FTIP ID# *(required)*: SBD990214

TCWG Consideration Date: December 3, 2024

Project Description *(clearly describe project)*:

Three build alternatives are being considered along with a No-Build Alternative for the I-10 Wildwood Canyon Road Interchange Project (Project). The build alternatives were designed to satisfy the Project purpose and need. The three build alternatives are as follows:

- Alternative 2 – Diamond Interchange Overcrossing
- Alternative 3 – Skewed Diamond Interchange Overcrossing
- Alternative 4 – Diverging Diamond Interchange Overcrossing

Associated improvements would include new connecting roadways and/or realignment of existing local roadways, overcrossing bridge structures, the protection or relocation of existing utilities, and advance signage which extends approximately 2 miles to the east and to the west beyond the lane improvement limits.

See **Attachment 1** and **Attachment 2** for detailed build alternative description narratives and exhibits, respectively.

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

County: San Bernardino	Narrative Location/Route & Postmiles: Interstate 10 at Wildwood Canyon Road, between the Live Oak Canyon Road/Oak Glen Road Interchange (**PM R37.0**) and the County Line Road Interchange (**PM R39.0**). Advance signage which extend approximately 2 miles on I-10 beyond the lane improvement limits to San Bernardino County, **PM 35.3** on the west, and Riverside County, **PM R1.1** on the east. See **Figure 1:** Regional Location and Project Vicinity and **Figure 2:** Project Study Area, (attached). **Caltrans Project – EA#** 1K0900

Lead Agency: City of Yucaipa

Contact Person	**Phone#**	**Fax#**	**Email**
Keith Cooper	(310) 439-3424	(213) 816-1949	Keith.Cooper@erpinc.com

Hot Spot Pollutant of Concern *(check one or both)* **PM2.5** ✓ **PM10** ✓

Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

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

Scheduled Date of Federal Action: June 2025

NEPA Assignment – Project Type *(check appropriate box)*

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

Current Programming Dates *(as appropriate)*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	10/12/2021	07/01/2025	11/01/2024	07/01/2028
End	06/30/2025	10/30/2027	02/28/2028	09/30/2030

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

The purpose of the proposed Project is to provide improved connectivity and increase multi-modal access for residents within the City and to accommodate the City's planned economic development around the area of proposed interchange, support efficient goods movement through the I-10 corridor, and improve emergency vehicle access and provide additional evacuation routes for the surrounding community.

The need of the Project is to improve circulation and access for commuter vehicles and trucks at existing adjacent interchanges, in conjunction with the proposed interchange, which is identified as a primary access point for the Wildwood Safety Roadside Rest Area and local businesses, as well as improving the overall operations on the I-10 corridor. The most apparent existing operational deficiencies are the substantial queuing and higher weaving densities at the existing adjacent interchanges at Live Oak Canyon Road and County Line Road on-ramps and off-ramps.

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

The land uses within and surrounding the Project Study Area consists primarily of open space and agricultural land interspersed with commercial/retail uses, Wildwood Safety Roadside Rest Area, and residential uses along both sides of the freeway corridor.

Opening Year 2030: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

	No-Build AADT			Alternatives 2/3 AADT			Alternative 4 AADT		
I-10 Segment	**Total**	**Trucks Only**	**% Trucks**	**Total**	**Trucks Only**	**% Trucks**	**Total**	**Trucks Only**	**% Trucks**
I-10 EB Mainline In	73,090	8,470	12%	73,800	8,570	12%	73,800	8,570	12%
I-10 EB Live Oak Canyon Rd Off	15,350	1,780	12%	13,870	1,610	12%	13,870	1,610	12%
I-10 EB Live Oak Canyon Rd On	6,370	730	11%	4,420	510	12%	4,420	510	12%
I-10 EB Wildwood Canyon Rd Off	—	—	—	4,560	530	12%	4,560	530	12%
I-10 EB Rest Area Off	770	90	12%	770	90	12%	770	90	12%
I-10 EB Wildwood Canyon Rd On	—	—	—	3,570	410	11%	3,570	410	11%
I-10 EB Rest Area On	980	120	12%	980	120	12%	980	120	12%
I 10 EB County Line Rd Off	7,010	820	12%	5,820	670	12%	5,820	670	12%
I 10 EB County Line Rd On	5,750	660	11%	4,690	540	12%	4,690	540	12%
I-10 EB Mainline Out	63,060	7,290	12%	62,440	7,250	12%	62,440	7,250	12%
I-10 WB Mainline In	67,840	7,050	10%	68,670	7,140	10%	68,670	7,140	10%
I-10 WB County Line Rd Off	4,350	450	10%	3,230	340	11%	3,230	340	11%
I-10 WB County Line Rd On	7,990	840	11%	7,290	760	10%	7,290	760	10%
I-10 WB Wildwood Canyon Rd Off	—	—	—	3,570	370	10%	3,570	370	10%
I-10 WB Wildwood Canyon Rd On	—	—	—	4,270	440	10%	4,270	440	10%
I-10 WB Oak Glen Rd Off	6,800	710	10%	5,460	560	10%	5,460	560	10%
I-10 WB Oak Glen Rd On	17,520	1,820	10%	15,000	1,560	10%	15,000	1,560	10%
I-10 WB Mainline Out	82,200	8,550	10%	82,970	8,630	10%	82,970	8,630	10%

Notes:
Source: Fehr & Peers 2023
See **Attachment 3** for I-10 mainline LOS data.

RTP Horizon Year / Design Year 2050: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

	No-Build AADT			Alternatives 2/3 AADT			Alternative 4 AADT		
I-10 Segment	**Total**	**Trucks Only**	**% Trucks**	**Total**	**Trucks Only**	**% Trucks**	**Total**	**Trucks Only**	**% Trucks**
I-10 EB Mainline In	93,140	10,800	12%	94,680	10,990	12%	94,680	10,990	12%
I-10 EB Live Oak Canyon Rd Off	19,200	2,230	12%	15,770	1,830	12%	15,770	1,830	12%
I-10 EB Live Oak Canyon Rd On	8,760	1,010	12%	4,480	520	12%	4,480	520	12%
I-10 EB Wildwood Canyon Rd Off	—	—	—	12,060	1,400	12%	12,060	1,400	12%
I-10 EB Rest Area Off	1,060	130	12%	1,120	130	12%	1,120	130	12%
I-10 EB Wildwood Canyon Rd On	—	—	—	10,790	1,250	12%	10,790	1,250	12%
I-10 EB Rest Area On	1,330	150	11%	1,330	150	11%	1,330	150	11%
I 10 EB County Line Rd Off	9,740	1,130	12%	7,500	880	12%	7,500	880	12%
I 10 EB County Line Rd On	7,990	930	12%	4,690	540	12%	4,690	540	12%
I-10 EB Mainline Out	81,220	9,400	12%	79,520	9,210	12%	79,520	9,210	12%
I-10 WB Mainline In	80,730	8,400	10%	82,330	8,550	10%	82,330	8,550	10%
I-10 WB County Line Rd Off	7,080	740	10%	3,720	390	10%	3,720	390	10%
I-10 WB County Line Rd On	10,020	1,040	10%	8,410	870	10%	8,410	870	10%
I-10 WB Wildwood Canyon Rd Off	—	—	—	9,320	970	10%	9,320	970	10%
I-10 WB Wildwood Canyon Rd On	—	—	—	11,150	1,170	10%	11,150	1,170	10%
I-10 WB Oak Glen Rd Off	9,320	970	10%	6,370	660	10%	6,370	660	10%
I-10 WB Oak Glen Rd On	23,970	2,490	10%	17,520	1,820	10%	17,520	1,820	10%
I-10 WB Mainline Out	98,320	10,220	10%	100,000	10,390	10%	100,000	10,390	10%

Notes:
Source: Fehr & Peers 2023
See **Attachment 3** for I-10 mainline LOS data.

Opening Year 2030: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

Intersection	No-Build AADT			Alternatives 2/3 AADT			Alternative 4 AADT		
	Total	Trucks Only	% Trucks	Total	Trucks Only	% Trucks	Total	Trucks Only	% Trucks
Live Oak Canyon Road/Outer Highway 10	14,370	430	3%	11,570	350	3%	11,570	350	3%
Live Oak Canyon Road/I-10 EB	31,890	960	3%	27,120	810	3%	27,120	810	3%
Oak Glen Road/I-10 WB	50,310	1,510	3%	43,870	1,320	3%	43,870	1,320	3%
Oak Glen Road/Calimesa Boulevard/14th Street	56,210	1,690	3%	54,110	1,620	3%	54,110	1,620	3%
Wildwood Canyon Road/I-10 EB	—	—	—	12,270	370	3%	12,270	370	3%
Wildwood Canyon Road/I-10 WB	—	—	—	17,170	520	3%	17,170	520	3%
Wildwood Canyon Road/Calimesa Boulevard	22,780	680	3%	—	—	—	—	—	—
7th Place/County Line Road	—	—	—	—	—	—	—	—	—
I-10 EB/County Line Road	18,580	560	3%	14,720	440	3%	14,720	440	3%
I-10 WB/County Line Road	26,990	810	3%	22,360	670	3%	22,360	670	3%
Calimesa Boulevard/County Line Road	33,220	1,000	3%	29,640	890	3%	29,640	890	3%
Avenue F/Calimesa Boulevard	—	—	—	24,740	740	3%	24,740	740	3%
Avenue F/Wildwood Canyon Road	—	—	—	24,600	740	3%	24,600	740	3%

Notes:
Source: Fehr & Peers 2023
See **Attachment 4** for local intersection LOS data.

RTP Horizon Year / Design Year 2050: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

Intersection	No-Build AADT			Alternatives 2/3 AADT			Alternative 4 AADT		
	Total	Trucks Only	% Trucks	Total	Trucks Only	% Trucks	Total	Trucks Only	% Trucks
Live Oak Canyon Road/Outer Highway 10	22,780	680	3%	17,940	540	3%	17,940	540	3%
Live Oak Canyon Road/I-10 EB	43,800	1,310	3%	34,270	1,030	3%	34,270	1,030	3%
Oak Glen Road/I-10 WB	65,880	1,980	3%	51,580	1,550	3%	51,580	1,550	3%
Oak Glen Road/Calimesa Boulevard/14th Street	71,140	2,130	3%	67,910	2,040	3%	67,910	2,040	3%
Wildwood Canyon Road/I-10 EB	—	—	—	32,090	960	3%	32,090	960	3%
Wildwood Canyon Road/I-10 WB	—	—	—	44,220	1,330	3%	44,220	1,330	3%
Wildwood Canyon Road/Calimesa Boulevard	32,170	970	3%	—	—	—	—	—	—
7th Place/County Line Road	—	—	—	—	—	—	—	—	—
I-10 EB/County Line Road	28,730	860	3%	18,920	570	3%	18,920	570	3%
I-10 WB/County Line Road	36,860	1,110	3%	26,350	790	3%	26,350	790	3%
Calimesa Boulevard/County Line Road	42,190	1,270	3%	33,920	1,020	3%	33,920	1,020	3%
Avenue F/Calimesa Boulevard	—	—	—	38,200	1,150	3%	38,200	1,150	3%
Avenue F/Wildwood Canyon Road	—	—	—	50,180	1,510	3%	50,180	1,510	3%

Notes:
Source: Fehr & Peers 2023
See **Attachment 4** for local intersection LOS data.

Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*

Although material traffic redistribution effects are not anticipated, proposed build alternatives would (1) reduce delay at local street intersections which may improve emergency response times for City fire and police, (2) enhance access to medical facilities located east and west of the planned interchange, and (3) increase evacuation capacity in the Project Study Area.

Comments/Explanation/Details *(attach additional sheets as necessary)*

Under 40 CFR 93.123(b)—PM10 and PM2.5 Hot Spots—the following criteria are utilized to determine the potential for a proposed project to qualify as a Project of Air Quality Concern.

(i) New highway projects that have a significant number of diesel vehicles, and expanded highway projects that have a significant increase in the number of diesel vehicles.

The proposed project is not a new highway project. No material change in AADT volumes or truck volumes are anticipated to occur under the build alternatives when compared to the No-Build Alternative. Therefore, the proposed project would not result in a significant increase in the number of diesel vehicles and would not be considered a Project of Air Quality Concern under this criterion.

(ii) Projects affecting intersections that are at Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level-of-Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project.

As shown in Tables provided in Attachment 4, intersection LOS would improve under the build alternatives when compared to the No-Build Alternative. In addition, intersection traffic volumes would be reduced under the build alternatives when compared to the No-Build Alternative. As such, the proposed project would not be considered a Project of Air Quality Concern under this criterion.

(iii)New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location.

The proposed project would not implement a new bus or retail terminal or transfer point at which diesel vehicles would be congregating. Therefore, the proposed project would not be considered a Project of Air Quality Concern under this criterion.

(iv)*Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location*.

The proposed project does not involve expansion of a bus or rail terminal or transfer point. Therefore, the proposed project would not be considered a Project of Air Quality Concern under this criterion.

(v) *Projects in or affecting locations, areas, or categories of sites which are identified in the PM10 or PM2.5 applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation*.

The proposed project is not in or affecting a site of PM10 or PM2.5 air quality standard violation. Therefore, the proposed project would not be considered a Project of Air Quality Concern under this criterion.

Attachments:

Figure 1 – Regional Location and Project Vicinity
Figure 2 – Project Study Area
Attachment 1 – Build Alternative Descriptions
Attachment 2 – Build Alternative Exhibits
Attachment 3 – I-10 Mainline LOS Data
Attachment 4 – Local Intersection LOS Data

Figure 1 – Regional Location and Project Vicinity

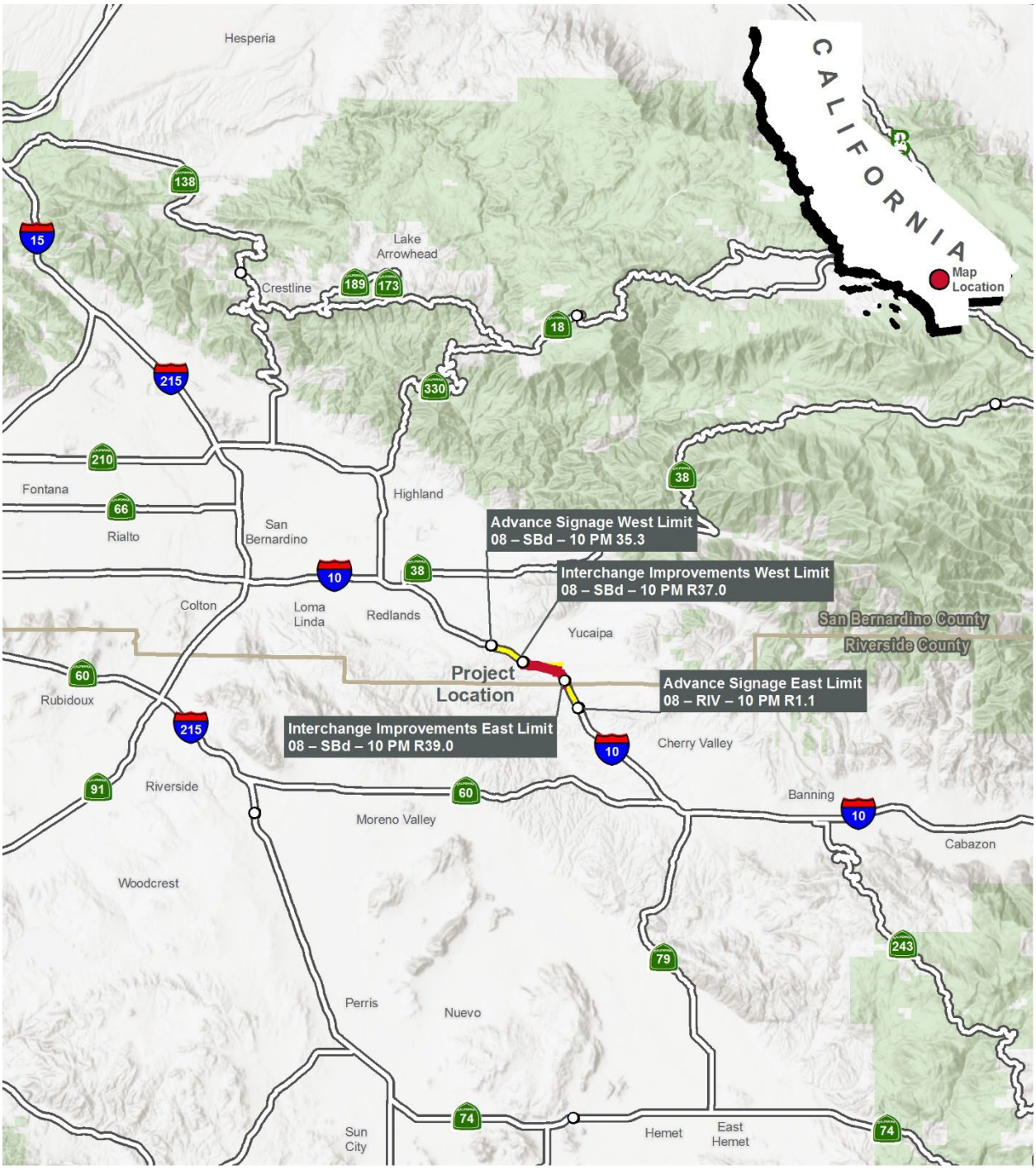

Figure 1. Regional Location and Project Vicinity

Figure 2 – Project Study Area

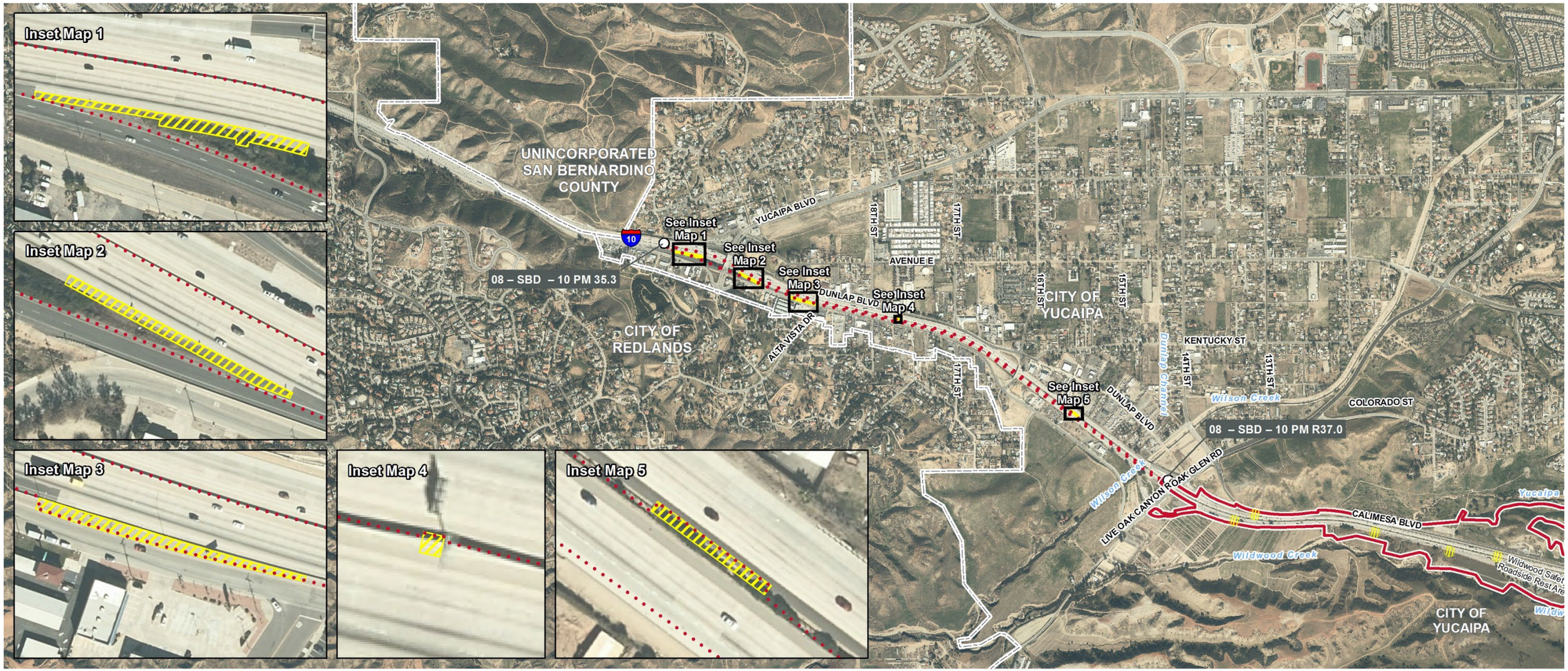

Figure 2. Project Study Area (Sheet 1 of 3)

0 Feet 800

LEGEND

- Project Design Footprint
- Advanced Signage Area
- Potential Advanced Signage Locations
- Post Mile

Map Extent
Page 2 of 3

08 – SBd – 10 PM 35.3 to R39.2
08 – RIV – 10 PM R0.0 to R1.1
EA 08-1K0900
I-10 Wildwood Canyon Road Interchange Project

Figure 2. Project Study Area (Sheet 2 of 3)

Figure 2. Project Study Area (Sheet 3 of 3)

Attachment 1 – Build Alternative Descriptions

Alternative 2 – Diamond Interchange Overcrossing

Alternative 2 proposes a new diamond interchange overcrossing with a centerline alignment perpendicular to I-10. The overcrossing would be located on the west side of the Wildwood SRRA and would provide the minimum 1.0-mile interchange spacing from adjacent interchanges. The proposed Project under Alternative 2 would reconfigure and realign portions of Wildwood Canyon Road and Calimesa Boulevard into four-lane local roadways with signalized intersections. The newly configured portion of Wildwood Canyon Road would be constructed starting at the intersection of Wildwood Canyon Road and the new I-10 EB on- and off-ramps. The improvements would then continue north, crossing over I-10, before veering in an easterly direction to join the existing Wildwood Canyon Road alignment at the intersection of Wildwood Canyon Road and John Wayne Way, where two lanes would be dropped to match the existing two-lane roadway. A striped median lane would also be proposed as a modification to the secondary highway typical cross section shown in the City's standard design guidelines to allow vehicles to make left turns into private properties located on either side of Wildwood Canyon Road.

The longitudinal grades for the proposed roadway improvements would meet Americans with Disabilities Act (ADA) accessibility requirements along sidewalks and walkways. Along Wildwood Canyon Road a three-span bridge structure would clear over both roadbeds of I-10 and over the Wildwood SRRA EB off-ramp, a multi-span bridge will occur on the EB on-ramp immediately south of the Wildwood SRRA, and an additional single-bridge structure would span over Calimesa Boulevard. The bridge structures would be designed to meet or exceed the minimum permanent vertical clearances of 16.5 feet over the freeway and 15 feet over Calimesa Boulevard. A portion of Calimesa Boulevard would be realigned to the north of its current location to accommodate for the construction of the new I-10 WB on- and off-ramps, and to provide room for potential future freeway widening.

The realigned portion of Calimesa Boulevard would be grade-separated from the newly elevated four-lane portion of Wildwood Canyon Road, and would be widened to provide the ultimate four-lane configuration of a modified secondary highway. The existing segment of Wildwood Canyon Road that intersects Calimesa Boulevard at a "T" intersection would be reconfigured to provide a new connector to the new Wildwood Canyon Road alignment. This local road connection between Calimesa Boulevard and Wildwood Canyon Road would also have a modified secondary highway section consisting of two lanes in each direction with a striped median/turning lane, outside shoulders, parkways, and sidewalk facilities.

Alternative 3 – Skewed Diamond Interchange Overcrossing

Alternative 3 proposes a new diamond interchange overcrossing with a skewed local roadway centerline alignment over I-10 that would be located further west of the Wildwood SRRA compared to the proposed Project under Alternative 2. In this case the spacing to the Live Oak Canyon Road interchange would be slightly less than 1.0 mile and the spacing to the County Line Road interchange would increase compared to Alternative 2. Similar to Alternative 2, the new four-lane roadway alignment for Wildwood Canyon Road would have signalized

intersections. The newly configured portion of Wildwood Canyon Road would be constructed starting at the intersection of Wildwood Canyon Road and the new I-10 EB on- and off-ramps. The improvements would then continue north, crossing over I-10, before veering in an easterly direction to join the existing Wildwood Canyon Road alignment at the intersection of Wildwood Canyon Road and John Wayne Way, where two lanes would be dropped to match the existing two-lane roadway. A striped median lane would also be proposed as a modification to the secondary highway typical cross section shown in the City's standard design guidelines to allow vehicles to make left turns into private properties located on either side of Wildwood Canyon Road.

The longitudinal grades for the proposed roadway improvements would meet ADA accessibility requirements along sidewalks and walkways. Along Wildwood Canyon Road a three-span bridge structure would clear over both roadbeds of I-10 and over the Wildwood SRRA EB off-ramp, a multi-span bridge would occur on the EB on-ramp immediately south of the Wildwood SRRA, and an additional single-bridge structure would span over Calimesa Boulevard. The bridge structures would be designed to meet or exceed the minimum permanent vertical clearances of 16.5 feet over the freeway and 15 feet over Calimesa Boulevard. A portion of Calimesa Boulevard would be realigned to the north of its current location to accommodate for the construction of the new I-10 WB on- and off-ramps, and to provide room for potential future freeway widening.

The realigned portion of Calimesa Boulevard would be grade-separated from the newly elevated four-lane portion of Wildwood Canyon Road and would be widened to provide the ultimate four-lane configuration of a modified secondary highway. The existing segment of Wildwood Canyon Road that intersects Calimesa Boulevard at a "T" intersection would be reconfigured to provide a new connector to the new Wildwood Canyon Road alignment. This local road connection between Calimesa Boulevard and Wildwood Canyon Road would also have a modified secondary highway section consisting of two lanes in each direction with a striped median/turning lane, outside shoulders, parkways, and sidewalk facilities.

Alternative 4 – Diverging Diamond Interchange Overcrossing

The roadway alignments for Alternative 4 are similar to those proposed in Alternative 2, the primary difference is that a Diverging Diamond Interchange (DDI) overcrossing is proposed under this alternative at the on- and off-ramp terminals. The proposed centerline alignment would be perpendicular to I-10 and would be located on the west side of the Wildwood SRRA, providing the minimum 1.0 mile interchange spacing from adjacent interchanges. The DDI crossover intersection and the four-lane roadway alignment for Wildwood Canyon Road would be constructed starting at its intersection with the proposed I-10 EB on- and off-ramps, located south of I-10. From the intersection with the proposed I-10 EB on- and off-ramps, the new Wildwood Canyon Road NB and SB lanes would parallel one another crossing over the freeway. Continuing north of the freeway, the NB and SB lanes would transition to the left and right side, respectively, at the roadway crossover intersection, where connections to the WB on- and off-ramps would be provided. From there, the Wildwood Canyon Road alignment would veer to the east in order to join the existing Wildwood Canyon Road at the intersection of Wildwood

Canyon Road and John Wayne Way, where two lanes would be dropped to match the existing two-lane roadway. The typical cross section for Wildwood Canyon Road outside of the DDI would match the City's standard design guidelines for a secondary highway; however, a striped median lane is proposed as a modification to the typical cross section to allow vehicles to make left turns into private properties located on either side of Wildwood Canyon Road.

The longitudinal grades for the proposed roadway improvements would meet ADA accessibility requirements along sidewalks and walkways. Along Wildwood Canyon Road, a three-span bridge structure would clear over both roadbeds of I-10 and over the Wildwood SRRA EB off-ramp, a multi-span bridge will occur on the EB on-ramp immediately south of the Wildwood SRRA, and an additional single-bridge structure would span over Calimesa Boulevard. The bridge structures would be designed to provide the same minimum vertical clearances as Alternatives 2 and 3; however, the bridge structure over I-10 would be considered narrower, as no opposing left turn lanes are required with the DDI configuration. The single-bridge structure would be longer along Calimesa Boulevard compared to the bridge structure proposed under Alternatives 2 and 3, because the DDI footprint requires Wildwood Canyon Road to be wider due to the crossover intersection geometry. Similar to Alternative 2, a portion of Calimesa Boulevard would be realigned to the north of its current location to accommodate for the new I-10 WB on- and off-ramps, and to provide adequate space for potential future freeway widening.

The realigned portion of Calimesa Boulevard would cross under a portion of the DDI crossover, north of I-10 and would remain close to existing ground elevation, except where it cuts through existing hillsides. The realigned portion of Calimesa Boulevard would be widened to provide the ultimate four-lane configuration of a modified secondary highway. Similar to Alternative 2, the existing segment of Wildwood Canyon Road that currently intersects Calimesa Boulevard at a "T" intersection would be reconfigured to provide a new connector to the new Wildwood Canyon Road alignment. This local road connection between Calimesa Boulevard and Wildwood Canyon Road would also have a modified secondary highway section consisting of two lanes in each direction with a striped median/turning lane, outside shoulders, parkways, and sidewalk facilities.

Attachment 2 – Build Alternative Exhibits

I-10 WILDWOOD CANYON ROAD
ALTERNATIVE 2 - DIAMOND INTERCHANGE

LEGEND:

AUX	AUXILIARY LANE
TCL	TRUCK CLIMBING LANE (BY ANOTHER PROJECT)
	RETAINING WALL
	CONCRETE BARRIER
	CONCRETE PAVING
	ASPHALT PAVING
	SIDEWALK
	BRIDGE STRUCTURE
	MIDWEST GUARDRAIL SYSTEM (MGS)
	DRAINAGE IMPROVEMENTS
	FUTURE IMPROVEMENTS BY OTHERS

I-10 WILDWOOD CANYON ROAD
ALTERNATIVE 3 - SKEWED DIAMOND INTERCHANGE

LEGEND:

AUX	AUXILIARY LANE
TCL	TRUCK CLIMBING LANE (BY ANOTHER PROJECT)
	RETAINING WALL
	CONCRETE BARRIER
	CONCRETE PAVING
	ASPHALT PAVING
	SIDEWALK
	BRIDGE STRUCTURE
	MIDWEST GUARDRAIL SYSTEM (MGS)
	DRAINAGE IMPROVEMENTS
	FUTURE IMPROVEMENTS BY OTHERS

I-10 WILDWOOD CANYON ROAD
ALTERNATIVE 4 - DIVERGING DIAMOND INTERCHANGE

LEGEND:

AUX	AUXILIARY LANE
TCL	TRUCK CLIMBING LANE (BY ANOTHER PROJECT)
	RETAINING WALL
	CONCRETE BARRIER
	CONCRETE PAVING
	ASPHALT PAVING
	SIDEWALK
	BRIDGE STRUCTURE
	MIDWEST GUARDRAIL SYSTEM (MGS)
	DRAINAGE IMPROVEMENTS
	FUTURE IMPROVEMENTS BY OTHERS

Attachment 3 – I-10 Mainline LOS Data

Table 14 - Freeway Operations – Opening Year (2030) Eastbound I-10 Operations

I-10 Segment	Facility Type	No-Build		Alternatives 2 and 3 (Diamond)		Alternative 4 (Diverging Diamond)	
		AM	PM	AM	PM	AM	PM
Down Grade Start to Live Oak Canyon Road	Basic	B / 17	**F / 63**	B / 17	D / 31	B / 17	D / 34
Live Oak Canyon Road off-ramp	Diverge	B / 18	**F / 109**	B / 14	**F / 61**	B / 14	**F / 76**
Live Oak Canyon Road off-ramp to on-ramp	Basic	B / 14	C / 22	B / 14	C / 24	B / 14	C / 24
Live Oak Canyon Road on-ramp	Merge	B / 13	C / 20	-	-	-	-
Live Oak Canyon Road on-ramp to SRRA off-ramp	Basic	B / 16	C / 23	-	-	-	-
Live Oak Canyon Road on-ramp to Wildwood Canyon Road off-ramp	Weave	-	-	B / 14	B / 21	B / 14	B / 20
SRRA off-ramp	Diverge	B / 13	C / 22	B / 11	B / 15	B / 11	B / 14
SRRA off-ramp to on-ramp	Basic	B / 16	C / 24	B / 16	C / 22	B / 16	C / 22
SRRA on-ramp	Merge	D / 31	**F / 55**	-	-	-	-
Wildwood Canyon Road /SRRA on-ramp	Merge	-	-	B / 14	C / 24	B / 15	C / 24
SRRA on-ramp to County Line Road off-ramp	Basic	C / 22	**F / 56**	-	-	-	-
County Line Road off-ramp	Diverge	D / 32	**F / 87**	B / 14	**E / 35**	B / 19	**E / 36**
County Line Rd off-ramp to Up Grade End	Basic	C / 21	D / 30	C / 22	D / 31	C / 22	D / 32
Up Grade End to County Line Road on-ramp	Basic	C / 21	D / 30	C / 22	D / 29	C / 22	D / 30
County Line Road on-ramp	Merge	B / 19	**E / 37**	B / 19	D / 34	B / 19	**E / 36**

Notes: The LOS and density (in vehicles per lane per mile) are reported. Bold and underline font indicate LOS E or F conditions.

Table 15 - Freeway Operations – Opening Year (2030) Westbound I-10 Operations

I-10 Segment	Facility Type	No-Build		Diamond		Diverging Diamond	
		AM	PM	AM	PM	AM	PM
County Line Road off-ramp	Diverge	**F / 84**	D / 34	**F / 83**	C / 26	**F / 82**	C / 26
County Line Road off-ramp to Down Grade Start	Basic	**F / 83**	C / 24	**F / 80**	C / 25	**F / 81**	C / 25
Down Grade Start to County Line Road on-ramp	Basic	**F / 80**	C / 24	**F / 78**	C / 24	**F / 79**	C / 24
County Line Road on-ramp	Merge	**F / 72**	C / 27	**F / 70**	C / 25	**F / 70**	C / 26
County Line Road on-ramp to Oak Glen Road off-ramp	Basic	**E / 41**	D / 30	-	-	-	-
County Line Road on-ramp to Wildwood Canyon Road off-ramp	Basic	-	-	D / 35	D / 27	D / 35	D / 27
Wildwood Canyon Road off-ramp	Diverge	-	-	C / 30	C / 24	C / 30	C / 24
Wildwood Canyon Road off-ramp to on-ramp	Basic	-	-	D / 31	C / 26	D / 31	C / 26
Wildwood Canyon Road on-ramp to Oak Glen Road off-ramp	Weave	-	-	D / 29	C / 22	D / 28	C / 22
Oak Glen Road off-ramp	Diverge	**F / 49**	D / 29	-	-	-	-
Oak Glen Road off-ramp to on-ramp	Basic	D / 35	D / 27	D / 32	C / 25	D / 32	C / 25
Oak Glen Road on-ramp	Basic[1]	D / 30	C / 20	D / 29	C / 20	D / 29	C / 20

Notes: The LOS and density (in vehicles per lane per mile) are reported. Bold and underline font indicate LOS E or F conditions

1. A lane add occurs at the on-ramp, so the segment is analyzed as a Basic segment.

Table 19 - Freeway Operations – Design Year (2050) Eastbound 1-10 Conditions

I-10 Segment	Facility Type	No-Build		Alternative 2 and 3 (Diamond)		Alternative 4 (Diverging Diamond)	
		AM	PM	AM	PM	AM	PM
Down Grade Start to Live Oak Canyon Road	Basic	D / 27	**F / 71**	C / 22	**F / 60**	C / 22	**F / 55**
Live Oak Canyon Road off-ramp	Diverge	**F / 46**	**F / 110**	B / 18	**F / 80**	B / 18	**F / 78**
Live Oak Canyon Road off-ramp to on-ramp	Basic	C / 18	C / 24	C / 19	D / 29	C / 19	D / 30
Live Oak Canyon Road on-ramp	Merge	B / 16	C / 25	-	-	-	-
Live Oak Canyon Road on-ramp to SRRA off-ramp	Basic	C / 20	**E / 38**	-	-	-	-
Live Oak Canyon Road on-ramp to Wildwood Canyon Road off-ramp	Weave	-	-	B / 17	C / 25	B / 17	C / 25
SRRA off-ramp	Diverge	B / 17	**F / 49**	B / 13	C / 15	B / 13	B / 15
SRRA off-ramp to on-ramp	Basic	C / 21	**F / 58**	C / 19	C / 24	C / 19	C / 23
SRRA on-ramp	Merge	B / 19	**F / 99**	-	-	-	-
Wildwood Canyon Road /SRRA on-ramp	Merge	-	-	B / 18	D / 31	B / 18	D / 30
SRRA on-ramp to County Line Road off-ramp	Basic	C / 22	**F / 74**	-	-	-	-
County Line Road off-ramp	Diverge	C / 22	**F / 108**	B / 19	D / 33	B / 19	D / 32
County Line Rd off-ramp to Up Grade End	Basic	C / 20	D / 26	C / 21	D / 29	C / 21	D / 29
Up Grade End to County Line Road on-ramp	Basic	C / 19	C / 22	C / 21	D / 27	C / 20	D / 27
County Line Road on-ramp	Merge	B / 14	C / 23	B / 15	C / 25	B / 15	C / 25

Notes: The LOS and density (in vehicles per lane per mile) are reported. Bold and underline font indicate LOS E or F conditions.

Table 20 - Freeway Operations – Design Year (2050) Westbound 1-10 Conditions

I-10 Segment	Facility Type	No-Build		Alternative 2 and 3 (Diamond)[2]		Alternative 4 (Diverging Diamond) [2]	
		AM	PM	AM	PM	AM	PM
County Line Road off-ramp	Diverge	**F / 102**	**F / 88**	**F / 81**	**E / 37**	**F / 81**	**E / 38**
County Line Road off-ramp to Down Grade Start	Basic	**F / 102**	C / 26	**F / 78**	**F / 51**	**F / 78**	**F / 55**
Down Grade Start to County Line Road on-ramp	Basic	**F / 101**	C / 25	**F / 77**	**F / 67**	**F / 76**	**F / 70**
County Line Road on-ramp	Merge	**F / 104**	C / 28	**F / 67**	**F / 63**	**F / 67**	**F / 64**
County Line Road on-ramp to Oak Glen Road off-ramp	Basic	**F / 88**	C / 28	-	-	-	-
County Line Road on-ramp to Wildwood Canyon Road off-ramp	Basic	-	-	D / 34	D / 35	D / 34	D / 35
Wildwood Canyon Road off-ramp	Diverge	-	-	C / 25	C / 26	C / 25	C / 26
Wildwood Canyon Road off-ramp to on-ramp	Basic	-	-	D / 28	D / 30	D / 28	D / 29
Wildwood Canyon Road on-ramp to Oak Glen Road off-ramp	Weave	-	-	D / 29	D / 28	D / 29	D / 28
Oak Glen Road off-ramp	Diverge	**F / 90**	D / 30	-	-	-	-
Oak Glen Road off-ramp to on-ramp	Basic	D / 29	C / 25	D / 32	D / 31	D / 32	D / 31
Oak Glen Road on-ramp	Basic[1]	D / 29	C / 22	D / 30	C / 25	D / 30	C / 25

Notes: The LOS and density (in vehicles per lane per mile) are reported. Bold and underline font indicate LOS E or F conditions.
1. A lane add occurs at the on-ramp, so the segment is analyzed as a Basic segment.
2. The unacceptable LOS on the segments between County Line Road and Wildwood Canyon Road were a function of assumed improvements at the County Line Road interchange.

Attachment 4 – Local Intersection LOS Data

Table 16 - Intersection Operations – Opening Year (2030) Conditions

Intersection	Control	No-Build		Alternative 2 and 3 (Diamond)		Alternative 4 (Diverging Diamond)	
		AM	PM	AM	PM	AM	PM
1. Live Oak Canyon Road / Outer 10 Highway	Signal	A / 4	A / 7	A / 4	A / 6	A / 4	A / 6
2. Live Oak Canyon Road / I-10 EB Ramps	Signal	**D / 52**	**E / 55**	C / 34	**D / 41**	B / 18	**D / 41**
3. Oak Glen Road / I-10 WB Ramps	Signal	**D / 51**	**D / 42**	**D / 39**	B / 19	B / 19	C / 22
4. Oak Glen Road / Calimesa Boulevard / 14th Street	Signal	**F / 127**	**D / 50**	**F / 86**	**D / 52**	**F / 82**	**D / 52**
5. Wildwood Canyon Road / I-10 EB Ramps	Signal	-	-	A / 9	B / 15	A / 5	A / 8
6. Wildwood Canyon Road / I-10 WB Ramps	Signal	-	-	A / 6	A / 6	A / 6	A / 10
7. Wildwood Canyon Road / Calimesa Boulevard	All Way Stop	**F / 198**	**F / 75**	-	-	-	-
7. Avenue F / Calimesa Boulevard	Signal	-	-	C / 23	B / 16	C / 22	B / 16
8. Avenue F / Wildwood Canyon Road	Signal	-	-	B / 16	B / 17	B / 15	B / 17
9. County Line Road / I-10 EB Ramps / 7th Place	Roundabout	**F / 112**	**F / 180**	B / 11	A / 9	B / 10	A / 9
10. County Line Road / I-10 WB Ramps	Roundabout	A / 7	**E / 40**	A / 5	A / 7	A / 5	A / 7
11. County Line Road / Calimesa Boulevard	Signal	B / 15	B / 15	B / 13	B / 15	B / 13	B / 15

Notes: For signal, all way stop, and roundabout control, the overall intersection LOS and average delay (in seconds per vehicle) are reported. For side street stop control, the worst movement LOS and delay are reported with the worst movement listed in parentheses. Bold and underline font indicate LOS D (for non-roundabout intersections only), E or F conditions.

Table 21 - Intersection Operations – Design Year (2050) Conditions

Intersection	Control	No-Build		Alternative 2 and 3 (Diamond)		Alternative 4 (Diverging Diamond)	
		AM	PM	AM	PM	AM	PM
1. Live Oak Canyon Road/Outer 10 Highway	Signal	A / 5	**F / 224**	A / 4	B / 11	A / 4	B / 12
2. Live Oak Canyon Road/I-10 EB Ramps	Signal	**D / 54**	**F / 87**	B / 20	**D / 54**	B / 19	**D / 55**
3. Oak Glen Road/I-10 WB Ramps	Signal	**E / 78**	**E / 62**	B / 17	C / 24	B / 17	C / 23
4. Oak Glen Road/Calimesa Boulevard /14th Street	Signal	**F / 171**	**F / 119**	**D / 38**	**D / 47**	**D / 47**	**D / 47**
5. Wildwood Canyon Road/I-10 EB Ramps	Signal	-	-	C / 22	C / 34	A / 7	B / 12
6. Wildwood Canyon Road/I-10 WB Ramps	Signal	-	-	B / 16	B / 19	A / 7	C / 20
7. Wildwood Canyon Road/Calimesa Boulevard	Signal	**F / 140**	B / 13	-	-	-	-
7. Avenue F/Calimesa Boulevard	Signal	-	-	B / 16	**D / 36**	B / 17	C / 32
8. Avenue F/Wildwood Canyon Road	Signal	-	-	B / 20	C / 33	B / 18	C / 32
9. County Line Road/I-10 EB Ramps/7th Place	Roundabout	**F / 65**	**F / 162**	A / 7	D / 29	A / 8	D / 33
10. County Line Road/I-10 WB Ramps	Roundabout	C / 24	**F / 59**	A / 7	B / 15	A / 6	C / 20
11. County Line Road/Calimesa Boulevard	Signal	**E / 64**	**D / 38**	B / 24	C / 25	C / 25	B / 26

Notes: For signal, all way stop, and roundabout control, the overall intersection LOS and average delay (in seconds per vehicle) are reported. For side street stop control, the worst movement LOS and delay are reported with the worst movement listed in parentheses. Bold and underline font indicate LOS D (for non-roundabout intersections only), E or F conditions.