RTIP ID# (required) RIV010206

TCWG Consideration Date December 4, 2018

Project Description (clearly describe project)

The Supplemental PM Conformity Hot Spot Analysis (Analysis) is an update to the February 24, 2015 PM Conformity Hot Spot Analysis. The proposed project within this Analysis would remove the existing I-15 northbound (NB) off-ramp at Railroad Canyon Road while maintaining the existing I-15 NBon-ramp at Railroad Canyon Road (which is a design change from the 2015 Analysis).

The Riverside County Transportation Commission (RCTC), in cooperation with the City of Lake Elsinore (City) and the California Department of Transportation (Caltrans), discussed the challenges of insufficient funding to design and construct the entire project. The August 2017 approved Project Report documents the project development team's agreement to split the project into two phases:

- Phase 1: I-15/Railroad Canyon Road Interchange Improvements
- Phase 2: I-15/Franklin Street New Interchange.

Phase 1 is proceeding with the Plans, Specifications, and Estimate (PS&E) phase for I-15/Railroad Canyon Road Interchange Improvements identified in the Project Report. Phase 2 will proceed at a future date; therefore, there is no further discussion regarding Phase 2 in this analysis.

Design refinements to Alternative 2, Phase 1 (the proposed project) and the expected changes to the vehicular traffic movement patterns were analyzed in the 2018 Supplemental Traffic Impact Analysis (2018 STIA). Given the modified I-15 NB ramp configuration, the transportation network in the vicinity of the project will experience slight traffic circulation changes. These traffic circulation changes will be exclusive to the access exchange from Railroad Canyon Road (where access from the I-15 NB off-ramp and eastbound Railroad Canyon Road (left turn lane) to the I-15 NB on-ramp will be removed) to Grape Street at the second driveway into the shopping center located on the southeast corner of Grape Street/Summerhill Drive & Railroad Canyon Road. For this analysis, two alternatives were identified:

Alternative 1. No Build Alternative.

Alternative 2. Reconstruct the NB ramps to a hook ramp configuration to Grape Street; eliminate the existing NBdiagonal entrance ramp at Railroad Canyon Road; and maintain a diamond configuration for the southbound (SB) ramps at Railroad Canyon Road with a new interchange at Franklin Street. Under this revised scenario, two new hook ramps (an on-ramp and an off-ramp) are proposed for Grape Street, across the middle driveway to the Shopping Center located on the southwest corner of Grape Street / Summerhill Drive and Railroad Canyon Road. The existing I-15 NB off-ramp on Railroad Canyon Road.

| Type of Project (use Table 1 on instruction sheet) Reconfigure existing interchange and construct a new interchange | | | | | | | |
|---|-----------------------|------------------------------|------|--------------------------|--|--|--|
| County Riverside | | | | | | | |
| | 8-RIV-15 PM 17.5/21.0 | | | | | | |
| Caltrans Projects – EA No. 0A4411 | | | | | | | |
| Lead Agency: RCTC | | | | | | | |
| Contact Person Alex Menor | | Phone# (951) 787-7970 | Fax# | Email AMenor@RCTC.org | | | |

| Hot Spot Pollutant of Concern (check one or both) PM2.5 x PM10 x | | | | | | | | | |
|--|--|---------------|------------------------------------|-----------|---|-------------------------------|---------------------------------|--|--|
| Federal Actio | Federal Action for which Project-Level PM Conformity is Needed (check appropriate box) | | | | | | | | |
| Categorical EA C | | or aft EIS | FONSI or Final | | X | PS&E or X Construc tion | | | |
| Scheduled Date of Federal Action: January 2016 | | | | | | | | | |
| NEPA Delegation – Project Type (check appropriate box) | | | | | | | | | |
| Exempt | | | Section 326 –Categorical Exclusion | | × | | n 327 – Non orical Exclusion | | |
| Current Programming Dates (as appropriate) | | | | | | | | | |
| | PE/Environment | ental ENG ROW | | CON | | | | | |
| Start | 2014 | | 2016 | 2016 2 | | 2019 | | | |
| End | 2019 | | 2019 | 2019 2020 | | | 2020 | | |

Project Purpose and Need (Summary): (attach additional sheets as necessary)

The purpose of the proposed project is to relieve existing and future congestion, eliminate two of the five closely spaced traffic signals along Railroad Canyon Road, and to improve the overall operational characteristics of the Railroad Canyon Road interchange by providing new freeway access to relieve congestion at the adjacent interchanges.

Surrounding Land Use/Traffic Generators (especially effect on diesel traffic)

Surrounding land uses within the project area include residential, commercial, hotels, a church, light industrial, and vacant land.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility Railroad Canyon Road

2020 Alt 1 (No Build), Railroad Canyon Road - ADT = 36,680, Truck ADT = 2,934 (8%) Grape Street - ADT = 15,060, Truck ADT = 1,205 (8%)

2020 Alt 2 (Proposed Project), Railroad Canyon Road - ADT = 27,980, Truck ADT = 2,238 (8%) Grape Street - ADT = 27,690, Truck ADT = 2,215 (8%)

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

2040 No Build (Alt 1), Railroad Canyon Road - ADT = 52,050, Truck ADT = 4,164 (8%) Grape Street - ADT = 21,370, Truck ADT = 1,710 (8%)

2040 Proposed Project (Alt 2), Railroad Canyon Road - ADT = 29,780, Truck ADT = 2,382 (8%) Grape Street - ADT = 32,800, Truck ADT = 2,624 (8%)

Describe potential traffic redistribution effects of congestion relief (impact on other facilities) See attached analysis

Comments/Explanation/Details (attach additional sheets as necessary) See attached analysis

PM_{2.5}/PM₁₀ Hot-Spot Analysis

The proposed project is located within a nonattainment area for federal PM_{2.5} and PM₁₀ standards. Therefore, per 40 CFR Part 93 hot-spot analyses are required for conformity purposes. However, the EPA does not require hot-spot analyses, qualitative or quantitative, for projects that are not listed in 40 CFR Section 93.123(b)(1) as an air quality concern. The project does not qualify as a project of air quality concern (POAQC) because of the following reasons:

- i. The proposed project is not a new or expanded highway project. The proposed project is an interchange reconstruction project (Railroad Canyon Road) that does not increase the capacity of I-15. This type of project improves freeway interchange operations by reducing traffic congestion and improving merge operations. Based on the Supplemental Traffic Impact Analysis (October 2014 and July 2018), the proposed Build Alternatives would increase the capacity of Railroad Canyon Road and Grape Street. However, the traffic volumes would not exceed the 125,000 average daily trips criteria for a POAQC. In addition, the total truck percentages along Railroad Canyon Road and Franklin Street would not exceed the 8 percent criteria, and the total truck average annual daily traffic (AADT) would not exceed the 10,000-vehicle criteria for POAQC. The future traffic volumes along Railroad Canyon Road, Grape Street, and other local roadways are shown in Tables 1 and 2.
- ii. The proposed project does not affect intersections that are at LOS D, E, or F with a significant number of diesel vehicles. Based on the Supplemental Traffic Impact Analysis (July 2018), the proposed Build Alternatives would reduce the delay and improve the LOS at intersections within the project vicinity. The LOS conditions in the project vicinity with and without the proposed project are shown in Tables 3, 4, 5, and 6.
- iii. The proposed project does not include the construction of a new bus or rail terminal.
- iv. The proposed project does not expand an existing bus or rail terminal.
- v. The proposed project is not in or affecting locations, areas, or categories of sites that are identified in the PM_{2.5} and PM₁₀ applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

Therefore, the proposed Build Alternatives meet the CAA requirements and 40 CFR 93.116 without any explicit hot-spot analysis. The proposed Build Alternatives would not create a new, or worsen an existing, PM_{10} or $PM_{2.5}$ violation.

Table 1 2020 Average Daily Traffic Volumes (Total AADT/Truck AADT)

| | No Build (Alt 1) | Proposed Project (Alt 2) |
|----------------------|------------------|-----------------------------|
| Roadway Link | Traffic Volumes | Traffic Volumes |
| Railroad Canyon Road | 36,680/2,934 | 27,980/2,238 |
| Franklin Street | 7,590/607 | 7,590/607 |
| Main Street | 10,010/801 | 10,010/801 |
| Grape Street | 15,060/1,205 | 27,690/2,215 |
| Casino Drive | 6,970/558 | 6,970/558 |
| Auto Center Drive | 6,640/531 | 6,640/531 |
| Mission Trail | 14,700/1,176 | 14,700/1,176 |
| Lakeshore | 12,830/1,026 | 12,830/1,026 |
| Camino Del Norte | 3,590/287 | 3,590/287 |

Source: Supplemental Traffic Impact Analysis, October 2014/July 2018.

Table 2 2040 Average Daily Traffic Volumes (Total AADT/Truck AADT)

| | | Proposed |
|----------------------|------------------|-----------------|
| | No Build (Alt 1) | Project (Alt 2) |
| Roadway Link | Traffic Volumes | Traffic Volumes |
| Railroad Canyon Road | 52,050/4,164 | 29,780/2,382 |
| Franklin Street | 10,080/806 | 11,380/910 |
| Main Street | 21,870/1,750 | 21,870/1,750 |
| Grape Street | 21,370/1,710 | 32,800/2,624 |
| Casino Drive | 9,890/791 | 8,740/699 |
| Auto Center Drive | 9,410/753 | 8,130/650 |
| Mission Trail | 20,860/1,669 | 19,060/1,525 |
| Lakeshore | 18,200/1,456 | 18,200/1,456 |
| Camino Del Norte | 15,980/1,278 | 15,980/1,278 |

Source: Supplemental Traffic Impact Analysis, October 2014/July 2018.

Table 3 2020 No Build (Alternative 1) Intersection LOS

| | AM Peak Hour | | PM Peak Hour | | | |
|---|--------------|-----|--------------|-----|--|--|
| Intersection | Delay (sec) | LOS | Delay (sec) | LOS | | |
| Railroad Canyon Road at I-15 Northbound Ramps | 110.5 | F | 153.0 | F | | |
| Grape Street/Summerhill Drive & Railroad Canyon Road | 125.6 | F | 139.9 | F | | |
| Grape Street & Shopping Center Driveway (North) | 13.4 | В | 15.0 | В | | |
| Grape Street & Shopping Center Driveway (Middle) | 11.9 | В | 21.7 | С | | |
| Grape Street & Shopping Center Driveway (South) | 9.4 | Α | 10.1 | В | | |
| Parking Lot & Shopping Center Driveway | _ | _ | _ | _ | | |
| Railroad Canyon Road at I-15 Southbound Ramps | 49.5 | D | 98.6 | F | | |
| Source: Supplemental Traffic Impact Analysis (July 2018). | | | | | | |
| I-15 = Interstate 15 LOS = level of service sec = seconds | | | | | | |

Table 4 2020 Proposed Project (Alternative 2) Intersection LOS

| | AM Peak H | lour | PM Peak Hour | | | |
|---|-------------|------|--------------|-----|--|--|
| Intersection | Delay (sec) | LOS | Delay (sec) | LOS | | |
| Railroad Canyon Road at I-15 Northbound Ramps | _ | _ | _ | _ | | |
| Grape Street/Summerhill Drive & Railroad Canyon Road | 31.9 | С | 37.2 | D | | |
| Grape Street & Shopping Center Driveway (North) | 11.9 | В | 20.5 | С | | |
| Grape Street & Shopping Center Driveway (Middle) | 23.7 | С | 43.7 | D | | |
| Grape Street & Shopping Center Driveway (South) | 9.4 | Α | 10.1 | В | | |
| Parking Lot & Shopping Center Driveway | _ | _ | _ | _ | | |
| Railroad Canyon Road at I-15 Southbound Ramps | 24.9 | С | 32.0 | С | | |
| Source: Supplemental Traffic Impact Analysis (July 2018). | | | | | | |
| I-15 = Interstate 15 LOS = level of service sec = seconds | | | | | | |

Table 5 2040 No Build (Alternative 1) Intersection LOS

| | AM Peak H | lour | PM Peak Hour | |
|---|-------------|------|--------------|-----|
| Intersection | Delay (sec) | LOS | Delay (sec) | LOS |
| Railroad Canyon Road at I-15 Northbound Ramps | 332.7 | F | 267.9 | F |
| Grape Street/Summerhill Drive & Railroad Canyon Road | 229.2 | F | 213.7 | F |
| Grape Street & Shopping Center Driveway (North) | 26.2 | D | 35.3 | Е |
| Grape Street & Shopping Center Driveway (Middle) | 15.4 | С | 136.3 | F |
| Grape Street & Shopping Center Driveway (South) | 10.0 | Α | 11.1 | В |
| Parking Lot & Shopping Center Driveway | _ | _ | _ | _ |
| Railroad Canyon Road at I-15 Southbound Ramps | 132.9 | F | 480.7 | F |
| Source: Supplemental Traffic Impact Analysis (July 2018). | | • | | • |

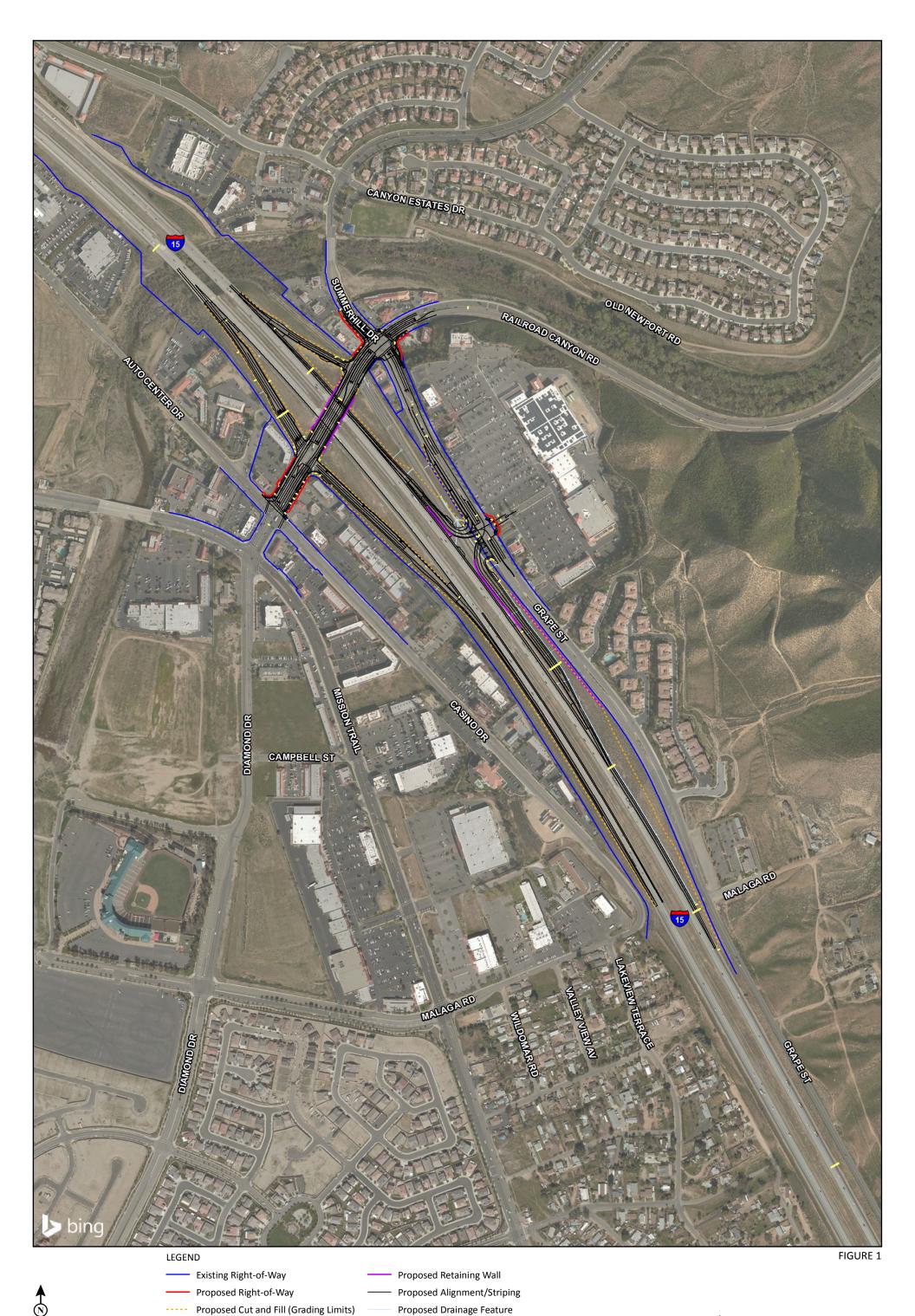
I-15 = Interstate 15 LOS = level of service sec = seconds

Table 6 2040 Proposed Project (Alternative 2) Intersection LOS

| | AM Peak Hour | | PM Peak Hour | |
|--|--------------|-----|--------------|-----|
| Intersection | Delay (sec) | LOS | Delay (sec) | LOS |
| Railroad Canyon Road at I-15 Northbound Ramps | _ | _ | _ | _ |
| Grape Street/Summerhill Drive & Railroad Canyon Road | 60.8 | Е | 82.5 | F |
| Grape Street & Shopping Center Driveway (North) | 14.7 | В | 56.7 | F |
| Grape Street & Shopping Center Driveway (Middle) | 34.2 | D | 84.3 | F |
| Grape Street & Shopping Center Driveway (South) | 10.0 | Α | 11.1 | В |
| Parking Lot & Shopping Center Driveway | _ | _ | _ | _ |
| Railroad Canyon Road at I-15 Southbound Ramps | 28.6 | С | 65.1 | Е |

Source: Supplemental Traffic Impact Analysis (July 2018).

I-15 = Interstate 15 LOS = level of service sec = seconds



Proposed Sign Locations

0 300 600 FEET I-15/Railroad Canyon Road Interchange

Conceptual Design Plan

08-Riv-15 PM 17.5/21.0

Project Number 08-0000-0016