities most or all of the time, while 55 percent reported that they were involved only some or none of the time (Hawes, Phillips, and Rose, 2000a). For activities sponsored off the campus, only 35 percent of residents reported that they were involved. The researchers considered two contributing factors: (1) that staff asked fewer than half of the residents' preferences on activities, and (2) the lack of transportation offered for residents to attend off campus outings (Hawes, Phillips, and Rose, 2000a). Suitable daytime activities in residential care have been determined as a resident need (Martin, Hancock, Richardson, et al., 2002).

Meals

Assisted living facilities provide two to three meals a day as a basic service, and in most definitions as noted earlier, must provide at least two meals daily to qualify as an assisted living facility. According to Hawes' study, few facilities provide private kitchens, so that the resident is dependent on the facility to provide meals (Hawes, Rose, and Phillips, 1999).

Housekeeping and Laundry

Cleaning of personal space, clothing, and linens is typically provided in the base price (monthly fees) of assisted living (MetLife, 2003).

Transportation

Assisted living residents often need transportation such as a van or bus within a defined mileage radius for medical visits, personal care (e.g., beauticians), and recreational activities. A survey of assisted living facilities shows that more than 95 percent of facilities provide transportation for shopping and medical care (Kraditor, Dollard, Hodlewsky, et al., 2001).

The environmental scan revealed a wide variety of services and level of services provided across assisted living facilities. This lack of a uniform set of services, staffing, and facility characteristics inherent in assisted living that could facilitate true objective comparisons poses a key challenge in developing consumer instruments.

[2] Available at http://www.aspe.hhs.gov/daltcp/reports/facres.htm.
[3] For additional information on State occupancy requirements, see *State Residential Care and Assisted Living Policy: 2004* (Mollica and Johnson-Lamarche, 2005).
[4] Refer to *State Residential Care and Assisted Living Policy: 2004* for State-specific assisted living staff training requirements (Mollica and Johnson-Lamarche, 2005).

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Page last reviewed December 2006
Internet Citation: Chapter 3. Assisted Living Defined: Environmental Scan of Instruments to Inform Consumer Choice in Assisted Living. December 2006. Agency for Healthcare Research and Quality, Rockville, MD.
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