

RTIP ID# <i>(required)</i> SB200810
TCWG Consideration Date December 3, 2024
<p>Project Description (clearly describe project) The San Bernardino County, Department of Public Works (County) in cooperation with the California Department of Transportation (Caltrans), proposes to implement the PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement Project (Project) in the community of Baker, California (Figure 1. Project Vicinity and Figure 2. Project Location). The Project will replace the existing two lane, timber bridge on Baker Boulevard, with a new four lane structure.</p> <p>The existing bridge was originally built in 1931 as a 93-foot (plus or minus) 5 span simple-supported stringer timber bridge crossing the Mojave River Channel on Baker Boulevard (formerly US 91 and State Route 31). It was repaired and lengthened in 1938. Repairs conducted in 1938 included replacement of all untreated Douglas Fir timber within the existing bridge with Redwood; the addition of 9 new spans to the west and 8 new spans to the east increasing bridge overall length to 408-feet (plus or minus), and channel excavation for the length of the structure to maintain a minimum clearance of 6-feet below the bottom stringer (soffit) of the bridge. The bridge currently exists as a 22-span simple-supported stringer timber bridge with a 5- to 6-inch-thick continuous cast in place reinforced concrete deck overlain with asphalt concrete and closed end reinforced concrete strutted abutments supported on Coastal Douglas Fir (CDF) timber piles. The bents and abutments are set at a 45-degree skew to accommodate flows within the Mojave River (Channel) below. Timber railing and plywood planking accommodating an elevated 2-foot-wide walk on both sides of the bridge is worn and deteriorating. Current sufficiency rating per Caltrans biannual bridge inspection reports (BRIS) for the structure is roughly 76. Average daily traffic (ADT) recorded in vicinity of the bridge in 2022 is 9,559 vehicles per day.</p> <p>The Project includes the demolition of the existing two-lane 22 span simple-supported stringer timber bridge and its replacement with a four-lane, 10-span cast-in-place reinforced concrete slab structure founded on cast-in-drilled hole piles (CIDH) or driven concrete pile extensions (Figure 3. Project Features). This proposed structure will meet and address County and American Association of State Highway and Transportation Officials (AASHTO) standards and criteria, or equivalent. Approximately 1,200 feet of approach roadway work would be required to widen Baker Boulevard to its ultimate width. The design would construct and/or tie into existing, planned and projected ultimate roadway improvements from 0.14 miles west of the existing structure to Death Valley Road (State Highway 127). Additionally, the new bridge will include sidewalks, streetlights, and bridge barrier railing meeting current MASH safety and testing requirements. Existing driveways located within the Project area may require improvements to ensure conformity with the widened bridge and roadway approaches.</p> <p>It is anticipated that excavators, dozers, dump trucks, concrete trucks, drill rigs, pile driving rigs and concrete pumps will be required to rehabilitate and widen the existing road surface and replace the bridge. Temporary and permanent right of way acquisition may be required for construction. The existing structure is well suited for either staged construction, with part of the new structure built adjacent to the existing bridge prior to removal of the existing bridge or a full detour (1.25-mile detour length) using adjacent SR-127/I-15 and the local road network to provide a complete closure for construction. Both options will keep the new bridge and approach road widenings within existing ROW. The Project will require relocation of overhead utilities, utilities attached to the bridge, and may require relocation of underground utilities along the roadway approaches. Construction may start as early as 2026 and may last 24 months.</p> <p>The proposed Project may construct a permanent ramp providing access into the San Bernardino County (SBC) Flood Control District (FCD) owned floodway channel north of the bridge along the eastern levee to better facilitate channel maintenance and future bridge inspections.</p> <p>This project is included in the Southern California Association of Governments (SCAG) 2024 Connect SoCal plan, the current Regional Transportation Plan/Sustainable Communities Strategy, and the 2023 Federal Transportation Improvement Program (2023 FTIP). Caltrans is the lead agency under the National Environmental Policy Act (NEPA) and County is lead agency under the California Environmental Quality Act (CEQA).</p>
<p>Type of Project <i>(use Table 1 on instruction sheet)</i> Change to existing regionally significant street.</p>

PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

County San Bernardino		Narrative Location/Route & Postmiles The bridge replacement would occur along Baker Boulevard over the Mohave River Channel between Death Valley Road (State Route 127) and Mill Road in the town of Baker, CA. Caltrans Project Federal Number: STPL-5954(193)			
Lead Agency: Caltrans (NEPA)					
Contact Person Zach Liptak		Phone# 916-858-0642	Fax# 916-858-0643		Email zliptak@dokkenengineering.com
Hot Spot Pollutant of Concern (<i>check one or both</i>) PM2.5 PM10 X					
Federal Action for which Project-Level PM Conformity is Needed (<i>check appropriate box</i>)					
<input checked="" type="checkbox"/>	Categorical Exclusion (NEPA)	<input type="checkbox"/>	EA or Draft EIS	<input type="checkbox"/>	FONSI or Final EIS
<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	PS&E or Construction
<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	Other
Scheduled Date of Federal Action: 2025					
NEPA Assignment – Project Type (<i>check appropriate box</i>)					
<input type="checkbox"/>		<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Exempt		Section 326 – Categorical Exemption		Section 327 – Non-Categorical Exemption	
Current Programming Dates (<i>as appropriate</i>)					
	PE/Environmental	ENG	ROW	CON	
Start	Prior	Prior	Prior	2023/2024	
End	Prior	Prior	Prior	2023/2024	
Project Purpose and Need (Summary): (<i>attach additional sheets as necessary</i>) The purpose of the Project is to improve structure safety and operations through replacement of the existing bridge and roadway approach. The project is needed to meet current bridge structural design and safety standards along with projected future traffic capacity needs albeit the project in and of itself will not generate increase traffic volume and/or demand.					
Surrounding Land Use/Traffic Generators (<i>especially effect on diesel traffic</i>) Highway Commercial, Rural Commercial, and Floodway. Implementation of the project would not affect light duty vehicle or truck traffic volumes along Baker Boulevard, and it would not introduce new truck trips to the area.					

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility
Opening Year (2028)

Baker Boulevard between Death Valley Road (State Route 127) and Mill Road	Level of Service		AADT		AADT Trucks	
	Build	No Build	Build	No Build	Build	No Build
Average Weekday	LOS C	LOS C	6,062	6,062	552 (9.1%)	552 (9.1%)
Average Weekend	LOS C	LOS C	9,369	9,369	853 (9.1%)	853 (9.1%)

Source: Fehr & Peers, 2024. Traffic information from *Baker Bridge Replacement and Travel Demand Forecasting Memo, October 2024*

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

Baker Boulevard between Death Valley Road (State Route 127) and Mill Road	Level of Service		AADT		AADT Trucks	
	Build	No Build	Build	No Build	Build	No Build
Average Weekday	LOS C	LOS C	9,700	9,700	883 (9.1%)	883 (9.1%)
Average Weekend	LOS C	LOS D	14,700	14,700	1,338 (9.1%)	1,338 (9.1%)

Source: Fehr & Peers, 2024. Traffic information from *Baker Bridge Replacement and Travel Demand Forecasting Memo, October 2024*

As shown in the data above, the maximum truck AADT along Baker Boulevard would be approximately 1,338 trucks per day in the Horizon/Design Year of 2050. The maximum truck percentage throughout the project area would be approximately 9.1% under both the Build and No Build Alternative.

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

The proposed action does not involve development of a new interchange or intersection, nor does it involve reconfiguration of an existing intersection that would affect local traffic circulation patterns or truck volumes.

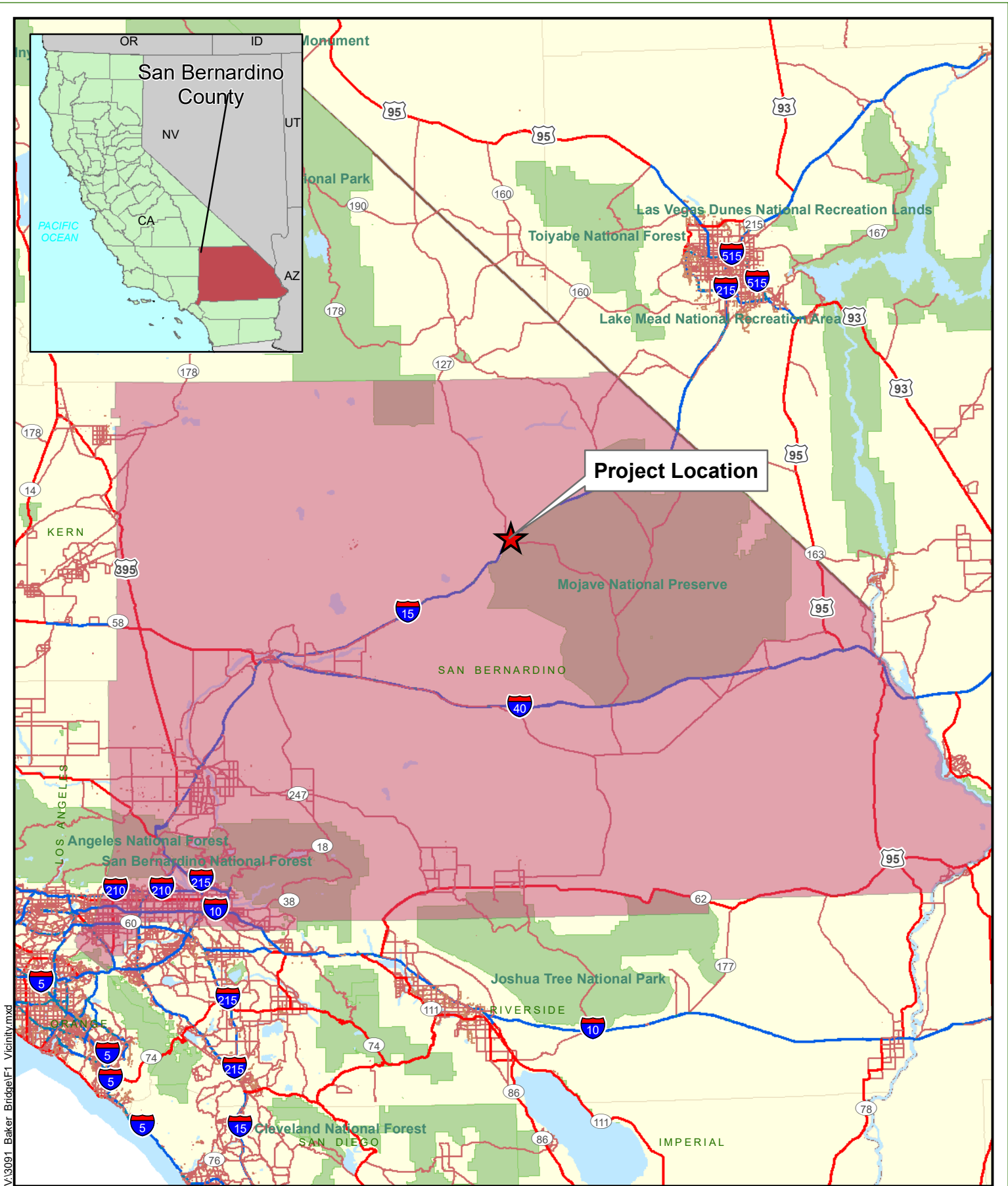
RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

The proposed action does not involve development of a new interchange or intersection, nor does it involve reconfiguration of an existing intersection that would affect local traffic circulation patterns or truck volumes.

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

The proposed project improvements would increase capacity and improve traffic operations, reducing delay times and improving operations from a LOS D to a LOS C or better in the design year conditions.

Comments/Explanation/Details <i>(attach additional sheets as necessary)</i>	
The following table details why the project does not meet the definition of a Project of Air Quality Concern.	
EPA Definition of POAQC	Proposed Project
(i) New or expanded highway projects that have a significant number of or significant increase in diesel vehicles;	The Baker Boulevard Bridge Replacement Project is not a new or expanded highway project with a significant number of or significant increase in diesel vehicles. Diesel/heavy truck traffic is expected to be 9.1% within the Project Area. The greatest number of trucks on a segment is estimated to be 1,338, which is well below the general threshold of 10,000 diesel trucks (i.e. 125,000 volume of which 8% is diesel). The truck percentage is projected to remain the same for both the opening year and the horizon year at approximately 9.1%.
(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;	The anticipated number of diesel vehicles is not significant (see above).
(iii) New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location;	Bus and rail terminals and transfer points are not part of this project.
(iv) Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and	Expanded bus and rail terminals and transfer points are not part of this project.
(v) Projects in or affecting locations, areas, or categories of sites which are identified in the PM ₁₀ or PM _{2.5} applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.	The project is not in, nor will it affect, a location of violation or possible violation



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Source: ESRI 2008; Dokken Engineering 10/24/2024; Created By: amyd



0 10 20 30
Miles

FIGURE 1
Project Vicinity

PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement
STPL-5954(193)
Baker, San Bernardino County, California

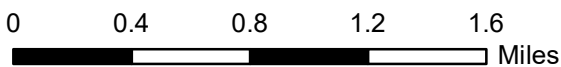


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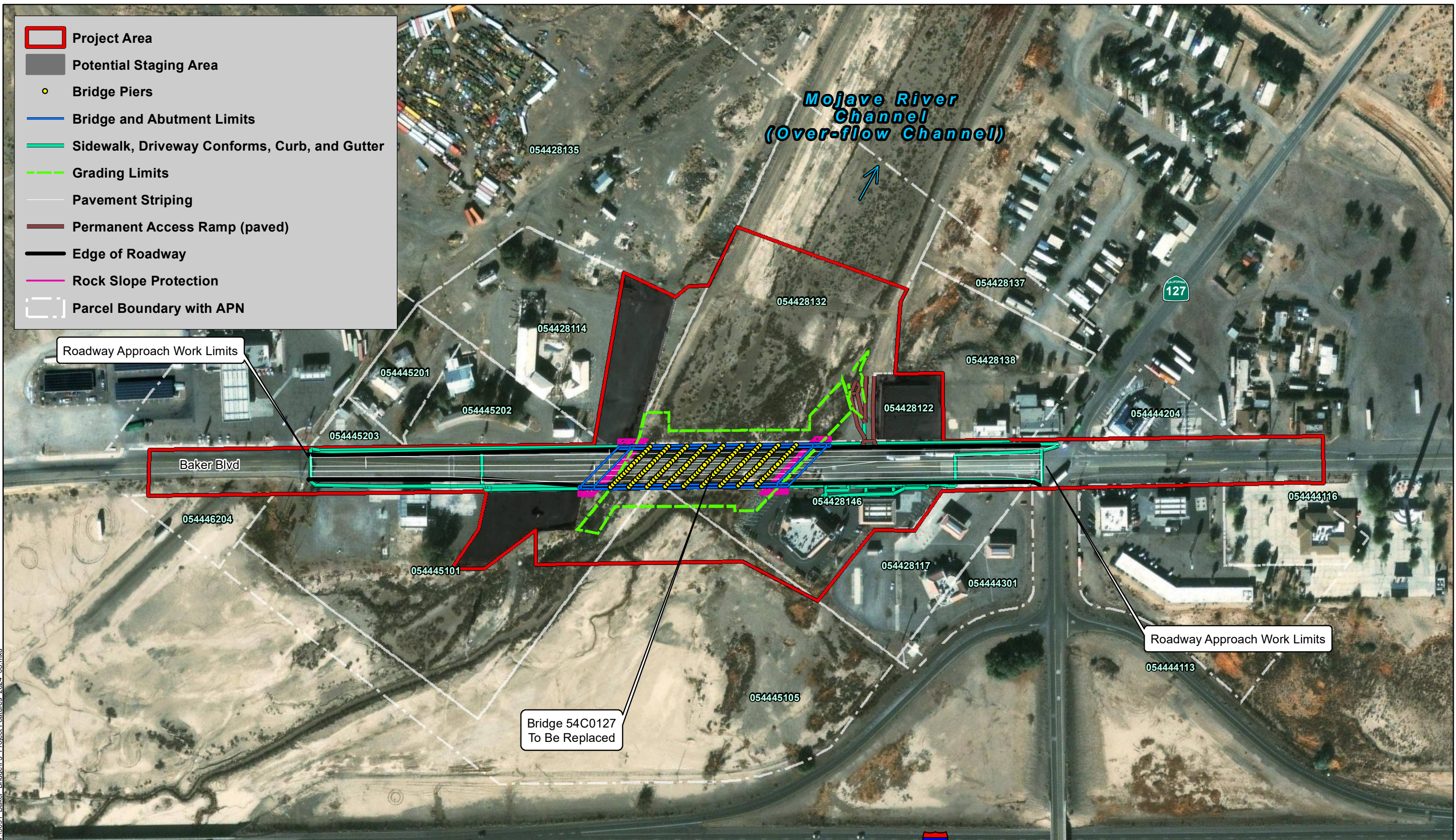
Source: ESRI World Street Maps Online; Dokken Engineering 10/24/2024; Created By: amyd

FIGURE 2
Project Location

PSR#TD004 Baker Boulevard Over Mojave River Bridge Replacement
STPL-5954(193)
Baker, San Bernardino County, California



- Project Area
- Potential Staging Area
- Bridge Piers
- Bridge and Abutment Limits
- Sidewalk, Driveway Conformers, Curb, and Gutter
- Grading Limits
- Pavement Striping
- Permanent Access Ramp (paved)
- Edge of Roadway
- Rock Slope Protection
- Parcel Boundary with APN



V:\3091 Baker_Bidder\F3 Project Features_2024_08.mxd

Source: ESRI Maps Online; Dokken Engineering 10/1/2024; Created By: amyd



Figure 3
Project Features