

ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017
PROJECT BASELINE AGREEMENT
Pumpkin Center 3R Rehabilitation (06-0V610)

Resolution _____

(will be completed by CTC)

1. FUNDING PROGRAM

- Active Transportation Program
- Local Partnership Program (Competitive)
- Solutions for Congested Corridors Program
- State Highway Operation and Protection Program
- Trade Corridor Enhancement Program

2. PARTIES AND DATE

- 2.1 This Project Baseline Agreement (Agreement) for the *Pumpkin Center 3R Rehabilitation (06-0V610)*, effective on, _____ (will be completed by CTC), is made by and between the California Transportation Commission (Commission), the California Department of Transportation (Caltrans), the Project Applicant, *Caltrans*, and the Implementing Agency, *Caltrans*, sometimes collectively referred to as the "Parties".

3. RECITAL

- 3.2 Whereas at its May 13, 2020 meeting the Commission approved the State Highway Operation and Protection Program, and included in this program of projects the *Pumpkin Center 3R Rehabilitation (06-0V610)*, the parties are entering into this Project Baseline Agreement to document the project cost, schedule, scope and benefits, as detailed on the Project Programming Request Form attached hereto as Exhibit A and the Project Report attached hereto as Exhibit B, as the baseline for project monitoring by the Commission.
- 3.3 The undersigned Project Applicant certifies that the funding sources cited are committed and expected to be available; the estimated costs represent full project funding; and the scope and description of benefits is the best estimate possible.

4. GENERAL PROVISIONS

The Project Applicant, Implementing Agency, and Caltrans agree to abide by the following provisions:

- 4.1 To meet the requirements of the Road Repair and Accountability Act of 2017 (Senate Bill [SB] 1, Chapter 5, Statutes of 2017) which provides the first significant, stable, and on-going increase in state transportation funding in more than two decades.
- 4.2 To adhere, as applicable, to the provisions of the Commission:
- Resolution *Insert Number*, "Adoption of Program of Projects for the Active Transportation Program", dated _____
 - Resolution *Insert Number*, "Adoption of Program of Projects for the Local Partnership Program", dated _____
 - Resolution *Insert Number*, "Adoption of Program of Projects for the Solutions for Congested Corridors Program", dated _____
 - Resolution G-20-40, "Adoption of Program of Projects for the State Highway Operation and Protection Program", dated 05/13/2020
 - Resolution *Insert Number*, "Adoption of Program of Projects for the Trade Corridor Enhancement Program", dated _____

- 4.3 All signatories agree to adhere to the Commission's State Highway Operation and Protection Program, Guidelines. Any conflict between the programs will be resolved at the discretion of the Commission.
- 4.4 All signatories agree to adhere to the Commission's SB 1 Accountability and Transparency Guidelines and policies, and program and project amendment processes.
- 4.5 Caltrans agrees to secure funds for any additional costs of the project.
- 4.6 Caltrans agrees to report on a quarterly basis; after July 2019, reports will be on a semi-annual basis on the progress made toward the implementation of the project, including scope, cost, schedule, outcomes, and anticipated benefits.
- 4.7 Caltrans agrees to prepare program progress reports on a quarterly basis; after July 2019, reports will be on a semi-annual basis and include information appropriate to assess the current state of the overall program and the current status of each project identified in the program report.
- 4.8 Caltrans agrees to submit a timely Completion Report and Final Delivery Report as specified in the Commission's SB 1 Accountability and Transparency Guidelines.
- 4.9 All signatories agree to maintain and make available to the Commission and/or its designated representative, all work related documents, including without limitation engineering, financial and other data, and methodologies and assumptions used in the determination of project benefits during the course of the project, and retain those records for four years from the date of the final closeout of the project. Financial records will be maintained in accordance with Generally Accepted Accounting Principles.
- 4.10 The Transportation Inspector General of the Independent Office of Audits and Investigations has the right to audit the project records, including technical and financial data, of the Department of Transportation, the Project Applicant, the Implementing Agency, and any consultant or sub-consultants at any time during the course of the project and for four years from the date of the final closeout of the project, therefore all project records shall be maintained and made available at the time of request. Audits will be conducted in accordance with Generally Accepted Government Auditing Standards.

5. SPECIFIC PROVISIONS AND CONDITIONS

5.1 Project Schedule and Cost

See Project Programming Request Form, attached as Exhibit A.

5.2 Project Scope

See Project Report or equivalent, attached as Exhibit B. At a minimum, the attachment shall include the cover page, evidence of approval, executive summary, and a link to or electronic copy of the full document.

5.3 Other Project Specific Provisions and Conditions

Attachments:

Exhibit A: Project Programming Request Form

Exhibit B: Project Report

SIGNATURE PAGE
TO
PROJECT BASELINE AGREEMENT

Pumpkin Center 3R Rehabilitation (06-0V610)

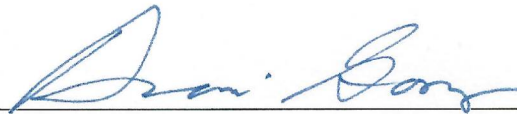
Resolution SHOPP-P-2021-05B

Date

Project Applicant

Date

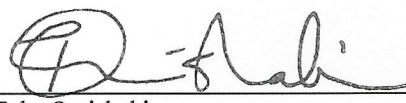
Implementing Agency



DIANA GOMEZ
Date 02/05/2021

District Director


California Department of Transportation



Toks Omishakin
Date 3/4/2021

Director

California Department of Transportation



Mitchell Weiss
Date 04/05/21

Executive Director

California Transportation Commission

Baseline agreement information was extracted from Caltrans' project data systems. Project description, funding and performance measures are from CTIPS. Project delivery milestones are from PRSM. All information is current and accurate.

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

BASELINE AGREEMENT						Date:	02/18/21 03:45:01 PM
District	EA	Project ID		PPNO	Project Manager		
06	0V610	0616000222		6805	SENAN, HUSSEIN		
County	Route	Begin Postmile	End Postmile	Implementing Agency			
KER	119	28.2	31.3	PA&ED	Caltrans		
				PS&E	Caltrans		
				Right of Way	Caltrans		
				Construction	Caltrans		
Project Nickname							
Pumpkin Center 3R Rehab							
Location/Description							
Near Bakersfield, from 0.1 miles east of Ashe Road to Route 99 Separation. Rehabilitate roadway with asphalt pavement, reconstruct ramp termini at southbound Route 99 offramp with concrete pavement, widen intersections and shoulders to meet current standards, add bicycle lanes, median lane to accommodate two-way turning, install drainage inlets and stormwater basin, sidewalks and upgrade Americans with Disabilities Act (ADA) ramps to current standards.							
Legislative Districts							
Assembly:	34		Senate:	16		Congressional:	23
PERFORMANCE MEASURES							
	Primary Asset	Good	Fair	Poor	New	Total	Units
Existing Condition	Pavement		5.1	0.9		6	Lane-miles
Programmed Condition	Pavement	6				6	Lane-miles
Project Milestones						Actual	Planned
Project Approval and Environmental Document Milestone						12/08/20	
Right of Way Certification Milestone							09/01/23
Ready to List for Advertisement Milestone							12/01/23
Begin Construction Milestone (Approve Contract)							06/01/24
FUNDING (Allocated amounts are shaded)							
Component	Fiscal Year	SHOPP					Total
PA&ED	17/18	3,200					3,200
PS&E	20/21	2,500					2,500
RW Support	20/21	6,300					6,300
Const Support	23/24	4,600					4,600
RW Capital	23/24	15,900					15,900
Const Capital	23/24	26,500					26,500
Total		59,000					59,000

Project Report
For
Project Approval

On Route SR 119
Between 0.1 Mile West of Ashe Road
And SR 119 / SR 99 Separation

I have reviewed the right-of-way information contained in this report and the right-of-way data sheet attached hereto, and find the data to be complete, current and accurate:



NABEELAH ABI-RACHED
Acting Central Region Division Chief, Right of Way

APPROVAL RECOMMENDED:



HUSSEIN SENAN, Project Manager

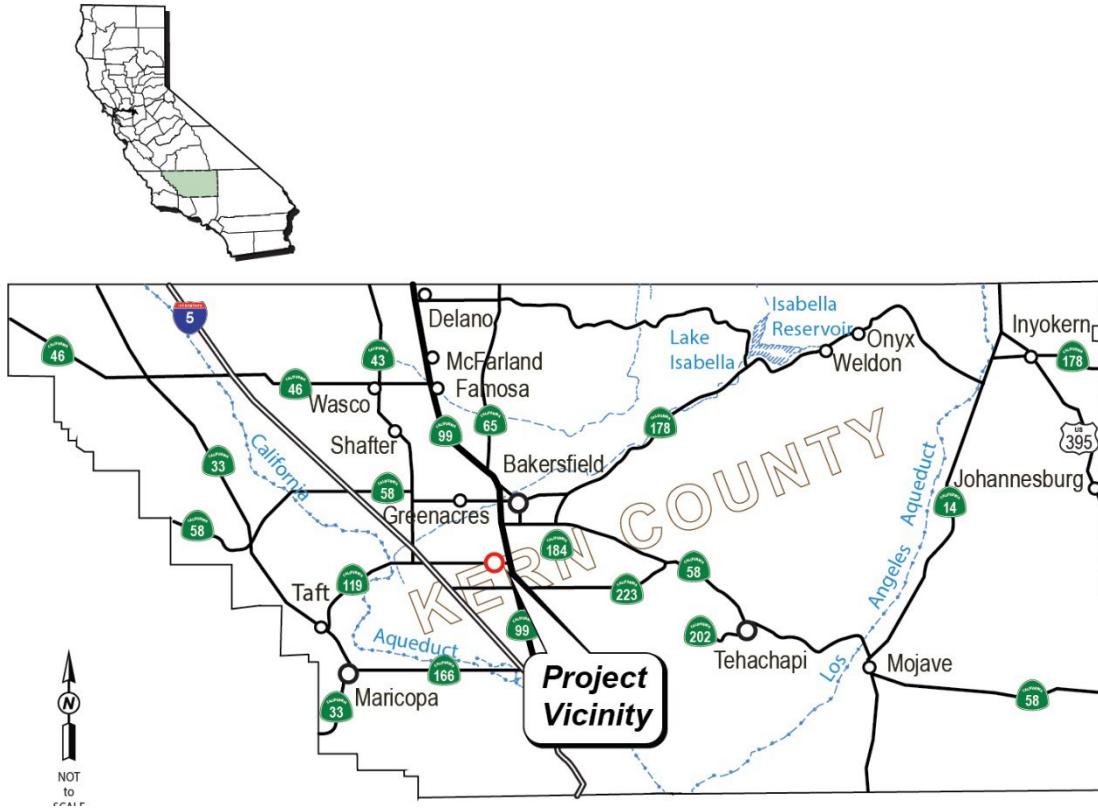
APPROVED:



DIANA GOMEZ, District 6 Director

12-8-2020
Date

Vicinity Map



Along SR 119 between 0.1 mile west of Ashe Road
To SR 119 / SR 99 Separation

06 - Ker - 119 – 28.2/31.3
06-0V6100 - 0616000222 – 6805
20.10.201.120
Roadway Rehabilitation 3R
November 2020

This project report has been prepared under the direction of the following registered civil engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

Ranjeev Kumar Ghai

10/30/2020

REGISTERED CIVIL ENGINEER

DATE



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1. INTRODUCTION

Project Description: The Pavement Condition Report (PCR) from the most recent surface distress data collected within the project limits of State Route (SR) 119 has identified the need for timely action to preserve and extend the service life of the existing pavement. The proposed project will restore the pavement to a state of good repair and extend the remaining service life of the pavement by an additional period of 20 years. The project will also restore transportation assets identified in the Transportation Asset Management Plan (TAMP), to meet the performance objectives of the State Highway System Management Plan (SHSMP). The project will also include a range of comprehensive improvements consistent with the scoping guidance of Design Information Bulletin (DIB) 79-04 and the policies of the Department. Some of the key scoping principles include complete streets design features to make the highway facility accessible to all modes of transportation and all age groups consistent with the Department’s complete street policy. SR 119 will function as a “Main Street” within the community of Pumpkin Center. The proposed project will include a continuous median two-way left turn lane between Wible Road and SR 119 & SR 99 separation to enhance the safety and improve the operational efficiency of the highway.

Additional acquisition of right of way, along with permanent and temporary construction easements, are required for the proposed project. A significant number of utility relocations will also be required. The current capital construction expenditure for the project is \$19,600,000 and will be funded from the 2020 State Highway Operational Protection Program (SHOPP). The Ready to List (RTL) is in 2023 fiscal year. A summary of the project data is shown in the table below:

Project Limits	06-Ker-119 - PM 28.2/31.3	
Number of Alternatives	2 – Build / No Build	
	Current Cost Estimate:	Escalated Cost Estimate:
Capital Outlay Support	\$15,300,000	\$16,600,000
Capital Outlay Construction	\$19,600,000	\$23,000,000
Capital Outlay Right-of-Way	\$13,708,000	\$15,900,000
Funding Source	SHOPP/201.120 – Roadway Rehabilitation 3R	
Funding Year	2023/24	
Type of Facility	2-lane Conventional Highway	
Number of Structures	0	
SHOPP Project Output	6.0 Lane Miles	
Environmental Determination or Document	Initial Study/Mitigated Negative Declaration for CEQA and Categorical Exclusion (CE) for NEPA	
Legal Description	In Kern County near Bakersfield from 0.1mile west of Ashe Road to SR 119/ SR 99 Separation	
Project Development Category	4A	

2. RECOMMENDATION

It is recommended that the Project Report (PR) be approved using the preferred alternative and that the project proceed to the design phase. The affected local agencies have been consulted with respect to the recommended plan, that their views have been considered, and the local agencies are in general accord with the plan as presented.

3. BACKGROUND

Project History

Project Initiation Document (PID) Phase: A Project scope summary report (PSSR) was approved for the only recommended viable alternative solution and for programming in June 2017. The Project Development Team (PDT) developed one viable alternative solution that met the project Purpose and Need. A Mini-Preliminary Environmental Analysis Report (Mini-PEAR) was prepared that identified the scope of environmental studies, environmental constraints and the anticipated environmental determination/document.

Project Approval & Environmental Document (PA&ED) Phase: The project was evaluated for the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) environmental compliance. An Initial Study with Mitigated Negative Declaration under CEQA and a Categorical Exclusion under NEPA was prepared to document the findings for compliance with the Federal and State environmental laws and regulations. A Value Analysis study to improve the project performance and to minimize construction schedule and costs was held in November 2019.

Community Interaction

A Public Notice was issued in July 2020, for a review of the Draft Environmental Document (DED), to submit written review comments and to request an Opportunity for a Public Hearing. Notices to government agencies, officials, and affected property owners and businesses, a public notice was also issued in the local newspaper. There were no comments received opposing the project from anyone including local agencies or affected business/property owners.

Existing Facility

The proposed project is located under the jurisdiction of the City of Bakersfield sphere of influence.

Within the proposed project limits: SR 119 is a two-lane conventional highway. The typical roadway cross section consists of 12' traveled way lanes, a 2' continuous paved shoulder except at the new subdivisions, where the shoulders are 8'. The right of way width is 60'/55', except at new subdivisions / developments, where the right of way is offset at the Ultimate Transportation Corridor (UTC). Pumpkin Center and Panama are two unincorporated communities located along SR 119. An elementary school is located at the NE corner of SR 119 and Stine Road intersection. A Changeable Message Sign (CMS) is located at PM 29.90 facing the EB direction. The posted speed limit along SR 119 is 55

and 40 mph, west and east of Wible Road, respectively. There are 3 major signalized intersections along SR 119 at Ashe, Stine and Wible Road. Several public road connections are located along SR 119 at Akers (south), Cerro Street (north), Hughes lane (south), and Michele Street (north). Multiple paved and unpaved driveway approaches are located along the highway. Pedestrian facilities and bicycling facilities exist only in segments in and around the new subdivisions and new developments.

The roadbed is primarily a flexible pavement type with HMA (Type A) surfacing. A minor segment near the SR 99/SR 119 separation is rigid pavement. The adjacent land use consists of a mix of established agricultural land, housing communities, retail businesses and new subdivisions. There are several large and small diameter trees, a row of Palm trees within the Clear Recovery Zone (CRZ) of the highway facility. There are 5 canals crossing SR 119, the Farmer’s Canal, Randall Ditch, Burness Ditch, Stillson Ditch and the Branch One Ditch. There are several public utilities with encroachments along SR 119. Utility poles are located along both directions and are within the CRZ of the highway.

Within the community of Pumpkin Center: There are several retail businesses, restaurants, automotive shops, and a US Post Office located along SR 119. On street parking exists along this section of SR 119 in front of businesses and is configured perpendicularly to the highway.

4. PURPOSE and NEED

Purpose:

The purpose of the project is to:

- Rehabilitate the roadway to a state of good repair.
- Improve operational efficiency of SR 119 within the project limits.
- Incorporate complete streets features within the project limits.
- Reduce flooding issues within the proposed project limits.

Need:

At the current level of distress, the pavement will continue to deteriorate rapidly and therefore will require costly preventive and corrective maintenance to preserve the service life of the pavement. The proposed rehabilitation of the highway will thereby reduce increasing maintenance costs and reduce the exposure of maintenance personnel to highway traffic. There are significant flooding issues identified by Maintenance at several locations, within the proposed project limits.

4A. Problem, Deficiencies and Justification

Some of the issues identified within the proposed project limits are as follows:

- The performance measure identified in TAMP for the mainline existing asphalt pavement is, 5.1 miles in fair condition and 0.90 miles in poor condition, see Attachment K.

- The 2019 Deflection Study Report (Attachment J) indicates a maximum International Roughness Index (IRI) of 220 inches/mile in the EB direction and 273 inches/mile in the WB direction. As per Highway Design Manual (HDM), the maximum allowable value of IRI that does not require special consideration for design is 170 inches/mile.
- The Automated Pavement Condition Survey (APCS) data for year 2016, collected for the most recent surface distresses showed signs of alligator, longitudinal and transverse cracks throughout the project limits.
- The average 80th percentile deflection measurements at various test sections along EB and WB traveled way lanes, are greater than the tolerable deflections at the surface (TDS).
- Shoulder widths along SR 119 within the project limits are nonstandard. The typical shoulder width is 2' wide, except at the new subdivisions and new developments.
- Pedestrian and bicycling facilities currently exist in segments around new subdivisions/developments only.
- Fixed objects such as utility poles, large and small diameter trees are within the CRZ of the highway facility.
- There are numerous flooding issues reported by Caltrans Maintenance at several locations along SR 119. Within the community of Pumpkin Center there is severe flooding and standing storm water issues.

4B. Regional and System Planning

SR 119 is a major East West connector starting from SR 33 in Taft to SR 99 in Bakersfield. It passes through some of Kern County's most famous oil fields, including the Midway-Sunset, the third-largest oil field in the United States; the Buena Vista Oil Field; and runs adjacent to the Elk Hills Oil Field. Land use along SR 119 include commercial and residential development, as well as oil fields and agriculture in the rural county area. The route also passes through the City of Taft, and small communities of Ford City, Valley Acres, Dustin Acres, and Pumpkin Center.

Identify Systems

SR 119, as identified in the Transportation Concept Report (TCR), is on the Freeway and Expressway System and is considered a Terminal Access route on the STAA Truck Network. It is a route with Regional Significance. SR 119 serves as the main connector between the extreme southwestern corner of the San Joaquin Valley and Bakersfield.

State Planning

SR 119 is a two-lane conventional highway and is planned to be a six-lane expressway in the vicinity of the project, in keeping with City of Bakersfield and County of Kern General Plan Circulation Elements.

Regional Planning

Per the 2009 Kern County General Plan Circulation Element, SR 119 connects Taft to Bakersfield. Near Taft, SR 119 passes directly through Valley Acres and Dustin Acres. The 2009 General Plan has a Goal to realign and upgrade SR 119 from SR 99 to west of Taft, with a Policy stating Caltrans should upgrade SR 119 to a freeway – a project to include construction of a bypass around the communities of Dustin Acres and Valley Acres. The plan further qualifies this policy by stating Caltrans should bring this project to a “ready stage”, with the Roads Department coordinating with Caltrans in developing and updating a Route Concept Report and Project Study Report for the facilities. Similarly, both Kern Council of Governments (KCOG) and the Kern County Roads Department should coordinate with Caltrans in developing Federal Transportation Improvement Plan (FTIP) priorities for SR 119 freeway. Note an update of the Kern County General Plan is currently underway.

KCOG’s 2018 Regional Transportation Plan (RTP) includes in Chapter 2 Planning Policy 16.1 to widen SR 119 in the vicinity of Taft. KCOG considers SR 119 to be regionally significant and in Kern County it is also known as Taft Highway. SR 119 has been a part of a KCOG-commissioned truck origin-destination study (in 2011), and the bypass portion of a project to widen SR 119 from Cherry Avenue to Elk Hills Road was recently completed. Projects on SR 119 in the 2018 RTP Constrained List include the remaining phases of widening from Cherry Avenue to Elk Hills road, the installation of HOV lanes near the interchanges with SR 99 and the West Beltway, and also widening the highway to four lanes both between Interstate 5 (I-5) to Buena Vista, and between County Road and Tupman Avenue in Elk Hills. Projects on SR 119 in the 2018 Unconstrained list include widening the highway to four lanes between SR 33 and Cherry Lane, and between Tupman Road and I-5.

Local Planning

SR 119 is listed in the Kern COG Active Transportation Plan. SR 119 from I-5 to SR 99 is a significant entrance way into the City of Bakersfield and is an important component of the Circulation Elements of the City of Bakersfield and County of Kern. These agencies desire to have a consistent and aesthetically pleasing entranceway and agreed to adopt uniform policies and standards for the highway within their respective jurisdictions. The City of Bakersfield and the County of Kern have entered into a Memorandum of Understanding (MOU) that includes standards and policies that apply to all developments within a specified area that have frontage on SR 119. See Attachment L.

Transit Operator Planning

No transit stops are listed on this segment.

4C. Traffic

Current and Forecasted Traffic:

The future travel forecasting was based on the assumption that the project location is a rural setting and planned land use in the area growth rate of 2.48% was used for forecasting purposes.

Item	Along SR 119	South Bound, SR 99 Off Ramp to SR 119
Construction Year ADT (2024)	20,500	10,400
Future ADT (2044)	33,500	17,000
Future Year ADT (2064)	54,500	28000
DHV (2044)	2,850	1500
DHV (2064)	4,650	2,400
T (%) (2044, 2064)	6%	5%
D (%) (2044, 2064)	60%	100%
20 Year ESAL (2044)	10,120,000	8,320,000
20 Year TI (2044)	12	11.5
40 Year ESAL (2064)	28,150,000	23,210,000
40 Year TI (2064)	13.5	13

Notes: ADT – Average Daily Traffic, DHV – Design Hourly Volume, ESAL – Equivalent Single-Axle Loads forecasted for pavement engineering, TI- Traffic Index, D – Directional Split, T – Truck Traffic Volume as a percentage of DHV.

Collision Analysis:

The collision analysis of Actual Vs. the Statewide Average accident rates for the most recent 3-year period (07/01/2016 to 06/30/2019) for the mainline segment of SR 119 and along SR 119 at various intersections are as follows:

- **Ker SR 119 Mainline Segment PM 28.30/31.28**

Ker-SR 119 (PM 28.30 / 31.28)	Actual / (MVM)			State Average / (MVM)		
	Fatal	F+I	Total	Fatal	F+I	Total
	0.048	0.31	0.73	0.014	0.42	1.02

Notes: 1) Source: Traffic Accident Surveillance and Analysis System (TASAS) Table B- Selective Accident Rate Calculation, Caltrans District 06. 2) The total accident rate is calculated using a formula based on several accident categories that are not shown in the table above. Therefore, the columns entitled “Fatal” and Fatal & Injury” (F+I) will not add together to equal the “Total” Column. 3) MVM = Million Vehicle Miles.

The above data indicates that the actual *Fatal* rate is higher than the Statewide Average for similar highways. However, the *Fatal plus Injury* and *Total* rates are lower than the Statewide Averages. There were 30 total reported collisions within the 3.07-mile segment (2-Fatal, 11-Injury, 17-Property Damage Only). The types of collisions were “rear-ending”

and “broadside”. The primary collision factor was “speeding” for most “Rear-end” collisions, and “failure to yield” for “broadside” collisions. The 3 hit object collisions involved the following objects: pole (1), Soundwall (1), other object off the road (1).

Two fatal collision were recorded in this segment. The first one occurred at PM 26.16, just west of the Stine Road intersection. It was a “head-on” collision and the primary collision factor was listed as “influence of alcohol”. The second fatal collision occurred at PM 29.57, between Stine Road and Van Horn Road. It was a “rear end” collision in the EB direction. The primary collision factor was listed as “other violation”.

Within the Pumpkin Center area from PM 30.48 to 30.76, a total of 17 collisions were recorded. This is a segment with multiple commercial and residential accesses to and from SR 119. Of the 17 collisions, 16 were related to vehicles turning or stopping. An addition of a new two-way left turn lane would improve safety and significantly reduce the number of turning related collisions in the segment.

At Various Intersections along SR 119

The collision history for the following SR 119 intersections indicate that the *Actual Fatal*, Fatal plus Injury, and Total collision rates are all lower than the Statewide Average for similar intersections.

Intersections	Actual / (MV)			State Average / (MV)		
	Fatal	F+I	Total	Fatal	F+I	Total
SR 119 at Ashe Road	0.00	0.00	0.06	0.002	0.16	0.43
SR 119 at Van Horn Road	0.00	0.00	0.00	0.002	0.06	0.14
SR 119 at Wible Road	0.00	0.05	0.05	0.002	0.16	0.43
SR 119 at Hughes Lane	0.00	0.00	0.06	0.002	0.06	0.14
SR 119 at Michele Street	0.00	0.00	0.00	0.002	0.06	0.14
SR 119 at SB 99 Ramps	0.00	0.06	0.06	0.002	0.06	0.14

Ker SR 119 at Stine Road PM 29.32:

Intersections	Actual / (MV)			State Average / (MV)		
	Fatal	F+I	Total	Fatal	F+I	Total
SR 119 at Stine Road	0.00	0.18	0.24	0.002	0.16	0.43

This is a 4-legged signalized intersection with left turn lanes in the EB and WB directions. The collision history for this intersection indicates that the Actual Fatal plus Injury collision rate is slightly higher than the Statewide Averages for similar intersections. However, the Actual Fatal and Total collision rates are lower than the Statewide Averages. A total of 4 collisions (0-Fatal, 3-Injury, 1-Property Damage Only) were recorded at this intersection.

Ker SR 119 at Cerro Street (North) Intersection-PM 30.51:

Intersections	Actual / (MV)			State Average / (MV)		
	Fatal	F+I	Total	Fatal	F+I	Total
SR 119 at Cerro Street	0.00	0.00	0.61	0.002	0.05	0.14

The collision history for the same three-year study period for this intersection indicates that the Actual Fatal collision rate is lower than the Statewide Averages for similar intersections. However, the Actual Fatal plus Injury, and *Total* collision rates are higher than Statewide Average for similar highway facilities. This is a stop control intersection with stop control on Cerro Street to the north and a driveway access to the south. A total of 10 collisions (0-Fatal, 0-Injury, 10-Property Damage Only) were recorded at this intersection. The following table shows the types of collision and their corresponding primary collision factors. The object struck in the “hit object” collision was listed as “other object off the road”.

5. ALTERNATIVES**5A. Viable Alternative**

Preferred Alternative – Build Alternative:

Proposed Engineering Features

- Rehabilitate and reconstruct existing mainline pavement to extend the design life by an additional 20 years.
- Reconstruct 300' of ramp termini along SB SR 99 off ramp at SR 119, and engineer the roadbed as a rigid pavement structural section.
- Construct 8' shoulders where non-standard shoulder exists.
- Construct a 14 feet wide, continuous Two Way Left Turn Lane (TWLTL) in the median from Wible Road to SB SR 99 / SR 119 separation.
- Construct an exclusive right turning lane along SR 119, in the WB direction at Ashe road intersection to improve traffic operations of the intersection during special events that occur at the Bakersfield Sports Village located on Ashe Road just north of SR 119.
- Reconfigure the intersections at Stine and Wible road, to include left turning lanes along the minor legs for simultaneous truck turning movements.
- Improve existing public road connections at Akers Road (south), Cerro Street (north), Hughes Lane (south), and Michele Street (north) to a Standard Public Road Intersection, as per Figure 405.7 of the HDM.
- The edges of pavement shall be offset around right turns at all major intersections to accommodate both the swept and tracking widths of a STAA design vehicle.
- Integrate complete streets design elements to include all modes of transportation. Some of the key complete street's elements include sidewalks, curb ramps, Class II Bike Lanes along East/West bound directions, cross walks, bicycle detection loops.
- Repair localized failure (digouts) areas with a full depth replacement. Install tapered edges along the edge of paved roadbed and place shoulder backing along edge of pavement.

- Construct a drainage retention basin, at the NW corner of Wible and SR 119, within APN 514-020-16. The size of the proposed drainage basin is approximately 340' x 155' (length x width) with a proposed basin depth of 12'.
- Install a 1400' long trunk drain along SR 119, between Palma street and the proposed drainage retention basin.
- Install roadside ditches along SR 119, from 0.1 west of Ashe and Wible road to collect roadway surface runoff.
- Extend irrigation canal crossings and offset the headwalls outside of CRZ.
- Install curb and gutter, sidewalk, and new driveways approaches to provide access to parcels within the community of Pumpkin Center.
- Driveway approaches obliterated due to the proposed improvements will be replaced with new driveway approaches.
- Install sidewalk from the NW corner of Compagnoni Street (PM 31.18) to the gas station located at PM 31.10.
- Large and small diameter trees including a row of palm trees, utility poles, utility appurtenances, traffic signal poles, traffic signs, mailboxes, fire hydrants and headwalls within the project construction footprint are to be removed, reset, or relocated as close to right of way as feasible.
- Install the following Transportation Management System (TMS) field elements:
 - Remove existing Changeable Message Sign (CMS) located at PM 29.90 and install a new CMS with LED display information panel, at the same postmile location.
 - Install a Closed-Circuit Television (CCTV) at the intersection at PM 31.25, SR 119 / SR 99 separation.
 - Add powered 334L cabinet and redo loop detectors and piezo, at approx. PM 31.436

Nonstandard Design Features

Existing overhead electrical and communication lines run parallel along SR 119 and the local streets. Approximately 65 utility poles are estimated to be relocated 41' from Edge of Traveled Way (ETW) of the proposed highway between Ashe Road and Wible Road.

Utility poles are discretionary fixed objects. As per HDM Index, 309 (2) (b), discretionary fixed objects should be located beyond the CRZ at a minimum of 52 feet horizontally from the planned ultimate edge of traveled way. The horizontal clearance to longitudinal utility facilities is 41' from the ETW, and therefore less than the standard horizontal clearance of 52'. A Design Standard Decision Document (DSDD) was prepared to document the engineering decisions made regarding the proposed nonstandard horizontal clearance to discretionary fixed objects. The DSDD was approved on 09-18-2020, by Richard Helgeson, Design Office Chief, Central Region Project development.

Interim Features

Not applicable for the proposed project.

High-Occupancy Vehicle (Bus and Carpool) Lanes

Not applicable for the proposed project

Ramp Metering

Not applicable for the proposed project.

California Highway Patrol Enforcement Areas

Not applicable for the proposed project.

Park-and-Ride Facilities

There are no proposed Park and Ride facilities within project limits. The District Park and Ride Coordinator concurs with this determination.

Utility and Other Owner Involvement

Existing utilities, storm drains and water systems have been approximately located based on available as-built plans, from the Department's encroachment permits, the City of Bakersfield and local utility companies. The following existing underground and overhead utilities have been identified with the project limits.

- Gas Transmission Line: – PG&E has natural gas transmission pipeline crossing SR 119 in a transverse direction at approximately PM 29.72.
- Petroleum (Chevron Pipeline Company (CPL)): Chevron owns and operates a 10-inch petroleum product pipeline crossing SR 119 west of Stine Road.
- Irrigation Canals (Kern Delta Water District): The Kern Delta Water District (KDWD) operates five irrigation canals, from west to east, the Farmers Canal (two 48" dia RCP's), Randall Ditch (36" CMP), Burness Ditch (one 48" CMP), Stillson Ditch (one 36" line, ditch has been installed into a pipeline and re-aligned), and the Branch One Ditch. KDWD also has two properties that abut SR 119, APN's 184-220-06 and 532-040-14, that are used to bank water in high flow years. In addition, KDWD has a water banking facility, the Romero Recharge Basins, that stretch from Ashe Road to Stine Road.
- Gas Lines (PG&E): PG&E has a 4" gas line parallel to SR 119 along the south side. In addition, there is a 3" abandoned gas line from begin project to sta 148+75. Also, there is a 4" natural gas currently inactive and installed for future use, approximately 1575' from Sta. 206+75 to Sta. 222+00.00.
- Water Line (City of Bakersfield): City of Bakersfield (CBK) has a 16" pressurized water main line at back of sidewalk along the northside of SR 119.
- Water Line (California Water Service): CWS has a 12" pressurized main water service line starting at Wible and along the northside of SR 119. The 12" pressurized main shifts to the southside at Palma St. and continues along SR 119 to the east all through the project limits. There is another segment of 12" pressurized water service line along

the northside at the back of sidewalk at the new subdivision at Akers Road and SR 119. The community of Pumpkin Center has a network of waterlines that connect to the main water service line along SR 119.

- Overhead Electrical Lines (PG&E): PG&E has overhead electrical lines running parallel with SR 119, along the southside of SR 119. The overhead electrical lines are within the project footprint and therefore in conflict with the proposed improvements.
- Overhead Fiber Optic and Coaxial cable, Communication Line (Spectrum): Spectrum (earlier known as Bright House Network, BHN), has an overhead fiber optic and coaxial communication line running parallel with the highway and along the southside of SR 119.
- Fiber Optic and coaxial cable, communication line (Spectrum): Spectrum also has a small segment of buried fiber optic and coaxial cable along the northside of SR 119 near new subdivision at the Mountain Ridge and SR 119 intersection and along the southside of SR 119 near the Akers Road and SR 119 intersection.
- Fiber Optic Line (AT&T): AT&T has a buried fiberoptic cable within the existing roadbed of SR 119.

The process of verifying the exact location and ownership of existing utilities, determining conflicts, developing relocation plans is still ongoing. Utility facilities within the proposed project footprint will be relocated, removed or adjusted as necessary. An estimated 120 utility poles are within the project footprint. Relocation of utility facilities will require extensive coordination between the Department and the utility owners.

Railroad Involvement

No railroad agencies will be involved since there are no existing railroad facilities within or near the proposed project.

Highway Planting

Several large diameter trees, small diameter trees, a row of palm trees and vegetation along SR 119, are within the project footprint. The widening of the roadway will require the removal of trees and shrubs from residential areas that front the highway. The vegetation provides an effectual visual screen between the residences and the highway. The visual impact of the removal of this vegetation was studied during the environmental studies and the results of the study are included in the Final Environmental Document attached to this report, (see Attachment D). In summary, it was found that while the removal of the trees will create a visual impact to the adjacent residential and commercial areas, the visual impact will be temporary. The project includes funds for replacement planting to replace the vegetation that was removed and restore the screening effect that was lost with the construction of the project.

Erosion Control

The existing cut slopes for the proposed roadside ditches are typically flat enough to allow re-vegetation and limit potential erosion. An application of native or drought tolerant seed will help in erosion control along the disturbed slopes.

Noise Barriers

Not applicable for this project.

Nonmotorized and Pedestrian Features

All transportation improvements are opportunities to fulfill the objectives of short-range and long-range transportation plans. Walkable communities and safe, connected networks for bicycling can reduce the number of automobile trips, ease congestion, and improve the overall performance of the transportation system. The proposed project will integrate the mobility and accessibility needs of travelers of all ages and abilities including bicyclists and pedestrians. The non-motorized design features include Class II Bike Lanes along EB and WB directions within the proposed 8' shoulders, sidewalks within the community of Pumpkin Center, pedestrian crosswalks, ADA curb ramps and pedestrian refuge islands. The proposed project is consistent with the Department's complete streets policy.

Needed Roadway Rehabilitation and Upgrading

A deflection study and coring for the flexible pavement were performed in April 2019 to evaluate the structural adequacy of the existing pavement, see Attachment J. The estimated average pavement thickness, the average 80th percentile of the measured deflections, the allowable tolerable deflections and the international roughness index are summarized in the table below:

Location	Lane #	Test Section (PM-PM)	Average HMA Thickness (ft)	Average 80 th Percentile Deflections (inch)	Tolerable Deflection (inch)	Maximum IRI (in/mile)
Ker - 119 (EB Lane)	1	28.18-29.18	0.34	0.018	0.013	181
	1	29.18-30.18	1.09	0.016	0.013	129
	1	30.18-31.25	0.78	0.019	0.014	220
Ker - 119 (WB lane)	1	31.25-30.18	0.68	0.016	0.012	273
	1	30.18-29.18	0.47	0.029	0.016	149
	1	29.18-28.18	0.51	0.017	0.013	200

The results of the deflection data were analyzed for the following three performance criteria a) structural adequacy, b) reflective crack retardation and c) ride quality. It was determined that the flexible pavement rehabilitation strategy is controlled by structural adequacy. A preliminary pavement structural section engineered to perform for a design period of 20 years consists of the following pavement structure layers:

Mainline Traveled way	Rehab strategy / Pavement layers
0.1 mile west of Ashe Road / Wible Road	Flexible Pavement: Mill and Overlay <ul style="list-style-type: none"> • 0.35' cold plane • 0.20' RHMA (Type G) • 0.30' HMA (Type A)
Wible Road / Hughes Road (PM 30.8)	Flexible Pavement: Remove and Replace <ul style="list-style-type: none"> • 0.50' Remove Exist AC Surfacing • 0.20' RHMA (Type G) • 0.30' HMA (Type A)
Hughes Road (PM 30.8) / 31.01	Flexible Pavement: Reconstruction <ul style="list-style-type: none"> • 0.20' RHMA (Type G) • 0.35' HMA (Type A) • 1.70' AB <u>Alternative Strategy</u> Rigid Pavement: Reconstruction <ul style="list-style-type: none"> • 0.95' JPCP • 0.35' LCB
Mainline Shoulders	Rehab strategy / Pavement layers
0.1 mile west of Ashe Road / (SR 99/SR 119 separation)	Flexible Pavement: New Construction <ul style="list-style-type: none"> • 0.20' RHMA (Type G) • 1.10' HMA (Type A) • 0.50' AB

However, the final structural section thickness will be based on deflection study performed within an 18 months' timeframe prior to start of construction, to ensure reliability of the rehabilitation strategies.

Ramp Termini at SB SR 99 off ramp at SR 119/SR 99 Intersection:

It is recommended to reconstruct 300' of ramp termini along SB SR 99 off ramp to SR 119, and engineer the roadbed as a rigid pavement structural section. The pavement

rehabilitation strategy recommended is a “lane replacement” strategy with a Continuously Reinforced Concrete Pavement (CRCP). The pavement structure layers will be engineered for a design period of 40 years. The typical pavement structural section engineered for a design life of 40 years consists of a 0.90' CRCP / 0.25' HMA or 1.05' JPCP / 0.25' HMA.

Cost Estimate:

Item	Current year cost
Roadway Construction Cost	\$19,600,000
Right of way Cost	\$13,800,000
Total Capital Outlay Cost	\$34,400,000

Right-of-Way Data

Right of way cost estimates at the current stage of project development are shown on the Right-of-Way Data Sheet, see Attachment E. The current right of way costs is estimated at \$13,708,000. These include the cost of relocation assistance, demolition, Title and Escrow and the cost of utility relocations. However, at the PA&ED level, the full extent of utility relocations cannot be fully established and therefore, Right of Way has estimated the cost of utility relocations at 50% liability by Caltrans. The number of parcels to be acquired are estimated at 70. The project will require 40 Temporary Construction Easements (TCE). Utility easements are also anticipated for the proposed project and are yet to be determined.

Effect of Projects-Funded-by-Others on State Highway

This project will be funded by the State Highway Operational Protection Program.

5B. Rejected Alternatives

No-Build Alternative: This No-Build alternative is the baseline alternative to compare the future conditions of the highway facility in the absence of any project (also known as do nothing or free fall scenario). In the absence of any project, the condition of the existing pavement will continue to deteriorate. Based on the Pavement Condition Summary Report (PaveM) data, see Attachment I, the predicted condition of pavement for the RTL year 2024 shows 29% Rehabilitation Effectiveness which is above the 20% minimum threshold for Rehabilitation Effectiveness established by Headquarters Pavement Office. A summary of the predicted current year (2020) and future values of the pavement distresses for the RTL year of 2024, is included in the PaveM data (Attachment I). The average pavement condition distresses predicted for year 2024 are 22% Type B Alligator Cracking, 0.13 inches of rutting and an International Roughness Index (IRI) of 135 inch/mile. The No-Build Alternative will not accomplish the Purpose and the Need of the proposed project. Over the span of 20 years the pavement will require extensive routine, preventive and corrective maintenance to preserve the service life of the pavement.

6. CONSIDERATIONS REQUIRING DISCUSSION

6A. Hazardous Waste

The San Joaquin Valley Engineering Branch – Hazardous Waste and Paleontology was requested to perform hazardous waste Initial Site Assessment (ISA), Aerially Deposited Lead (ADL), and bridge surveys for the Pumpkin Center 3R rehab project in Kern County.

INITIAL SITE ASSESSMENT:

The following summarizes the hazardous waste evaluation conducted during the ISA. The complete ISA is included in Attachment D.

AERIALY DEPOSITED LEAD

An ADL soil investigation was performed by Geocon on April 15, 2019. 90 soil samples were advanced to a depth of 3 feet. Samples were collected at depth intervals from 0 to 1 foot, 1 to 2 feet, and 2 to 3 feet. Analytical results indicated that soil excavated from 0 to 3 feet would be considered non-hazardous. The 95% upper confidence level (UCL) for all excavation scenarios indicate that the soil can be reused or relinquished without restriction.

ASBESTOS AND LEAD-CONTAINING PAINT SURVEY

An asbestos survey was completed on the SR 99/SR 119 separation and several box culverts. Lead based paint was also analyzed from the SR 99 / SR 119 separation. Asbestos and Lead Containing Paint (LCP) may be present in existing structures present on parcels within the project study area planned for acquisition. San Joaquin Valley Air Pollution Control District (SJVAPCD) regulations require that an asbestos survey be conducted on any building prior to demolition, regardless of the date of construction. Asbestos and LCP surveys are recommended for buildings proposed for demolition as part of the improvement project to satisfy SJVAPCD requirements (asbestos) and demolition waste disposal characterization (asbestos and lead). The results of the ISA identified seven medium risk parcels within the project study area. These parcels may require further evaluation for potential impact to the planned project. The parcels are listed in the table below:

Parcel Acquisitions:

- APN 184-170-25: Valero Gas Station - This parcel is within the project footprint. There are active Underground Fuel Storage Tanks (USTs) at the site. There are no reported leaks. There is, however, potential concerns of impacts to subsurface from petroleum hydrocarbons associated with USTs.
- APN 514-213-09: American Smog & Oil Change - This parcel is currently within the project footprint. Existing USTs were removed from this site in 1999, as per the Leaking Underground Storage Tanks Geotracker database. There are no remedial actions required. There is, however, potential concerns of impacts to subsurface from petroleum hydrocarbons associated with former USTs.

- APN 514-050-22: Claw Daddy’s Restaurant - USTs were removed according to Kern County Database. There are no remedial actions required. There is, however, potential concerns of impacts to subsurface from petroleum hydrocarbons associated with former USTs.
- APN 184-170-18: Various Commercial businesses - This parcel is within the footprint of project. A former Texaco gas station was located at this site. There are no remedial actions required. There is, however, potential concerns of impacts to subsurface from petroleum hydrocarbons associated with former USTs.
- APN 514-060-15: Mikuls Family Trust - This parcel is within the footprint of the project. M4 Corporation fuel facility was located at this site from 2006 to 2014. There are no reported releases. However, there are potential subsurface impacts from petroleum hydrocarbons associated with former USTs. A PSI may be performed at this site, if needed.
- APN 184-160-14: Bakersfield 119 LLC – Bakersfield Travel Plaza - This parcel is within the project footprint. A Diesel fuel release was reported in 1998. There are no remedial actions required. There is, however, potential concerns of impacts to subsurface from petroleum hydrocarbons associated with former USTs.

Depending on the extent of the right of way acquisition, Preliminary Site Investigations (PSIs) may need to be performed. Four operating gasoline stations in the project area (no planned right of way acquisition) exist west of the SR 99/119 separation bridge. The 76 Station, 2126 Taft Hwy) had a reported release and received regulatory closure. No other releases have been reported that would impact this project. Undocumented USTs associated with former refueling and service station operations may exist within the Project Study Area. Where encountered, undocumented USTs, septic systems and domestic/agricultural/oil wells should be properly removed or abandoned in accordance with Kern County requirements. The irrigation well located south of SR 119 between Stine and Akers Road on Map ID No. 22 should be properly abandoned where impacted by ROW acquisition. There are no documented releases from the Shell and Chevron petroleum pipelines located along Ashe and Stine Roads within the project study area.

Avoidance, Minimization, and/or Mitigation Measures

Build Alternative: The following considerations are required:

- Where encountered, undocumented underground storage tanks, septic systems and domestic/agricultural/oil wells should be properly removed or abandoned in accordance with Kern County requirements.
- Asbestos-containing pipe and treated wood may be encountered during construction and would require handling and disposal in accordance with regulatory requirements.
- Yellow thermoplastic and paint striping removed during construction may require special handling and disposal requirements.
- San Joaquin Valley Air Pollution Control District regulations require that an asbestos survey be conducted on any bridge/building prior to demolition, regardless of the date

of construction. Asbestos and lead-containing paint surveys are recommended for structures proposed for demolition.

The No Build alternative is the basis for comparison of the Build Alternative. It satisfies the statutory requirements under CEQA and NEPA for an alternative that does not include any new action or project.

6B. Value Analysis

A five-day Value Analysis (VA) workshop was held during the week of November 18, 2019 at Caltrans, District 06 Manchester Office. The VA study was sponsored by Caltrans and facilitated by value specialist, Value Management Strategies Inc. The goal of the VA study was to obtain the optimum value by maximizing performance while minimizing cost. The framework for VA study were the guidelines of the Department's PDPM Chapter 19 on Value Analysis. The Value team developed the following VA alternatives:

- VA Alternative No. 1.1, Use rapid set with rigid pavement to stage access to the businesses
- VA Alternative No. 1.2, Use HMA in lieu of JPCP
- VA Alternative No. 2 Realign the road to the south through Pumpkin Center to minimize impacts
- VA Alternative No. 3 Stage the project instead of using one-way traffic control
- VA Alternative No. 4 Construct a parking lot on one of the potential complete parcel acquisition to accommodate lost parking spaces
- VA Alternative No. 5 Reduce scope to minimize throw-away work in anticipation of the 2035 six-lane expressway
- VA Alternative No. 6 Reduce and re-configure the cross section at Pumpkin Center.
- VA Alternative No. 7 Construct a collector driveway behind businesses and add parking.

Of the 7 proposed VA Alternatives, VA Alternative No. 1 and 2 will be considered favorably during the project development and the remaining five were rejected based on discussions held during VA Implementation Meeting on December 17, 2019 as well subsequent analysis provided to the meeting participants. A summary of the above analysis and a detailed summary of the VA study can be found in the Final Value Analysis Study Report, January 2020.

6C. Resource Conservation

Existing Asphalt Concrete from cold planing of the existing surfacing layers from the proposed project will be recycled and will be used as shoulder backing according to Caltrans and FHWA policies of using existing materials and maximizing the use of existing pavement.

6D. Right-of-Way Issues

Right of Way Required

Additional right of way acquisition, permanent and temporary construction easements and relocation of utility facilities are required for the proposed project. An estimated partial acquisition, in fee simple, from adjacent 70 private properties are required for the construction of the proposed project improvements. Based on a preliminary design, the total right of way acquisition is currently estimated at approximately 12 acres. The proposed project development will significantly impact the perpendicular parking stalls in front of commercial and business locations along SR 119 within the community of Pumpkin Center.

TCE's will be required for access to construct driveways, sidewalks, for driveway modifications, traffic signals, utility appurtenances, intersection improvements, TMS field elements and for extension of culverts along the irrigation canal crossings. Also, a TCE is required for a temporary parking lot in one of the vacant sites to compensate for the loss of parking in front of commercial and business locations during the construction phase of the project. The exact location of the temporary parking lot will be determined during the design phase of the project.

Relocation Impact Studies

An estimated 8 to 10 businesses may be impacted due to the proposed project, and one residential duplex may be impacted. All displacees will be contacted by a Relocation Agent, who will ensure that eligible displacees receive their full relocation benefits, including advisory assistance, and that all activities will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. Relocation resources shall be available to all displacees free of discrimination. At the time of the first written offer to purchase, owner occupants are given a detailed explanation of Caltrans' "Relocation Program and Services." Tenant occupants of properties to be acquired are contacted soon after the first written offer to purchase and are given a detailed explanation of Caltrans' "Relocation Program and Services." In accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, Caltrans will provide relocation advisory assistance to any person, business, farm or nonprofit organization displaced because of the acquisition of real property for public use.

6E. Environmental Compliance

The project Environmental Document is an Initial Study with Mitigated Negative Declaration under CEQA and a Categorical Exclusion under NEPA. Environmental issues include properties with potentially hazardous materials/waste concerns, residential and business relocations, tree and vegetation removal, farmland conversion, presence of State and Federal endangered and threatened species, paleontological resources and potential jurisdictional waters. Farmers Canal, Randall Ditch, Burness Ditch, and Branch One Ditch may be subject to U.S. Army Corps of Engineers (Section 404 permit), Regional Water Quality Control Board (Section 401 permit) and California Department of Fish and

Wildlife (Section 1600 Lake and Streambed Alteration Agreement) jurisdiction. Compensatory mitigation may be required under these permits.

Cultural: There are no properties within the project limits that are eligible for the National Register of Historic Places.

Wetlands: Definable wetlands were not observed in the project area. However, the project area includes potential jurisdictional waters. The following waters exhibit an ordinary high-water mark and may be subject to U.S. Army Corps of Engineers and Regional Water Quality Control Board jurisdiction: Farmers Canal, Randall Ditch, Burness Ditch, and Branch One Ditch. Additional consultation is required to determine if any of these waters also fall under the jurisdiction of the California Department of Fish and Wildlife under the Lake and Streambed Alteration Agreement Program.

Floodplain: The project is not located in a 100-year base floodplain.

Paleontology: The proposed project is within the Great Valley geomorphic province of California. Sediments underlying the project area consist of Quaternary/Recent alluvial fan deposits. The sediments of the Quaternary/Recent alluvial fan deposits have a low potential to contain scientifically significant non-renewable paleontological resources, however based on the dimensions of the proposed drainage basin and linear excavations reaching and exceeding 6 feet in depth, older underlying formations with higher paleontological potential may be disturbed. Paleontological monitors, designated by the qualified professional paleontologist, will be onsite to conduct full-time monitoring of excavation at the drainage basin. Continuous monitoring will occur for excavation deeper than 8 feet.

Biology: The San Joaquin Kit Fox (*Vulpes macrotis mutica*) is federally and state listed as endangered. There are known populations of urban San Joaquin Kit Foxes in the City of Bakersfield, including several historical and recent occurrences within a 10-mile radius of the project. The most recent report from the Endangered Species Recovery Program includes sightings at the Kaiser Permanente Sports Village Soccer Complex near Ashe Road and SR 119. An individual San Joaquin Kit Fox was observed within ½ miles of the project site during spotlighting surveys. The fox was observed in a fallow field next to a school on two consecutive nights during the spotlighting surveys; the two sightings are presumed to be the same individual. The fox was also observed about ½ mile north of the project site. Swainson's Hawk (*Buteo swainsoni*) is listed as state threatened. A Swainson's Hawk breeding pair was observed within ½ mile of the project site, and two young hawks were observed on the nest. The nest tree was on the east side of SR 99 outside the project limits. No other Swainson's Hawk nests were identified during this survey season. Other raptors were observed nesting within ½ mile of the project site, farther away from the roadway.

The White-Tailed Kite (*Elanus leucurus*) is designated as a fully protected species by the State of California. One individual was observed perching within a half-mile of the project site in January during field surveys. No active nests were identified.

The Burrowing Owl (*Athene cunicularia*) is considered a Species of Special Concern by the California Department of Fish and Wildlife. Four relatively active burrows were found

in an unused cattle enclosure about 1.2 miles south of the project. This species was observed within 2 miles of the project site during spotlighting surveys. No potential dens or other borrowing owl signs were observed within the project area. However, habitat within the project area could be suitable foraging and denning habitat.

6F. Air Quality Conformity

Air Quality-The Pumpkin Center Roadway Rehabilitation project is exempt from regional conformity under Table 3, Title 40, Section 93.127, of the U.S. Code of Federal Regulations. The project was presented to Interagency Consultation Partners and was found not to be a “Project of Air Quality Concern”. Concurrence from Caltrans and U.S. Environmental Protection Agency was received on September 19, 2019.

6G. Title VI Considerations

Title VI of the *Civil Rights Act of 1964* states: No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

Federal-aid recipients, sub-recipients and contractors are required to prevent discrimination and ensure nondiscrimination in all their programs, activities and services whether these programs, activities and services are federally funded or not. The Department is proud of its longstanding policy to ensure that social impacts to communities and people are recognized early and continually through the transportation decision-making process, starting early from planning, to post-construction operations and maintenance.

The proposed project will improve operations, provide adequate access for all users including pedestrians, people with disabilities and non-motorized traffic. Such facilities include ADA curb ramps, pedestrian refuge islands at intersections, sidewalks along EB and WB directions within the community of Pumpkin Center and Class II Bike Lanes along the EB and WB directions along SR 119 within the proposed project limits.

6H. Noise Abatement Decision Report

Not Applicable to this project.

6I. Life-Cycle Cost Analysis

It was determined by the Project Development Team (PDT) that a Life Cycle Cost Analysis (LCCA) is not warranted since an equivalent flexible pavement rehabilitation strategy for 40-year design life is not available.

6J. Reversible Lanes

Not Applicable to this project.

7. OTHER CONSIDERATIONS AS APPROPRIATE

Public Hearing Process

An opportunity for a public hearing was offered for the recommended project proposal. A Public Notice was issued for a public review from July 17th to August 17th, 2020. There was no request made by the public or the project stakeholders for a formal public hearing to be held.

Route Matters: Not applicable

Permits:

The following permits are needed for the proposed project

- USACE, Clean Water Act Section 404, Nationwide Permit
- CDFW, Section 1602, Lake or Streambed Alteration Agreement
- RWQCB, 401 Water Quality Certification

Cooperative Agreements

There are no formal cooperative agreements identified at this stage of project development.

Other Agreements

The KDWD irrigation canals/ditches predate SR 119 (Taft highway). There are no known records of any common/joint use agreements, except for the Burness Ditch and Stillson Ditch where there is a Utility Agreement (UA No. 06-1455.31) and a Consent to Common Use Agreement (CCUA Nos 06-1455.33-1 & 06-1455-31-2). Prior to any work within the KDWD rights-of-way, Caltrans will need to enter a joint use/common use agreement and coordinate the timing of the proposed construction work along these canals.

Report on Feasibility of Providing Access to Navigable Rivers

Not applicable to this project as there are no navigable rivers within the project limits or in the immediate vicinity.

Public Boat Ramps

Not applicable to this project as there are no navigable rivers within the project limits or in the immediate vicinity.

Transportation Management Plan

To reduce motorists, delay a Traffic Management Plan (TMP) will be implemented to effectively manage the flow of traffic within the planned construction zone. Preliminary traffic impacts and mitigation for the project have been outlined in the attached Traffic Management Plan Data Sheet (TMP Data Sheet), see Attachment F. Costs associated with the traffic impact mitigation measures listed in the TMP Data Sheet have been included in

this document estimate. Some of the strategy and elements of TMP outlined in TMP Data Sheet, include public information campaign, motorist information strategies, incident management and construction strategies and the additional use of Construction Zone Enhanced Enforcement Program (COZEEP) to enhance California Highway Patrol's engagement and enforcement activities in speed limit reduction work zones. The TMP will also include a 10-mph construction work zone speed limit reduction. A portable radar feedback sign shall be placed to alert drivers of the traveling speed, along each direction at the beginning of the segment of construction work zone. The construction contract will also include detail work zone traffic control plans for each stage of construction. The maximum length of lane closure and the limit of work zone should be less than ½ a mile for each stage of construction.

Stage Construction

The project will be built in multiple stages. It is anticipated a contractor could be awarded a construction contract in Sep 2023. Once the contractor begins construction it is estimated to take 185 calendar working days to complete the contract items of work. Utility relocations is exclusive of the contract items of work. It is preferred that the relocation of utilities work be done in advance of the contract construction activities. Additionally, seasonal limitations during the winter months for construction work along KDWD irrigation canal crossings when the demand of water supply to farmers is considerably lower, may be implemented. To avoid any inconvenience to the Panama Elementary School located at the NE corner of Stine and SR 119, all construction activities near the vicinity of the school are to be scheduled when the school is in recess.

Within the community of Pumpkin Center: The construction work will include an open trench, approximately 1400' long, to install a trunk drain along SR 119 between Palma street and the proposed drainage retention basin, install new drainage systems, cold planning and HMA surfacing, reconstruction of pavement structural section, installation of driveway approaches, sidewalk and curb and gutter plus the relocation of existing utilities. The above work will significantly impact traffic operations and accessibility to the various commercial and retail businesses. Also, the need to maintain access to the adjacent parcels and the availability of temporary parking spaces during the construction phase, is an important consideration. Staging of construction activities, therefore, will require close coordination and input from local agencies, the community and the various stakeholders involved.

Accommodation of Oversize Loads

SR 119 within the project limits is not part of the extra-legal load network. The minimum turning radius at the corners of major road intersections along SR 119 will be designed to accommodate the tracking and swept width of a STAA Design Vehicle.

Graffiti Control

Kern County is not considered a graffiti prone area and no special measures are required on this project.

Asset Management

The performance objective of the proposed project is consistent with the TAMP and Ten-year SHOPP. The performance objectives of the primary asset class identified in the TAMP are shown in the table below.

Primary Asset Class	Performance objective	Performance Measure	Qty	Condition Rating		
				Good	Fair	Poor
Mainline exist AC Pvmnt.	Pvmt. Class II	Lane miles	6		5.10	0.90
Changeable Message Sign (CMS)	Transportation Mgmt. Systems	EA	1			1.0

The proposed project will restore the existing AC pavement to a state of good condition and will also replace and upgrade the existing CMS located at PM 29.90 to a Light-Emitting Diode (LED) Sign. The SHOPP performance output for the proposed project is 6.0 lane miles. The proposed project is consistent with the objectives of the other assets as identified in the TAMP, see Attachment K-SHOPP Project-Accomplishment- Performance Measures-Benefits.

Complete Streets

Caltrans' intent is that travelers of all ages and abilities can move safely and efficiently along and across a network of Complete Streets. Key Complete Street elements to integrate the mobility and accessibility needs of travelers of all ages and abilities include bicyclists, pedestrians, paved shoulders along SR 119, Class II Bike Lanes along EB and WB directions, sidewalks within the community of Pumpkin Center, bicycle detection loops, pedestrian access, pedestrian crosswalks, new pedestrian refuge islands, enhanced crosswalk visibility, striping, pavement markings, street lighting.

Climate Change Considerations

There are no climate change impacts due to the proposed project. The Caltrans Climate Change models provided by Caltrans HQ branch, based off NOAA research for Precipitation, Heat Change, and Wildfires, in addition to a NASA JPL lidar model for subsidence was used to review this project at SR 119 Kern from PM 28.3 (0.1 mile west of Ashe road) to PM 31.25. The results were that there was no modeled precipitation, wildfire, or subsidence issues anywhere near the project. However, 1 mile north of the project for the full length of the entire project there is a massive heat change. While this is not on the project location, the initial methodology for dealing with climate change mitigation is to assume that changes within 1 mile of Caltrans property be checked for

possible climate change impact to the ground supporting the Caltrans right-of-way. However, it is recommended to check for possible heat change to the ground under the roadbed to be safe, since the current models that Caltrans has are in their first generation.

Operational Emissions: The proposed project would generate air pollutants during construction. The exhaust from construction equipment contains hydrocarbons, oxides of nitrogen, carbon monoxide, suspended particulate matter, and odors. However, the largest percentage of pollutants would be windblown dust generated during excavation, grading, hauling, and various other activities. The impacts of these activities would vary each day as construction progresses. While some greenhouse gas emissions during the construction period would be unavoidable, the proposed project once completed would not lead to an increase in operational greenhouse gas emissions. Construction and implementation of the project would not increase capacity. Once completed, the Pumpkin Center resurfacing, restoration and rehabilitation project will result in smoother pavement surfaces that would improve vehicle operations, reduce emissions and reduce energy consumption. The construction of a combined Class II Bike Lane/shoulder and installation of sidewalks where sidewalks currently do not exist provide residents with other transportation options.

Construction Emissions: Construction greenhouse gas emissions would result from material processing, onsite construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence would, where possible, be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases. In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the greenhouse gas emissions produced during construction would be offset to some degree by longer intervals between maintenance and rehabilitation activities.

The project will also implement Caltrans standardized measures (such as construction best management practice) that apply to most or all Caltrans projects. Certain common regulations, such as equipment idling restrictions and development and implementation of a traffic control plan that reduce construction vehicle emissions also help reduce greenhouse gas emissions.

Additionally, the proposed project is not located in the coastal zone and would not contribute to or be affected by sea-level rise and is not located in a very high fire hazard severity zone.

Broadband and Advance Technologies

California Governor's Executive Order S-23-06, "Twenty-First Century Government," directed the establishment of the California Broadband Task Force, of which Caltrans is a member, to bring together public and private stakeholders to remove barriers to broadband access, identify opportunities for increased broadband adoption, and enable the access to and deployment of new advanced communication technologies. Wired broadband refers to any facility, including copper and fiber optic cabling, that uses wide bandwidth to transmit voice, data, and/or video signals. AT&T and Spectrum, telecommunications company have underground and above ground fiberoptic cables along the highway, within Caltrans

existing right of way. Fiberoptic lines identified as conflicts will be relocated and an accommodated within the proposed State right-of-way.

Projects initiated on or after January 1, 2017 will be eligible for consideration of broadband conduit installations requested by Wired Broadband Stakeholders. It is the responsibility of the Wired Broadband Stakeholders to contact the Caltrans District 06 single focal point for information and collaboration in installing a broadband conduit as part of an initiated Caltrans led construction project. Currently, no stakeholders have been identified an interest in installing broadband for this project. Advanced communications (autonomous vehicles, vehicle-to-infrastructure) and zero emissions vehicle fueling features are not included in this project.

Other Appropriate Topics

Stormwater Compliance

The proposed project is located within the jurisdiction of the Central Valley, Regional Water Quality Control Board (CVRWQCB) Region 5-Fresno. The disturbed soil area is estimated at 29.1 acres. Permanent BMP's are not required to address TMDLs in this project. A Storm Water Pollution Prevention Plan (SWPPP) will be developed and implemented for preventing, controlling and abating water pollution due to stormwater discharges from the project. Temporary construction site BMP's will be incorporated into this project as discussed in the Storm Water Data Report (SWDR), see Attachment G.

8. FUNDING, PROGRAMMING AND ESTIMATE

Funding: It has been determined that this project is eligible for Federal-aid funding.

Programming: The project is programmed in the 2018 State Highway Operations and Protection Program (SHOPP) under the Roadway Rehabilitation 3R (201.120) subprogram as a Long Lead. However, construction funding is programmed in the 2020 SHOPP, which was adopted at the May 2020 California Transportation Commission (CTC) meeting. Construction funds will be allocated in the 2023/24 fiscal year.

Fund Source	Fiscal Year Estimate					
	Prior	20/21	21/22	22/23	23/24	Total
20.XX.201.120						
Component	In thousands of dollars (\$1,000)					
PA&ED Support	3,200					3,200
PS&E Support		2,500				2,500
R/W Support		6,300				6,300
Const. Support					4,600	4,600
Right-of-Way					14,200	14,200
Construction					26,500	26,500
Total	3,200	8,800			45,300	57,300

The support cost ratio is 40.8%

The escalated Right-of-Way capital estimate is \$15,900,000, which is higher than the programmed amount. The escalated Construction capital estimate is \$23,000,000, which is lower than the programmed amount. Both estimates are reflective of the current project scope. Nonetheless additional refinements to the scope are anticipated, which may eventually adjust the estimated costs. Any funding shortfall/excess will be addressed in the next phase via a Program Change Request (PCR).

9. DELIVERY SCHEDULE

Project Milestones	Milestone Date	
	Milestone	Date
Project Approval & Environmental Document	M200	11/16/2020
Right of Way Maps	M224	03/02/2020
Regular Right of Way	M225	11/02/2020
PS&E to DOE	M377	06/01/2023
Project PS&E	M380	06/01/2023
Right of Way Certification	M410	11/01/2023
Ready to List	M460	12/01/2023
Headquarter Advertise	M480	02/12/2024
Award	M495	04/15/2024
Approve Construction Contract	M500	04/29/2024
Contract Acceptance	M600	11/01/2025
End Project Expenditures	M800	05/03/2027
Final Project Closeout	M900	05/01/2028

10. RISKS

A Risk Register has been prepared by the project development team to assess, respond and monitor identified project risks that may occur throughout the life of the project. These risks and the appropriate response actions to minimize any adverse impacts to the project are summarized in the risk register, See Attachment H.

11. EXTERNAL AGENCY COORDINATION

Federal Highway Administration (FHWA): The project has been designated as a “Project of Division Interest”. It has been determined that this project is eligible for Federal-aid funding. This project is an Assigned Project in accordance with the current FHWA and California Department of Transportation (Caltrans) Joint Stewardship and Oversight Agreement. The project requires the following coordination and consultation with the following external agencies for permits, approvals and agreements

Agency	Permits / Approvals & Status
USACE	Clean Water Act Section 404 (Nationwide Permit) for fill and dredging waters of United States
CDFW	California Fish and Game Code Section 1602 Lake or Streambed Alteration Agreement
RWQCB	Clean Water Act Section 401 Water Quality Certification
SJVAPCD	National Emissions Standards for Hazardous Air Pollutants- Notification prior to demolition of structures
KDWD	Consent to common use agreements (CCUA)

Agency Abbreviations: USACE – U.S. Army Corps of Engineers, CDFW - California Department of Fish and Wildlife, RWQCB - Regional Water Quality Control Board, SJVAPCD - San Joaquin Valley Air Pollution Control District

12. PROJECT REVIEWS

Scoping team field review PDT Date 08-26-2018 & 08-20-2019, See Attachment M

Scoping team field review attendance roster attached.

District Program Advisor Bill Moses Date

Headquarters SHOPP Program Advisor Enter Name Date

District Maintenance Bill Moses Date

Headquarters Project Delivery Coordinator Paul Gennaro Date

Project Manager Hussein Senan Date

FHWA Enter Name Date

District Safety Review Date

Constructability Review Date: 08/28/2020

Other Date

13. PROJECT PERSONNEL

Name, Title	Functional Unit	Phone #
Ranjeev Ghai	Project Engineer Project Development	(559) 230-3116
Shahin Mansour	Design Manager Project Development	(559) 230-3114
Hussein Senan	Project Manager Project Management	(559) 243-3586
Som Phongsavnh	Sr. Env. Planner CR, Environmental	(559) 445-5231
Mazan Al-Ali	Stormwater coordinator Storm Water	(559) 243-8307
Bill Moses	Sr. Transportation Engineer Mtce. Engineering	(559) 445-6514
Rene Sanchez	Sr. Transportation Engineer Mtce. Engineering	(559) 488 4225
Sam Wong	District Hydraulics Engineer Hydraulics	(559) 243-3857
Albert Lee	Sr. Transportation Engineer Traffic Operations	(559) 488 4111
Mandeep Dhese	Materials Engineer Materials Engineering	(559) 488 4148
Robert Polyack	Asset Manager Asset Management	(559) 444 2559
Brad Cole	Landscape Architect Landscape Architecture	(559) 230-3134

14. ATTACHMENTS (Number of Pages)

- A. Location Map (1)
- B. Preferred Alternative Exhibits (25)
- C. Project Report Cost Estimate (11)
- D. Environmental Document (103)
- E. Right of Way Data Sheet (4)
- F. Transportation Management Plan Data Sheet (4)
- G. Storm Water Data Report, signed cover sheet (1)
- H. Risk Register (2)
- I. Pavement Condition Summary Report (PaveM) (3)
- J. Deflection Study Report (17)
- K. SHOPP Project-Accomplishment-Performance Measures-Benefits (1)
- L. City of Bakersfield, Policy Resolution No. 063-12 (6)
- M. Scoping Team Field Review Attendance Roster