RTIP ID# RIV061159 and RIV110825

TCWG Consideration Date: February 27, 2018

Project Description

The City of Coachella (City), in cooperation with the California Department of Transportation (Caltrans) District 8 and Coachella Valley Association of Governments (CVAG), proposes the construction of a new interchange at State Route 86 (SR-86) and Avenue 50, approximately 1.1 miles north of the existing Avenue 52 intersection and 1.95 miles south of the existing Dillon Road interchange; refer to Exhibit 1 (Site Vicinity). The proposed project would convert portion of SR-86 from existing expressway to freeway with a new overcrossing structure and access ramps, which would accommodate traffic for existing and planned development in the area. It would also improve safety and traffic operations by enhancing level of service (LOS) on the adjacent SR-86/Dillon Road interchange and SR-86/Avenue 52 intersection; refer to Exhibit 2 (Site Plan – Alternative 7) and Exhibit 3 (Site Plan – Alternative 8).

The proposed improvements include realignment and widening of Avenue 50 from the existing two-lane roadway to a six-lane major arterial, and realignment of Tyler Street on both the east and west side of SR-86. The project would also improve public safety and mobility by constructing another new bridge spanning over Coachella Valley Stormwater Channel (CVSC), replacing the existing low water crossing, and eliminating flood-related hazards during inclement weather events.

It should be noted that the new SR-86 and Avenue 50 interchange (RTIP IDs# RIV110825 and RIV061159) was submitted to stakeholders at a TCWG meeting on October 24, 2017, pursuant to the interagency consultation requirement of 40 CFR 93.105 (c)(1)(i). The TCWG determined that the project (RIV110825 and RIV061159) was not a project of air quality concern. The project has not changed since TCWG review on October 24, 2017; however, minor revisions to the traffic study occurred that affected level of service (LOS) at several study intersections. The minor revisions did not worsen intersections that are LOS D, E, or F. Additionally, the minor revisions would not affect or change the amount of diesel vehicles in the study area. Information associated with the project is provided below.

Type of Project *(use Table 1 on instruction sheet)*
New interchange.

County	**Narrative Location/Route & Postmiles:**
Riverside	State Route 86, PM R19.7/R20.9 **Caltrans Projects – EA#** 80-0C970

Lead Agency: City of Coachella

Contact Person	**Phone#**	**Fax#**	**Email**
Jonathan Hoy	760-398-5744	760-262-6253	jhoy@coachella.org

Hot Spot Pollutant of Concern **PM2.5** **PM10 X**

Federal Action for which Project-Level PM Conformity is Needed

Categorical Exclusion (NEPA)	X **EA or Draft EIS**	**FONSI or Final EIS**	**PS&E or Construction**	**Other**

Scheduled Date of Federal Action: 2019

NEPA Assignment – Project Type

Exempt	**Section 326 –Categorical Exemption**	X **Section 327 – Non-Categorical Exemption**

Current Programming Dates *(as appropriate)*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	06/2016	06/2019	06/2019	11/2020
End	06/2019	06/2020	06/2020	06/2024

Project Purpose and Need (Summary):

Need

- The proposed improvements are consistent with and included in the SCAG 2017 FTIP (Project IDs RIV110825 and RIV061159), as well as the 2016 CVAG Transportation Project Prioritization Study (TPPS). The TPPS is used to identify arterial road projects that are in most need. The improvements at Avenue 50 are considered a "Backbone Priority Project;" according to the TPPS, backbone projects are projects that have an importance to the regional circulation.
- The City's Land Use Plan Element of the General Plan identifies ongoing and planned development in the eastern part of Coachella that is expected to increase the local population and local/regional traffic demands.
- The City's Circulation Element of the 2035 General Plan identifies Avenue 50 as a Major Arterial with enhanced bicycle facilities with access to SR-86 to serve local and regional traffic needs.
- Avenue 50, within the limit of the project, is anticipated to operate at unsatisfactory level of service (LOS) based on growth and traffic projections.
- During severe winter and summer storms, the existing Avenue 50 low water crossing is frequently inundated and damaged due to debris flows within the CVSC. The flooding and the resulting road closure have a direct impact on the public's health and safety. In addition, the frequent flood damage results in repeated significant cost to the City for road repairs; and increases the response time of emergency vehicles.

Purpose

- To improve traffic operations and accommodate future planned growth by enhancing LOS at local area street intersections and adjacent interchanges
- To reduce vehicle miles traveled and improve commute time
- To improve freeway access for the City and the Coachella Valley Region
- To accommodate the City's circulation plan
- To improve public safety by replacing the existing low water crossing with a new bridge, allowing uninterrupted travel to and out of Coachella when flooding and debris flows occur.
- To improve mobility by providing direct and dependable access over the SR-86 and CVSC, which would improve emergency vehicle response times during storm events.

The proposed project is needed to address the following deficiencies: vehicular, pedestrian and bicycle safety crossing the SR-86 and CVSC, improving emergency response times, and accommodating future developments along Avenue 50, traffic and population demands.

Surrounding Land Use/Traffic Generators

Within the project limits, SR-86 serves activity areas in multiple communities in the Coachella Valley, including the cities of Coachella and Indio. The project site is immediately surrounded by residential, agricultural, recreational, and vacant land uses. The proposed project would improve the safety and traffic operations by enhancing level of service (LOS) on the adjacent SR-86/Dillon Road interchange and SR-86/Avenue 52 intersection, and provide congestion relief to reduce vehicle queuing and idling, thereby reducing emissions, including those from diesel traffic.

Existing: LOS, AADT, % and # trucks

As shown in Table 1 (Existing Traffic Volumes), existing average daily traffic (ADT) volumes along SR-86 range from 25,082 to 31,477 ADT, which include truck volumes that range from 4,866 to 6,107 ADT. Existing daily traffic volumes along Avenue 50 range between 10,473 and 16,203 ADT, which include truck volumes that range from 548 to 891 ADT.

Table 1
Existing Traffic Volumes

Segment	Existing		
	Total ADT[1,2]	% Trucks[1,2]	# Trucks[1,2]
SR-86 Mainline			
South of Avenue 50	25,082	19.4%	4,866
North of Avenue 50	31,477	19.4%	6,107
Avenue 50			
Bridge, Between Tyler Street & SR-86	10,473	7.9%	827
Between Leoco Lane and Peter Rabbit Lane	16,203	5.5%	891
West of Harrison Street	10,144	5.4%	548

Notes:
1. Total AADTs, and SR-86 truck volumes and percentages were derived from the *State Route 86/Avenue 50 New Interchange Project Traffic Operations Report* (November 2017), prepared by Fehr and Peers.
2. Avenue 50 truck volumes and percentages were derived from the *Traffic Report for Avenue 50 Bridge Over Coachella Valley Stormwater Channel (CVSC)*, May 2016.

Table 2 (Existing Level of Service) summarizes the existing Level of Service (LOS) within the project area. As shown in Table 2, all the study intersections operate acceptably at LOS D or better under existing conditions during both AM and PM peak hours, except the Avenue 50/Tyler Street intersection is currently stop-controlled and operates at an unacceptable LOS F during both AM and PM peak hours.

Table 2
Existing Level of Service

Study Intersection	Existing LOS	
	AM	PM
Avenue 50/Harrison Street	C	C
Avenue 50/Leoco Lane	A	A
Avenue 50/Peter Rabbit Lane	A	A
Avenue 50/Tyler Street	F	F
Avenue 50/Southbound SR-86 Ramps	D	C
Avenue 50/Northbound SR-86 Ramps		
Dillon Road/Southbound SR-86 Ramps	A	B
Dillon Road/Northbound SR-86 Ramps	B	B
Avenue 52/Southbound SR-86 Ramps	B	B
Avenue 52/Northbound SR-86 Ramps		
Tyler Street/Calle Mendoza	B	B

Notes:
Bold = Exceeds LOS D threshold.

Source: Fehr and Peers, *State Route 86/Avenue 50 New Interchange Project Traffic Operations Report,* November 2017.

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

The project would convert a portion of SR-86 from existing expressway to freeway with a new overcrossing structure and access ramps, which would accommodate traffic for existing and planned development in the area. The project would improve the safety and traffic operations by enhancing LOS on the adjacent SR-86/Dillon Road interchange and SR-86/Avenue 52 intersection, and provide congestion relief to reduce vehicle queuing and idling, thereby reducing emissions, including those from diesel traffic. Table 3 (Opening Year Traffic Volumes), depicts the opening year traffic volumes along each segment within the project limits. It is noted that there are two opening years for the proposed project: 2020 and 2025. Opening Year 2020 is when the Avenue 50 bridge construction would be complete, and Opening Year 2025 reflects the completion of SR-86/Avenue 50 interchange construction. As shown in Table 3, opening year ADT volumes range from 11,020 to 43,130, which include truck volumes that range from 595 to 8,367 ADT. The proposed project would not significantly change the truck traffic volumes and percentages in the area. The proposed roadway widening and new interchange improvements would attract traffic to the area. It should be noted that the proposed improvements would not result in a higher proportion of trucks overall. Project implementation would accommodate traffic for existing and planned development in the area. It would also improve safety and traffic operations by enhancing LOS on the adjacent SR-86/Dillon Road interchange and SR-86/Avenue 52 intersection. During build conditions, total traffic volumes would not exceed 43,130 on the SR-86 mainline and 18,500 on Avenue 50. Truck volumes would not exceed 8,367 on the SR-86 mainline and 1,496 on Avenue 50. As such, project traffic and truck volumes would be relatively low in the Opening Year build conditions.

Table 3
Opening Year Traffic Volumes

Location	Opening Year No Build[1]			Opening Year Build[1,2]			# Trucks Percent Change
	ADT	% Trucks	# Trucks	ADT	% Trucks	# Trucks	
SR-86 Mainline							
South of Avenue 50	30,280	19.4%	5,874	31,470	19.4%	6,105	3.9%
North of Avenue 50	42,520	19.4%	8,249	43,130	19.4%	8,367	1.6%
SR-86 Northbound Ramps							
Avenue 50 Off-Ramp	N/A	N/A	N/A	1,830	19.4%	355	N/A
Direct On-Ramp	N/A	N/A	N/A	640	19.4%	124	N/A
Loop On-Ramp	N/A	N/A	N/A	6,200	19.4%	1,203	N/A
SR-86 Southbound Ramps							
Avenue 50 Off-Ramp	N/A	N/A	N/A	7,710	19.4%	1,496	N/A
On-Ramp[1]	N/A	N/A	N/A	1,060	19.4%	206	N/A
Avenue 50							
Bridge, Between Tyler Street & SR-86	13,830	7.9%	1,093	15,480	7.9%	1,223	5.8
Between Leoco Lane and Peter Rabbit Lane	17,880	5.5%	983	18,500	5.5%	1,018	3.6
West of Harrison Street	11,020	5.4%	595	11,070	5.4%	598	10.1

ADT = Average Daily Traffic; SR-86 = State Route 86

Notes:
1. The traffic volumes along Avenue 50 and SR-86 are for Opening Year 2020, and 2025, respectively.
2. Build Alternatives 7 and 8 have different southbound on-ramp configurations, but the traffic volumes would be identical for both Alternatives. Therefore, the Opening Year Build traffic volumes would be the same for both Alternatives.

Source: Fehr and Peers, *State Route 86/Avenue 50 New Interchange Project Traffic Operations Report,* November 2017.

Table 4 (Existing and Opening Year Level of Service) summarizes the existing delay and corresponding LOS within the project area. As shown in Table 4, LOS would generally improve (i.e., delay would be reduced) at the intersections in the project vicinity under the Opening Year Build scenario. However, the Avenue 50/Tyler Street intersection would operate at an unacceptable LOS F with project implementation; all other intersections would operate at acceptable LOS D or better.

Table 4
Existing and Opening Year Level of Service

Study Intersection	Existing Peak Hour LOS		Opening Year (2020) No Build Peak Hour LOS		Opening Year (2020) Build Peak Hour LOS	
	AM	PM	AM	PM	AM	PM
Avenue 50/Harrison Street	C	C	C	D	C	D
Avenue 50/Leoco Lane	A	A	A	B	A	A
Avenue 50/ Peter Rabbit Lane	A	A	A	A	A	B
Avenue 50/Tyler Street	F	F	F	F	C	C
Avenue 50/Southbound SR-86 Ramps	D	C	E	E	F	F
Avenue 50/Northbound SR-86 Ramps						
Dillon Road/ Southbound SR-86 Ramps	A	B	N/A	N/A	N/A	N/A
Dillon Road/ Northbound SR-86 Ramps	B	B	N/A	N/A	N/A	N/A
Avenue 52/Southbound SR-86 Ramps	B	B	N/A	N/A	N/A	N/A
Avenue 52/ Northbound SR-86 Ramps						
Tyler Street/Calle Mendoza	B	B	C	B	C	C
Notes: **Bold** = Exceeds LOS D threshold.						
Source: Fehr and Peers, *State Route 86/Avenue 50 New Interchange Project Traffic Operations Report,* November 2017.						

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

Table 5 (Horizon Year Build and No Build Traffic Volumes) depicts the Horizon year (2045) traffic volumes along each segment within the project limits. As shown in Table 5, horizon year ADT volumes range from 15,370 to 62,140, which include truck volumes that range from 830 to 2,556 ADT. The proposed project would not significantly change the truck traffic volumes and percentages in the area. The proposed roadway widening and new interchange improvements would attract traffic to the area. It should be noted that the proposed improvements would not result in a higher proportion of trucks overall. Project implementation would accommodate traffic for existing and planned development in the area. It would also improve safety and traffic operations by enhancing LOS on the adjacent SR-86/Dillon Road interchange and SR-86/Avenue 52 intersection. During build conditions, total traffic volumes would not exceed 62,140 on the SR-86 mainline and 32,350 on Avenue 50. Truck volumes would not exceed 12,055 on the SR-86 mainline and 2,556 on Avenue 50. Under No Build conditions, truck volumes along the SR-86 mainline (North of Avenue 50) would be 11,869 ADT; however, the Build Scenario/With Project increase would only be 1.6 percent. Overall project traffic and truck volumes would be relatively low in the Horizon Year Build conditions and truck percent increases would be low for roadway segments with higher volumes of trucks.

Table 5
Horizon Year Traffic Volumes

Location	Horizon Year No Build			Horizon Year Build[1]			# Trucks Percent Change
	ADT	% Trucks	# Trucks	ADT	% Trucks	# Trucks	
SR-86 Mainline							
South of Avenue 50	42,580	19.4%	8,261	44,220	19.4%	8,579	3.9%
North of Avenue 50	61,180	19.4%	11,869	62,140	19.4%	12,055	1.6%
SR-86 Northbound Ramps							
Avenue 50 Off-Ramp	N/A	N/A	N/A	2,470	19.4%	479	N/A
Direct On-Ramp	N/A	N/A	N/A	1,830	19.4%	355	N/A
Loop On-Ramp	N/A	N/A	N/A	9,240	19.4%	1,793	N/A
SR-86 Southbound Ramps							
Avenue 50 Off-Ramp	N/A	N/A	N/A	10,380	19.4%	2,014	N/A
On-Ramp[1]	N/A	N/A	N/A	1,060	19.4%	206	N/A
Avenue 50							
Bridge, Between Tyler Street & SR-86	30,570	7.9%	2,415	32,350	7.9%	2,556	5.8
Between Leoco Lane and Peter Rabbit Lane	26,270	5.5%	1,445	31,240	5.5%	1,718	3.6
West of Harrison Street	15,370	5.4%	830	16,930	5.4%	914	10.1

ADT = Average Daily Traffic; SR-86 = State Route 86

Notes:
1. Build Alternatives 7 and 8 have different southbound on-ramp configurations, but the traffic volumes would be identical for both Alternatives. Therefore, the Horizon Year Build traffic volumes would be the same for both Alternatives.

Source: Fehr and Peers, *State Route 86/Avenue 50 New Interchange Project Traffic Operations Report,* November 2017.

Table 6 (Horizon Year Level of Service) summarizes the delay and corresponding LOS within the project area in the horizon year (2045). As shown in Table 6, LOS would generally improve (i.e., delay would be reduced) under the Horizon Year Build scenario for both alternatives. However, the intersection of Avenue 50/Harrison Street would operate at a higher delay due to traffic demand increase along Avenue 50. A such, mitigation was considered in the *State Route 86/Avenue 50 New Interchange Project Traffic Operations Report* (Traffic Impact Study), prepared by Fehr and Peers, November 2017. Mitigation would include modifying the northbound approach to have one left turn lane, three through lanes, and one right turn lane with a right turn overlap phase. This mitigation is consistent with the mitigation measures proposed for this location in the La Entrada Specific Plan Traffic Impact Analysis (LSA, June 2013). Following implementation of the aforementioned mitigation, the intersection at Avenue 50/Harrison Street would operate at acceptable LOS D under both Build alternatives (Alternatives 7 and 8).

Table 6
Horizon Year Level of Service

Study Intersection	Horizon Year No Build Peak Hour LOS		Alternative 7 Horizon Year Build Peak Hour LOS[1]		Alternative 8 Horizon Year Build Peak Hour LOS[1]	
	AM	PM	AM	PM	AM	PM
Avenue 50/Harrison Street	D	D	D	**E[1]**	D	**E[1]**
Avenue 50/Leoco Lane	B	C	B	D	B	D
Avenue 50/ Peter Rabbit Lane	A	A	B	B	B	B
Avenue 50/Tyler Street	F	F	C	C	C	C
Avenue 50/Southbound SR-86 Ramps	F	F	B	C	B	B
Avenue 50/Northbound SR-86 Ramps			A	B	B	B
Dillon Road/ Southbound SR-86 Ramps	B	C	B	C	B	C
Dillon Road/ Northbound SR-86 Ramps	C	B	C	C	C	C
Avenue 52/Southbound SR-86 Ramps	B	B	B	C	B	C
Avenue 52/ Northbound SR-86 Ramps	B	A	B	B	B	B
Tyler Street/Calle Mendoza	C	C	C	C	C	C

Notes:
Bold = Exceeds LOS D threshold.
1. As this LOS exceeds the LOS D threshold, mitigation is required. Mitigation would include modifying the northbound approach to have one left turn lane, three through lanes, and one right turn lane with a right turn overlap phase. This mitigation is consistent with the mitigation measures proposed for this location in the La Entrada Specific Plan Traffic Impact Analysis (LSA, June 2013). Following implementation of the aforementioned mitigation, the intersection at Avenue 50/Harrison Street would operate at acceptable LOS D.

Source: Fehr and Peers, *State Route 86/Avenue 50 New Interchange Project Traffic Operations Report,* November 2017.

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

See Table 3 above.

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

See Table 5 above.

Describe potential traffic redistribution effects of congestion relief

The proposed project would improve overall traffic operations and accommodate future planned growth, reduce vehicle miles traveled and improve commute time, improve freeway access for the City and the Coachella Valley Region, accommodate the City's circulation plan, improve public safety, and improve mobility over SR-86 and the CVSC. The proposed project would not divert to other routes, and the travel demand volume is not predicted to vary substantially between the build and no-build conditions. Thus, local traffic is not anticipated to be redistributed.

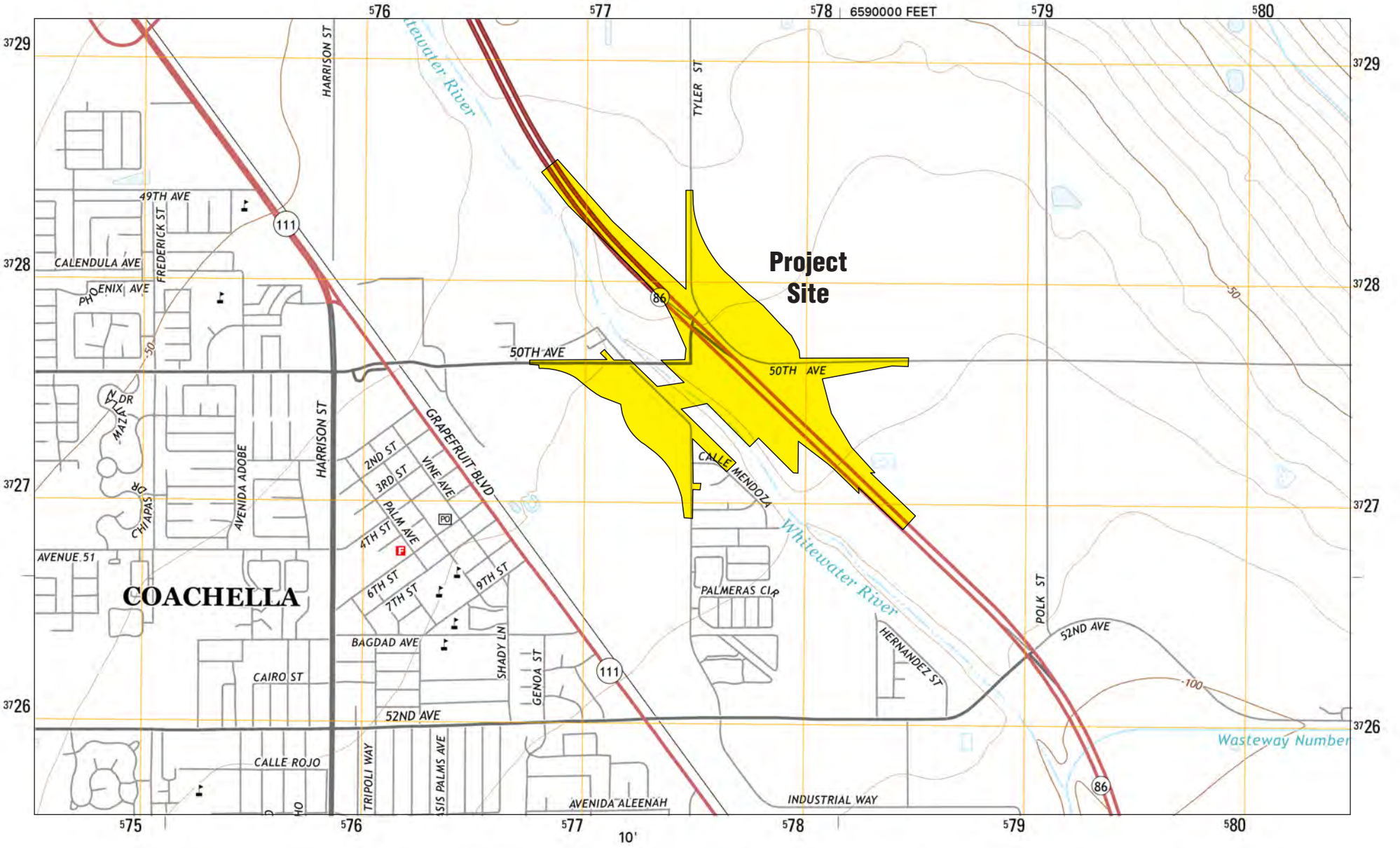
Comments/Explanation/Details

The proposed project would not conflict with an applicable plan, policy, or regulation of an agency with jurisdiction over the project. The proposed project is also consistent with Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP) and Federal Transportation Improvement Program (FTIP) (FTIP ID RIV061159 and RIV110825), as well as the 2016 CVAG Transportation Project Prioritization Study (TPPS). Further, the project is intended to meet the traffic needs in the area based on local land use plans.

Per the criteria under 40 CFR 93.123(b)(1), the proposed project would not qualify as project of local air quality concern (POAQC). The project would not be considered a "new or expanded highway projects that has a significant number of or significant increase in diesel vehicles" per 40 CFR 93.123(b)(1). Among the proposed project improvements, the project includes the construction of new SR-86 on- and off-ramps at Avenue 50, and a new Avenue 50 overcrossing structure spanning over SR-86 and the CVSC; the existing SR-86 mainline would not be modified. The SR-86 southbound on-ramp alignment would be slightly different under Alternatives 7 and 8, although traffic volumes would be the same for both alternatives. Avenue 50 would be realigned and widened from the existing two-lane roadway to a six-lane major arterial, and Tyler Street would be realigned on both the east and west side of SR-86.

Existing ADT volumes along SR-86 within the project study area range from 25,082 to 31,477, which include truck volumes that range from 4,866 to 6,107 ADT. Existing ADT volumes along Avenue 50 range from 10,144 to 16,203 ADT, which include truck volumes that range from 548 to 891 ADT. Opening Year ADT volumes along SR-86 within the project study area would range from 640 to 43,130, which include truck volumes that would range from 124 to 8,367 ADT under No Build and Build Conditions. ADT volumes along Avenue 50 would range from 11,020 to 15,480 ADT, which include truck volumes that would range from 595 to 1,223 ADT under Build and No Build conditions. Horizon Year ADT volumes along SR-86 within the project study area would range from 1,060 to 62,140, which include truck volumes that would range from 206 to12,055 ADT under No Build and Build Conditions. Horizon Year ADT volumes along Avenue 50 would range from 15,370 to 32,350 ADT, which include truck volumes that would range from 830 to 2,556 ADT under Build and No Build conditions.

The proposed project would not significantly change the truck traffic volumes and percentages in the area. The proposed improvements would not result in a higher proportion of trucks overall. Project implementation would accommodate traffic for existing and planned development in the area. It would also improve safety and traffic operations by enhancing LOS on the adjacent SR-86/Dillon Road interchange and SR-86/Avenue 52 intersection. Therefore, the proposed project is not considered a POAQC.



Source: USGS Indio, CA Quadrangle, 2016.

Project Site

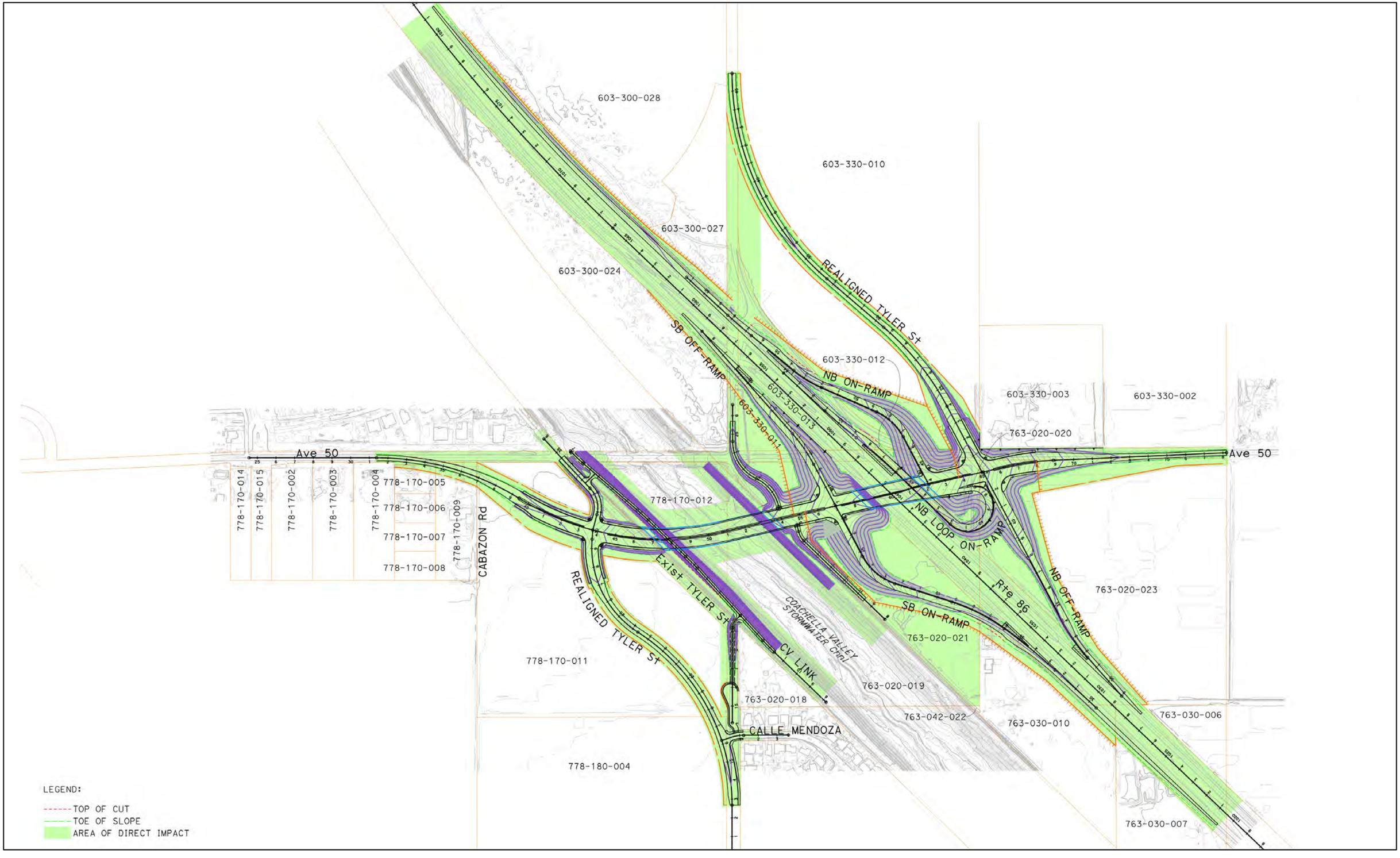
0 2000'
APPROXIMATE

09/26/17 JN159814 MAS

STATE ROUTE 86/AVENUE 50 NEW INTERCHANGE PROJECT

Site Vicinity Map

Exhibit 1



STATE ROUTE 86/AVENUE 50 NEW INTERCHANGE PROJECT

Site Plan – Alternative 7

09/26/17 JN159814 MAS

Exhibit 2

603-300-028
603-330-010
603-300-027
NB ON-RAMP
603-300-024
SB OFF-RAMP
REALIGNED TYLER St
603-330-012
603-330-011
603-330-013
603-330-003
603-330-002
763-020-020
Ave 50
Ave 50
SB LOOP ON-RAMP
778-170-014
778-170-015
778-170-002
778-170-003
778-170-004
778-170-005
778-170-006
778-170-007
778-170-008
778-170-009
CABAZON Rd
778-170-012
NB LOOP ON-RAMP
NB OFF-RAMP
Rte 86
763-020-021
763-020-023
EXIST TYLER St
REALIGNED TYLER St
COACHELLA VALLEY STORMWATER CHNL
CV LINK
778-170-011
763-020-019
763-020-018
763-042-022
763-030-010
763-030-006
CALLE MENDOZA
778-180-004
763-030-007

LEGEND:
TOP OF CUT
TOE OF SLOPE
AREA OF DIRECT IMPACT

STATE ROUTE 86/AVENUE 50 NEW INTERCHANGE PROJECT

Site Plan – Alternative 8

09/26/17 JN159814 MAS

Exhibit 3