NEPA/CEQA RE-VALIDATION FORM

DIST./CO./RTE.	06-Kern-Westside Parkway Project
PM/PM	NA
E.A. or Fed-Aid Project No.	06-48780
Other Project No. (specify)	SCH #2002121014
PROJECT TITLE	Westside Parkway Project
ENVIRONMENTAL APPROVAL TYPE	Environmental Impact Report (EIR)/Finding of No Significant Impacts (FONSI)
DATE APPROVED	January 10, 2007
REASON FOR CONSULTATION (23 CFR 771.129)	Check reason for consultation: ☐Project proceeding to next major federal approval ☒Change in scope, setting, effects, mitigation measures, requirements ☐3-year timeline (EIS only)
DESCRIPTION OF CHANGED CONDITIONS	The Westside Parkway project is currently undergoing final design (plans, specifications, and estimate [PS&E]). During this phase, many minor design changes have been identified to improve highway geometrics, eliminate sight distance problems, and change ramp and bridge alignments without changing the interchange configurations. Other design changes are associated with a higher design speed (from 55 miles per hour [mph] to 70 mph) at certain locations.

NEPA CONCLUSION - VALIDITY

Based on an examination of the changed conditions and supporting information: [*Check ONE of the three statements below, regarding the validity of the original document/determination (23 CFR 771.129). If document is no longer valid, indicate whether additional public review is warranted and whether the type of environmental document will be elevated.]*

_____ **The original environmental document or CE remains valid. No further documentation will be prepared.**

__X__ **The original environmental document or CE is in need of updating; further documentation has been prepared and ☒ is included on the continuation sheet(s) or ☐ is attached.**

__No__ **(Yes/No) Additional public review is warranted (23 CFR 771.111(h)(3))**

_____ **The original document or CE is no longer valid.**

_____ **(Yes/No) Additional public review is warranted (23 CFR 771.111(h)(3))**

_____ **(Yes/No) Supplemental environmental document is needed.**

_____ **(Yes/No) New environmental document is needed. (If "Yes," specify type: _____)**

CONCURRENCE WITH NEPA CONCLUSION

I concur with the NEPA conclusion above.

Signature: Environmental Branch Chief — Date 6/27/08 — Signature: Project Manager/DLAE — Date 6/27/08

CEQA CONCLUSION : *(Only mandated for projects on the State Highway System.)*

Based on an examination of the changed conditions and supporting information, the following conclusion has been reached regarding appropriate CEQA documentation: *(Check ONE of the four statements below, indicating whether any additional documentation will be prepared, and if so, what kind. If additional documentation is prepared, attach a copy of this signed form and any continuation sheets.)*

_____ **Original document remains valid. No further documentation is necessary.**

__X__ **Only minor technical changes or additions to the previous document are necessary. An addendum has been or will be ☒ prepared and is ☒ included on the continuation sheets or ☐ will be attached. It need not be circulated for public review. *(CEQA Guidelines, §15164)***

_____ **Changes are substantial, but only minor additions or changes are necessary to make the previous document adequate. A Supplemental environmental document will be prepared, and it will be circulated for public review. *(CEQA Guidelines, §15163)***

_____ **Changes are substantial, and major revisions to the current document are necessary. A Subsequent environmental document will be prepared, and it will be circulated for public review. *(CEQA Guidelines, §15162)***
(Specify type of subsequent document, e.g., Subsequent FEIR:)

_____

CONCURRENCE WITH CEQA CONCLUSION

I concur with the CEQA conclusion above.

Signature: Public Works Director, City of Bakersfield — Date 6/30/08 — Signature: Project Manager — Date 6/30/08

CONTINUATION SHEET(S)

Address only substantial changes or substantial new information since approval of the original document and only those areas that are applicable. Use the list below as section headings as they apply to the project change(s). Use as much or as little space as needed to adequately address the project change(s) and the associated impacts, minimization, avoidance and/or mitigation measures, if any.

1. Changes in project design, e.g., substantial scope change; a new alternative; change in project alignment.

The proposed design changes along the Westside Parkway corridor are described in the following subsections. General locations of the proposed changes are presented in Figure 1-1. Additional exhibits showing detailed changes are provided in Appendix A.

Design Changes along Westside Parkway

Horizontal Alignment

- Shift the Mohawk Street interchange 300 feet farther south and realign approximately 5 degrees to accommodate the proposed Mohawk Street railroad overcrossing. The realigned interchange does not require additional right-of-way (ROW).
- Shift the Westside Parkway mainline alignment farther south between Mohawk Street and Coffee Road to accommodate the relocation of the Mohawk Street interchange farther south.
- Modify ramp and bridge alignments to improve sight distance requirements at Coffee Road, Calloway Drive, and Allen Road.
- Close Brimhall Road between Coffee Road and Friant-Kern Canal to construct a westbound off-ramp, and a new local street and cul-de-sac approximately 500 feet north of the existing Brimhall Road to maintain access to local businesses.

Vertical Profile

- Change vertical profile along the Westside Parkway mainline to accommodate the tie-in with Mohawk Street and the Friant- Kern Canal bridge clearances over the canal facility.

Cross Section

- Minor changes at some locations to conform to City local street standards along Mohawk Street (110-foot ROW).
- Increased bridge width at Calloway Drive (13 feet) to improve sight distance.

Lanes

- Redesign the mainline freeway east of Allen Road to Coffee Road from an 8-lane facility to a 6-lane facility, and from Coffee Road east to the Mohawk Street interchange to an 8-lane facility. Beyond the Mohawk Street interchange, the mainline would be a four-lane facility tying into Truxtun Avenue. The ROW clearance would be performed for the ultimate 8-lane facility as originally planned.

Figure 1-1 Proposed Design Change Locations

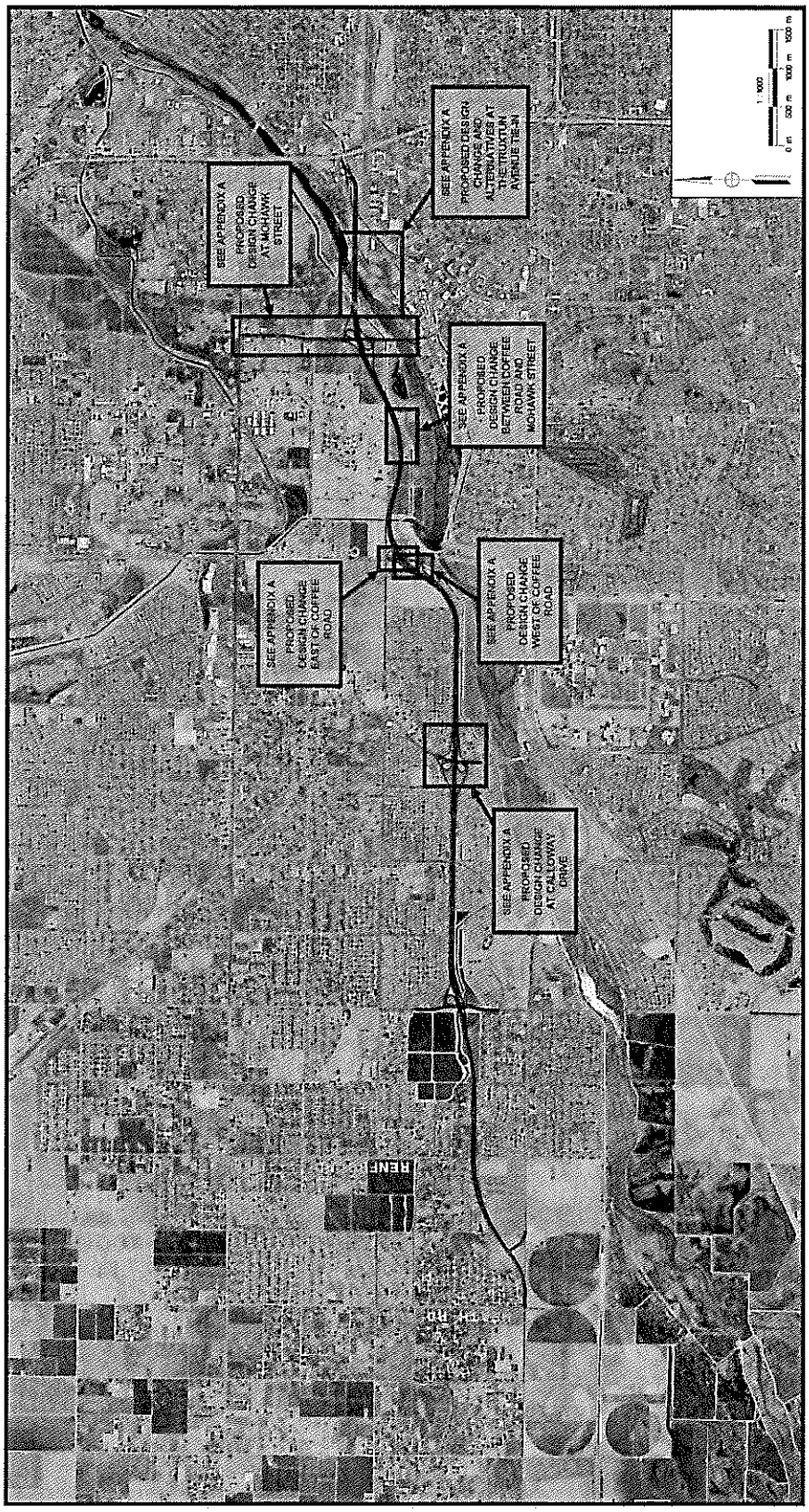

FIGURE 2-1
Proposed Design Change Locations

Facility Access/Interchanges

- Modify the number of ramp lanes and tie-ins with local streets. Interchange configurations at all of the approved interchanges would remain the same.

Cross Valley Canal

- Relocate a portion of the Cross Valley Canal at Station 430 to the location south of the Westside Parkway alignment to avoid having the freeway cross over the canal and the resulting construction of culverts.

<u>Proposed Design Changes along Mohawk Street</u>

Vertical Profile

- Change the vertical profile along Mohawk Street to accommodate an overcrossing at the Burlington Northern Santa Fe (BNSF) rail lines, rather than an undercrossing as originally planned, to minimize impacts to railroad operations.

Retention Basin

- Construct a new infiltration basin in the northwest quadrant of the Mohawk Street/BNSF railroad intersection to treat stormwater runoff from Mohawk Street prior to discharging to the Kern River.

Truxtun Tie-In

- The approved Westside Parkway Truxtun Option would connect the eastbound and westbound lanes of Westside Parkway with the existing Truxtun Avenue at an at-grade, signalized intersection approximately 650 feet west of the Truxtun Avenue undercrossing at SR 99. The Truxtun Option requires a 42-foot-high 3,400-foot-long bridge structure crossing the Cross Valley Canal, the Kern River, the BNSF railroad overcrossing, Truxtun Avenue, and the Carrier Canal. The redesigned Truxtun Avenue tie-in would be shortened and realigned slightly north to cross the Kern River with a 900-foot-wide bridge span, and then tie in with Truxtun Avenue just east of the Commercial Way/Truxtun Avenue intersection with a loop on-/off-ramp. Three tie-in alternatives are under consideration.

Rosedale Highway Improvement

- Widen Rosedale Highway from 710 feet west of Mohawk Street to 725 feet east of Mohawk Street to provide one additional left-turn lane for westbound traffic and add a right-turn lane for eastbound traffic at the Mohawk Street intersection. Other improvements include designing the median curb and northern curb returns to meet the future 'ultimate' Rosedale widening project; resurfacing the entire intersection; improving the drainage system; and installing a new water line, sewer line, street lighting, and traffic signal at the intersection.

2. Changes in environmental setting, e.g., new development affecting traffic or air quality;

None

3. Changes in environmental circumstances, e.g., a new law or regulation; change in the status of a listed species.

None

4. Changes to environmental impacts of the project, e.g., a new type of impact, or a change in the magnitude of an existing impact.

Community Impacts

Four full property acquisitions and thirty partial property acquisitions would be required as a result of the proposed design changes (Table 4-1). Current uses of these properties include commercial, industrial, and open space. Conversion of these uses along the Westside Parkway corridor to transportation facility ROW is not in conflict with the existing land use plans of the City. Several features of the proposed design changes would provide benefits to the community because they would improve multimodal mobility and safety, provide and maintain recreational facilities, and improve traffic flow. The project design changes are not expected to affect demographics or public facilities and services. A summary of impacts as a result of the proposed design changes is provided in Table 4-2.

Property owners affected by the proposed design changes would receive compensation in accordance with the Uniform Relocation Assistance and Real Properties Acquisition Policies Act, as amended. Imacts would be considered less than significant.

Table 4-1
Summary of Property Acquisitions Required for Proposed Design Changes

Land Use	Partial Acquisitions	Full Acquisitions	Total # of Acquisitions
Commercial	1	2	**3**
Open Space	2	1	**3**
Industrial	27	1	**28**
Total	**30**	**4**	**34**

Table 4-2
Potential Impacts Resulting from Proposed Design Changes

Project Design Change	Potential Impact
Shift Mohawk Street interchange 300 feet south and realign approximately 5 degrees.	• One partial private property acquisition near the interchange would be required. • Conversion of industrial land uses to transportation facility ROW.
Slightly realign ramps and bridges at Calloway Drive and Coffee Road.	• Realignment of the westbound exit ramp and bridge at Coffee Road would result in the full acquisition of one private refinery property. • Conversion of industrial land uses to transportation facility ROW.

Table 4-2
Potential Impacts Resulting from Proposed Design Changes

Project Design Change	Potential Impact
Close Brimhall Road at Coffee Road for the westbound exit ramp; construct a new local street and cul-de-sac to maintain access to local businesses.	• Full acquisition of one private property and partial acquisitions of eight adjacent private properties would be required.. The private property that is subject to full acquisition is currently used as a restaurant; therefore, it needs to be relocated. Partial acquisitions of other adjacent properties would result in the permanent loss of several parking spaces and modification to properties' access, facilities, and an existing drainage detention basin. The loss of parking spaces would not substantially affect business operations in the locality because ample parking would still be available to the commercial businesses. • Conversion of commercial land uses to transportation facility ROW.
Widen Mohawk Street between Rosedale Highway and the mainline Westside Parkway to conform to City local street standards, maintain property access to properties along Mohawk Street, and increase bridge width at Calloway Drive to improve sight distance.	• Widening Mohawk Street and maintaining access to properties along Mohawk Street would require the partial acquisition of 15 private properties located along and adjacent to Mohawk Street between Rosedale Highway and the Westside Parkway mainline. • Widening Mohawk Street and maintaining property access would result in the conversion of industrial land uses to transportation facility ROW. • Widening Mohawk Street would accommodate bike lanes, which are a beneficial impact to the community because it improves multimodal mobility and safety in the area. • Conversion of commercial and industrial land uses to transportation facility ROW.
Add an infiltration basin to the northwest quadrant of the Mohawk/BNSF railroad intersection.	• Partial acquisition of one privately owned vacant land would be required. • Conversion of industrial land use to transportation facility ROW.
Provide intersection improvements at Mohawk Street and Rosedale Highway, and Mohawk Street and Truxtun Avenue.	• Intersection improvements would occur in City-owned ROW; no private property acquisitions are required. • Improvements to the intersections would enhance safety and improve traffic flow, resulting in a beneficial impact to the community.
Provide access roads to the Cross Valley Canal along the Mohawk Street alignment..	• Partial acquisition of one private property to provide access roads to Cross Valley Canal and an equestrian trail. • Conversion of open space land to transportation facility ROW.
Redesign the mainline section west of Mohawk Street to cross the Kern River with a shorter 900-foot bridge span, and tie into Truxtun Avenue east of the Commercial Way/Truxtun Avenue intersection with a loop on-/off-ramp.	• Two partial private property acquisitions and three full private property acquisitions would be required. Two private properties that are subject to full acquisition are currently used as a salon and medical facility; thus, relocation is required. The third property that is subject to full acquisition is currently vacant. • Conversion of commercial and industrial land uses to transportation facility ROW.

Hazardous Materials/Waste

In December 2004, an initial site assessment (ISA) was conducted for the proposed project area to assess whether potential sources or evidence of hazardous waste contamination were present in the alternative alignments. Forty-three (43) parcels were identified as potentially containing hazardous wastes and were classified as Rank 1, 2, or 3 parcels. Rank 1 parcels are parcels known to be contaminated with hazardous wastes. Rank 2 parcels are parcels suspected of being contaminated with hazardous wastes, and Rank 3 parcels are parcels with the potential of being contaminated with hazardous wastes. The original environmental document outlined mitigation measures for each rank type. There would be no changes in recommendations for mitigation of these ranked parcels.

The proposed design changes between Coffee Road and Mohawk Street would cause the alignment to be developed on an abandoned coke plant site. A Phase II Site Investigation (SI) is being conducted to determine what types and concentrations of possible soil contaminants are still present at the site.

By following the proposed mitigation measures from the previously conducted ISA, following recommendations outlined in the SI, and remediating the site in accordance with local, state, and federal regulations, impacts would be considered less than significant.

Noise

Proposed changes to the project design subsequent to publication of the approved EA/EIR include focused changes to horizontal and/or vertical alignment and to design speeds. Those changes would be expected to increase predicted future build traffic noise levels by 1 to 6 decibels at noise-sensitive receptors near the key design changes. This analysis was performed using the Traffic Noise Model (TNM) promulgated by FHWA. It retained many of the assumptions applied in the 2005 Noise Study Report (NSR) that preceded the approved EA/EIR to enhance consistency with the conceptual approach of the 2005 NSR; however, it applied assumptions regarding the type of ground surface, and the associated attenuation of traffic noise over distance, that were more specific to anticipated future conditions than those applied in the 2005 NSR. That NSR relied on the simpler Sound32/2000 model officially approved for use by Caltrans at the time that the NSR analysis was prepared. The modeling performed for this reanalysis indicates that traffic noise impact determinations for the latest proposed project design remain within the extent of impacts identified in the 2005 NSR. Within areas of noise-sensitive development near key changes in project design, the current assessment of traffic noise abatement suggests that the soundwall heights shown in the 2005 NSR would need to be modified to some extent to meet the criteria based on the current TNM-based assessment. This analysis also proposes changes to the horizontal extent of those barriers.

Based on the results of this analysis, there would be no impacts as a result of the project design modifications that have not been previously identified in the approved EA/EIR. There would, however, be some changes in the level of noise impacts as a result of the design modifications. Within portions of the project corridor subject to impact and where those design modifications had the potential to measurably influence impact levels, the same soundwalls as proposed in the approved EA/EIR -- with partially-modified heights and horizontal extents -- would meet the same basic goals as were met in the analysis for the approved EA/EIR. Specifically, the considered walls would be acoustically feasible, would interrupt the line-of-sight of sensitive receptors to the exhaust stacks of heavy trucks traveling along the proposed Westside Parkway, and are predicted to reduce future build noise levels to below

the applicable NAC. The approved EA/EIR indicates: "*Even with the construction of noise barriers, some residential areas along the Westside Parkway ROW are projected to experience a 12 dBA increase in noise over existing conditions and some areas…are projected to experience a peak-noise-hour level of 66 dBA.*" This conclusion remains true with the proposed design modifications.

With implementation of noise abatement measures described in Table 5-1, impacts would be considered less than significant.

5. Changes to avoidance, minimization, and/or mitigation measures since the environmental document was approved.

Community Impacts

Property owners affected by the proposed design changes would receive compensation in accordance with the Uniform Relocation Assistance and Real Properties Acquisition Policies Act, as amended. Property owners would be compensated the fair market value for their properties; this would be determined on the basis of the highest and best use. Where replacement or relocation is required, federally mandated relocation benefits would be provided to the affected property and business owners in accordance with the Uniform Relocation Assistance & Real Properties Acquisition Policies Act, as amended. All benefits and services would be provided equitably to all affected parties without regard to race, color, religion, age, national origins, and disability, as specified under Title VI of the Civil Rights Act of 1964.

Hazardous Materials/Waste

Any recommendations outlined in the Site Investigation will be reviewed for implementation. Any contamination found will be remediated in accordance with local, state, and federal regulations.

Noise

Revisions to Noise Abatement Measures due to project design changes are described in Table 5-1 below:

Table 5-1
Revisions to Noise Abatement Motivated by Proposed Design Changes

Considered Soundwalls		Previous Analysis					Current Analysis					
			Approximate Begin-End Station Locations									
Desc-ription	Seg-ment	Place-ment	Original Stationing (Metric)	Equivalent for Current Stationing (English)[a]	Dimensions (feet) Length	Dimensions (feet) Height	Place-ment	Approximate Begin-End Station Locations	Dimensions (ft) Length	Dimensions (ft) Height	Changes in Dimensions (feet) Length	Changes in Dimensions (feet) Height
SW-4	a	R/W	150+65 / 157+00	264+10 / 284+90	2080	12	R/W	*264+10[b] /* 289+90	2080	12	-670	0 to +2
	b	R/W	157+00 / 159+40	284+90 / 292+80	790	10			500			
							R/W	289+90 / 292+10	220	10		
	c	R/W	159+40 / 161+25	292+80 / 298+80	600	8	N/A					
	Change to Surface Area (per side of barrier), Sq. Ft.:											*-4060*
SW-5	a	R/W	161+70 to 164+40	300+30 to 309+20	890	10	R/W	302+70 to309+20	4830	10	+250	-2 to 0
	b	R/W	164+40 to 179+00	309+20 to 357+10	4790	12	*R/W[b]*	*309+20 to 335+00*	*2580[b]*	*12[b]*		
							Variable[c]	335+00 to 351+00	1600	10		
							Variable[c]	351+00 to 362+00	1100	12		
	Change to Surface Area (per side of barrier), Sq. Ft.:											+280

[a] Stationing for the current design is based on a different reference starting location/value than stationing for the previous design.
[b] For the purposes of this reevaluation, noise analysis was constrained to vicinity of key design changes near Calloway Drive and west of Coffee Road as follows: approximately Sta. 280+00 to Sta. 320+00, including receptors between Sta. 284+00 and Sta. 307+00; and Sta. 335+00 to Sta. 370+00, with receptors between Sta. 342+00 to Sta. 356+00. This table assumes extension of previously-proposed soundwall designs outside of those areas.
[c] Top of cut or top of fill, as applicable.
N/A: Not applicable.

6. Changes to environmental commitments since the environmental document was approved, e.g., the addition of new conditions in permits or approvals. When this applies, append a revised Environmental Commitments Record (ECR) as one of the Continuation Sheets.

Based on the results of the environmental re-evaluation, no additional environmental commitments beyond the level committed in the approved EA/EIR are required except for the noise abatement, as shown in Table 5-1. In addition, if the results of the site investigation at the Coke Plant site reveal soil contamination from any toxic substances, remediation would be undertaken in accordance with the current regulatory requirements.

RECEIPT # 31612

Notice of Determination

Appendix D

TO:

☒ Office of Planning and Research

For U.S. Mail: P.O. Box Box 3044, Sacramento, CA 95812-3044

Street Address: 1400 Tenth Street, Sacramento, CA 95814

☒ County Clerk

County of: Kern

Address: 1115 Truxtun Avenue, Bakersfield, CA 93301

FILED
KERN COUNTY
DEC 14 2006
ANN K. BARNETT
AUDITOR-CONTROLLER-COUNTY CLERK
BY _____ DEPUTY COUNTY CLERK

FROM:

Public Agency: City of Bakersfield

Address: 1501 Truxtun Avenue, Bakersfield, CA 93301

Contact: Ted Wright

Phone: (661) 326-3700

Lead Agency (if different from above):

Address:

Contact:

Phone:

SUBJECT: ***Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.***

State Clearinghouse Number (if submitted to State Clearinghouse): 2002121014

Project Title: Westside Parkway Project

Project Location (include county): City of Bakersfield, Kern County, California

Project Description: The proposed project involves the construction of a new east-west freeway referred to as the Westside Parkway and a concurrent Specific Plan Line Amendment No. 03-1163. The alignment proposed for the Westside Parkway generally comprises the easterly portion of the Cross Valley Canal (CVC) Alignment as described in the Tier 1 Route 58 Route Adoption Environmental Impact Statement/Environmental Impact Report (EIS/EIR). The Westside Parkway is the first transportation facility project within the Route 58 corridor described in that Tier 1 EIS/EIR. The freeway would be approximately 13 kilometers (km) (8.1 miles) long and extend from approximately Heath Road to a point near SR99 at Truxtun Avenue in the City of Bakersfield and an unincorporated portion of Kern County. The project also includes the extension of Mohawk Street south from Rosedale Highway, across the Kern River, to Truxtun Avenue.

The Preferred Westside Parkway Truxtun Option alternative begins on Stockdale Highway at Heath Road (west terminus), running east and northeast generally paralleling the Cross Valley Canal and Kern River, then crosses the Kern River before connecting to Truxtun Avenue west of SR99 (east terminus). Mohawk Street would be improved and extended from Rosedale Highway to Truxtun Avenue, interchanging with the Westside Parkway and crossing the Kern River. The Westside Parkway facility would be designed to accommodate an ultimate eight-lane freeway with potential multimodal elements. The project would cross a number of existing features such as other roadways, canals and the Kern River. In addition to connecting to Stockdale Highway and Truxtun Avenue; interchanges would be provided at Allen Road, Calloway Drive, Coffee Road and Mohawk Street. Grade-separations would be constructed

This is to advise that the City of Bakersfield has approved the above described
(☒ Lead Agency or ☐ Responsible Agency)
project on December 13, 2006 and has made the following determinations regarding the above described project:

1. The project [☒ will ☐ will not] have a significant effect on the environment.
2. ☒ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☐ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☒were ☐were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☒was ☐ was not] adopted for this project.
5. A statement of Overriding Considerations [☒was ☐ was not] adopted for this project.
6. Findings [☒were ☐were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the Negative Declaration, is available to the General Public at:

The City of Bakersfield, City Hall 1501 Truxtun Ave., Bakersfield, CA 93301

Signature (Public Agency) [signature] Title: Civil Engineer IV

Date: 12/14/06 Date Received for filing at OPR: _____

Authority cited: Section 21083, Public Resources Code.

Reference: Sections 21000-21174, Public Resources Code.

Notice of Environmental Document
Posted by County Clerk on _____
and for 30 days thereafter, Pursuant to
Section 21152(C), Public Resources Code

Revised 2005

COPY

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
CALIFORNIA DIVISION
650 Capitol Mall, Suite 4-100
Sacramento, CA. 95814

January 9, 2007

IN REPLY REFER TO
HDA-CA
File #: 06-KER-00
Document #: P56128

Mr. Malcolm Dougherty, District Director
California Department of Transportation
District 6
P.O. Box 12616
Fresno, CA 93778-2616

Attention: Mr. Juergen Vespermann

Dear Mr. Dougherty:

SUBJECT: Westside Parkway Project – Finding of No Significant Impact

The Federal Highway Administration (FHWA) has reviewed the Environmental Assessment for the proposed project to construct Westside Parkway between Heath Road and SR 99 in the City of Bakersfield in Kern County. We have determined that a Finding of No Significant Impact (FONSI) is applicable for this project. Enclosed please find the signed FONSI statement.

The FHWA acknowledges receipt your letter dated December 13, 2006, responding to our concern relating to compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act (42 USC 4601 et seq.) on this project. Thank you for your assurance of compliance. Additionally, the FHWA would like to make you aware of the financial plan requirement for federally funded projects with an estimated total cost of greater than $100 million, such as Westside Parkway. These projects, termed major projects, must have a completed financial plan prior to the initial construction authorization. For additional information on this requirement, please see the attached FHWA memorandum dated December 8, 2005.

If you have any questions, please contact Mayela Sosa, Project Development Team Leader, at (916) 498-5057.

Sincerely,

/s/ Maiser Khaled

For
Gene K. Fong
Division Administrator

Enclosures

cc: (by E-mail, w/Enclosures)
Jay Norvell, Caltrans
Carrie Bowen, Caltrans
Juergen Vespermann, Caltrans
Richard Putler, Caltrans
Jason Dietz, FHWA
Mayela Sosa, FHWA
Joseph Vaughn, FHWA
Abraham Geevarghese, FHWA

FEDERAL HIGHWAY ADMINISTRATION
FINDING OF NO SIGNIFICANT IMPACT
for
Westside Parkway
between Heath Road and SR 99
in the City of Bakersfield in Kern County, California

The Federal Highway Administration (FHWA) has determined that this project will not have any significant impact on the human environment. This finding of no significant impact is based on the attached Environmental Assessment, which has been independently evaluated by the FHWA and determined to adequately and accurately discuss the environmental issues and impacts of the proposed project. It provides sufficient evidence and analysis for determining that an environmental impact statement is not required. The FHWA takes full responsibility for the accuracy, scope, and content of the environmental assessment.

January 10, 2007
DATE

/s/ Maiser Khaled
For
Gene K. Fong
Division Administrator
Federal Highway Administration

TIER 2 ENVIRONMENTAL ASSESSMENT/FINAL ENVIRONMENTAL IMPACT REPORT

WESTSIDE PARKWAY

City of Bakersfield
Public Works Department
1501 Truxtun Avenue, 2nd Floor
Bakersfield, CA 93301

Caltrans

United States Department of Transportation
Federal Highway Administration

September 2006

GENERAL INFORMATION ABOUT THIS DOCUMENT

What's in this document?

This document contains a Final of No Significant Impact and Final Environmental Impact Report, which examine the environmental effects of the proposed Westside Parkway in Bakersfield, Kern County.

The Environmental Assessment/Draft Environmental Impact Report was circulated to the public from March 16 to May 6, 2006. Responses to the circulated document are shown in the Comments and Responses section (Appendix I) of this document. Throughout this document, shading of the text indicates changes from the draft document.

What happens after this?

The proposed project has completed environmental compliance after the circulation of this document. When funding is approved, the California Department of Transportation and the Federal Highway Administration can design and construct all or part of the project.

It should be noted that at a future date, the Federal Highway Administration or another federal agency may publish a notice in the Federal Register, pursuant to 23 U.S. Code Section 139(1), indicating that a final action has been taken on this project by the Federal Highway Administration or another federal agency. If such notice is published, a lawsuit or other legal claim will be barred unless it is filed within 180 days after the date of publication of the notice (or within such shorter time period as is specified in the federal laws pursuant to which judicial review of the federal agency action is allowed). If no notice is published, then the lawsuit or claim can be filed as long as the periods of time provided by other federal laws that govern claims are met.

SCH# 2002121014

Construct Westside Parkway Project between Heath Road and SR99 in Bakersfield, Kern County

TIER 2 ENVIRONMENTAL ASSESSMENT/FINAL ENVIRONMENTAL IMPACT REPORT

Submitted Pursuant to: (State) Division 13, California Public Resources Code
(Federal) 42 USC 4332(2)(C)

U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration, Caltrans,
And City of Bakersfield Department of Public Works

Date of Approval	Jack LaRochelle Assistant Public Works Director City of Bakersfield Public Works Department
Date of Approval	Malcolm X. Dougherty District Director California Department of Transportation District 6
Date of Approval	Gene K. Fong Division Administrator Federal Highway Administration

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Acronyms

AADT	Annual Average Daily Traffic
ACHP	Advisory Council on Historic Preservation
ADT	Average Daily Traffic
ANSI	American National Standard Institute
APCD	Air Pollution Control District
APE	Area of Potential Effect
APN	Assessor Parcel Number
ASR	Archaeological Survey Report
AQAP	Air Quality Attainment Plan
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
AQS	Air Quality Study
BACMs	best available control measures
bgs	below ground surface
BMPs	Best Management Practices
BNSF	Burlington Northern Santa Fe
BO	Biological Opinion
BSP	Bakersfield Systems Plan
BTU	British Thermal Unit
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CAAQS	California Ambient Air Quality Standards
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CGS	California Geologic Survey
CBD	Central Business District
CDFG	California Department of Fish and Game
CDMG	California Division of Mines and Geology
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CGS	California Geologic Survey
CHL	California Historical Landmarks
CHRIS	California Historical Resources Information Systems
CMP	Congestion Management Program
CMS	Congestion Management System
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon Monoxide
COG	Council of Governments
CPHI	California Points of Historical Interest
CR	California Register
CRHR	California Register of Historic Resources
CTC	California Transportation Commission
CVC	Cross Valley Canal
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
dau	Detailed Analysis Unit
dBA	A-weighted decibel

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DBCP	1,2-dibromo-3-chlorpane
Del/Veh	delay in seconds per vehicle
DTSC	Department of Toxic Substances Control
EA	Environmental Assessment
EDB	ethylene dibromide
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FBD	ethylene analysis unit
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Maps
FIS	Flood Insurance Study
FTA	Federal Transit Administration
FTIP	Federal Transportation Improvement Program
FHWA	Federal Highway Administration
FMFCD	Fresno Metropolitan Flood Control District
FNAE	Finding of No Adverse Effect
FSTIP	Federal/State Transportation Improvement Program
FY	fiscal year
g	units of gravity
GET	Golden Empire Transit
ha	hectares
HCP	Habitat Conservation Plan
HEAP	Highway Energy Analysis Program
HMT	Hazardous Materials Team
H_2S	Hydrogen Sulfide
HOV	High Occupancy Vehicle
HPSR	Historic Property Survey Report
HRER	Historic Resources Evaluation Report
HRI	California State Historic Resources Inventory
I	Interstate
ID	Irrigation District
INCE	Institute of Noise Control Engineering
ISA	Initial Site Assessment
KCWA	Kern County Water Agency
KCDEHS	Kern County Department of Environmental Health Services
Kern COG	Kern Council of Governments
km	Kilometers
KWBA	Kern Water Bank Authority
LCA	Land Conservation Act
LOS	level of service
LT	long-term
MBHCP	Metropolitan Bakersfield Habitat Conservation Plan
MBFB-MPDG	Metropolitan Bakersfield Freeway Beautification, Master Plan Design Guidelines
MCE	Maximum Credible Earthquake
MCL	Maximum Contaminant Level
MFL	million fibers per liter
mg/l	milligrams per liter
MLD	most likely descendant
mm	millimeters
mph	miles per hour

mpg	miles per gallon
MRP	Monitoring and Reporting Plan
MSL	mean sea level
MS4s	Municipal Separate Storm Sewer Systems
MTBE	methyl tertiary butyl ether
MTIS	Major Transportation Investment Strategy
M_W	moment magnitude
NA	not applicable
NB	Northbound
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NAHC	Native American Heritage Commission
ND	not detectable
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NHPA	National Historic Preservation Act
NOC	Notice of Completion
NO_2	Nitrogen Dioxide
NOP	Notice of Preparation
NO_x	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NR	no ranking
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NTU	Nephelometric Turbidity Units
O_3	Ozone
PA	peak horizontal bedrock acceleration
Pb	Lead
pCi/L	pico Curries per liter
PDT	Project Development Team
PG&E	Pacific Gas and Electric
$PM_{2.5}$	Particulate Matter equal to or less than 2.5 microns
PM_{10}	Particulate Matter equal to or less than 10 microns
PNA	polynuclear aromatic compounds
ppm	parts per million
PRG	Preliminary Remediation Goals
RACM	Reasonably Available Control Measures
RACT	Reasonably Available Control Technology
RIP	Regional Improvement Program
ROCs	Reactive Organic Compounds
ROGs	Reactive Organic Gases
ROP	Rate of Progress
RRBWSD	Rosedale-Rio Bravo Water Storage District
RTP	Regional Transportation Plan
RTIP	Regional Transportation Improvement Program
SB	Southbound
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SJVUAPCD	San Joaquin Valley Unified Air Pollution Control District
SLM	Sound Level Meters
SO_2	Sulfur Dioxide

SOPUS	Shell Oil Products United States
SR	State Route
SSJVIC	Southern San Joaquin Valley Information Center
ST	short-term
SUSMP	Standard Urban Storm Water Mitigation Plan
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TeNS	Technical Noise Supplement
TCM	Transportation Control Measures
TDM	Traffic Demand Management
TDS	total dissolved solids
TIA	Traffic Impact Analysis
TIP	Transportation Improvement Program
TRPH	Total Recoverable Petroleum Hydrocarbons
TSM	Transportation Systems Management
USACOE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VMT	vehicle miles traveled

EXECUTIVE SUMMARY

ES-1 PROJECT DESCRIPTION

The City of Bakersfield, Caltrans, and the Federal Highway Administration (FHWA) have prepared a joint Tier 2 Environmental Assessment/Environmental Impact Report (EA/EIR) to construct a new east-west freeway referred to as the Westside Parkway. The alignment proposed for the Westside Parkway generally comprises the easterly portion of the Cross Valley Canal (CVC) Alignment as described in the Tier 1 Route 58 Route Adoption Environmental Impact Statement/Environmental Impact Report (EIS/EIR). The Westside Parkway is the first transportation facility project within the Route 58 corridor described in that Tier 1 EIS/EIR. The freeway would be approximately 13 kilometers (km) (8.1 miles) long and extend from approximately Heath Road to State Route (SR) 99 in the City of Bakersfield and an unincorporated portion of Kern County. The project also includes the extension of Mohawk Street south from Rosedale Highway, across the Kern River, to Truxtun Avenue.

The proposed alignment for the Westside Parkway begins at the intersection of Stockdale Highway and Heath Road. It then bends northward, paralleling Stockdale Highway approximately 0.8 km (0.5 mile) to the north to Allen Road where it would extend eastward parallel to the Cross Valley Canal (CVC) and Kern River, ultimately crossing the Kern River near the existing Burlington Northern Santa Fe (BNSF) railroad bridge and terminating near SR99.

Two alternatives are being considered for the project, construction of a new freeway and no action. Two options are being considered for the eastern terminus of the freeway alternative: the Truxtun Option and Oak Option. These options provide a different alignment for the Westside Parkway east of Mohawk Street. The alignment for the Truxtun Option heads directly east from Mohawk Street, crossing the CVC, Kern River, BNSF railroad, Truxtun Avenue and the Carrier Canal. It then curves northeast to join directly into Truxtun Avenue west of SR99. The alignment for the Oak Option curves in a southeasterly direction from Mohawk Street, nearly paralleling and remaining south of the BNSF railroad tracks where they cross the Kern River. The alignment would cross nearly perpendicular to the CVC, Kern River and Truxtun Avenue, curving back in an easterly direction adjacent and parallel to the BNSF mainline. The Oak Option would occupy the western portion of the BNSF rail yard, connecting to Oak Street east of SR99.

Sufficient right of way is being acquired for the Westside Parkway to accommodate an ultimate eight-lane facility. The typical 64-meter (210-foot) wide right of way accommodates four 3.6-meter (12-foot) lanes in each direction; 3-meter (10-foot) left and right shoulders; plus space for landscaped side slopes, drainage facilities and maintenance access along both sides of the freeway. The right of way also allows for potential future conversion of inside lanes to mass transit usage such as high occupancy vehicle (HOV) lanes, bus lanes or possibly bus rapid transit systems.

While the right of way would accommodate the ultimate build-out of an eight-lane freeway, traffic projections for the year 2030 indicate that fewer lanes would be required initially. Therefore, it is planned to construct only the number of lanes necessary within each segment of the corridor to maintain

acceptable levels of service on the freeway through 2030. This would be four lanes from Heath Road to Allen Road, six lanes from Allen to Coffee Road, eight lanes from Coffee Road to Mohawk Street and six lanes from Mohawk Street to the eastern terminus of the freeway.

The mainline right of way (64 meters/210 feet) acquired for the Westside Parkway is narrower than the corridor adopted in the Tier 1 Route 58 Route Adoption EIS/EIR, which was 91 meters (300 feet). The Tier 1 corridor width was selected to provide flexibility in the design of future transportation facilities. The Tier 1 corridor provided for an ultimate eight-lane freeway (depressed and elevated sections) and a median that could accommodate other transportation facilities. The Westside Parkway provides for an ultimate eight-lane freeway generally at grade, and a median that could accommodate other transportation facilities; i.e., mass transit.

Access to the freeway would be provided at Stockdale Highway, Allen Road, Calloway Drive, Coffee Road, Mohawk Street, and the eastern terminus at Truxtun Avenue or Oak Street. Stockdale Highway would connect with the Westside Parkway at an at-grade, three-way, signalized intersection east of Heath Road. Interchanges would be provided at Allen Road, Calloway Drive, Coffee Road, and the extended Mohawk Street. For the Truxtun Option, Truxtun Avenue would be connected with the Westside Parkway at an at-grade, signalized intersection about 200 meters (650 feet) west of the Truxtun undercrossing of SR99. For the Oak Option, the Westside Parkway would join Oak Street via two-lane east- and west-bound ramps.

ES-2 PURPOSE AND NEED

The purpose of the proposed Westside Parkway project is to construct a high-capacity, east-west transportation facility that meets the following criteria:

- Reduces congestion on existing east-west arterials in west Bakersfield
- Supports Bakersfield's current and planned development west of SR99
- Improves connectivity of the existing transportation network in west Bakersfield
- Accommodates potential future multimodal transportation facilities

This purpose flows directly from and is fully consistent with the Tier 1 purpose to "provide an alignment for future multimodal transportation facilities that reduces congestion on the transportation network in the western Bakersfield metropolitan area." (FHWA and Caltrans, 2002) This project combined with future Tier 2 projects could ultimately satisfy the additional Tier 1 purpose of continuity for State Route 58.

Bakersfield's Central Business District (CBD) is generally located east of SR99. It has always been a commuter destination for outlying residential areas. Commuters from the rapidly growing residential neighborhoods in Bakersfield west of SR99 currently have only a few continuous east-west arterials on which to commute to the CBD. Population growth in west Bakersfield within the next 30 years is projected to increase traffic volumes on existing east-west arterials by over two and one half times, resulting in a substantial decrease in level of service on these roads. A new east-west freeway would reduce this congestion. To maximize the congestion relief and the mobility improvement opportunity that would be available from a new east-west freeway, vehicles need to be adequately collected and

distributed to the freeway from the surrounding transportation network. The utility of existing east-west arterials that are not continuous between west Bakersfield and the CBD can be enhanced if connected to the proposed freeway by adequate north-south routes. The extension of Mohawk Street to Truxtun Avenue would connect five major east-west arterials in west Bakersfield, as well as the proposed freeway.

ES-3 PROJECT ALTERNATIVES

Formerly, this project was studied as a new alignment for State Route 58 (SR58) between Interstate 5 (I-5) and SR99. That process, known as Route Adoption, initiated preliminary engineering and environmental review of alternative corridor alignments to replace existing SR58. The No Project alternative was also studied which would have maintained existing SR58 in its current location. In 1991, a Tier 1 EIS/EIR for the Route 58 Adoption Project was initiated. The objective of the Tier 1 EIS/EIR was to consider alternative corridors and identify a preferred corridor alignment that could be utilized for right of way acquisition and corridor protection. The Tier 1 EIS/EIR studied environmental impacts that were differentiators between the corridor alternatives considered. The Tier 1 EIS/EIR was certified by FHWA and the California Department of Transportation (Caltrans) in May 2001 and a Record of Decision was adopted in February 2002, recommending a preferred alternative (CVC Alignment). Construction-level impacts of the project are addressed by this Tier 2 EA/EIR based upon the preferred alternative selected in the Tier 1 studies. Funding that has been identified for construction of the Westside Parkway project requires completion of a Tier 2 (construction-level) environmental analysis. As a result, the City of Bakersfield, Caltrans, and FHWA have prepared this EA/EIR to satisfy those requirements.

The footprint of the Westside Parkway project is nearly identical to the eastern segment CVC Alignment alternative of the Tier 1 alignment analyzed in the Route Adoption Project, with refinements to reduce environmental impacts (such as avoiding the Bakersfield Refinery) and improve circulation in some areas (such as an interchange with Mohawk Street). Since completion of the Tier 1 studies, the Westside Parkway alignment has been refined in several areas to reduce environmental impacts or to enhance circulation while keeping within the Tier 1 preferred alternative corridor location.

A range of reasonable alternatives that could potentially meet the stated purpose of the proposed project was considered over the course of project planning. Those alternatives ranged from reducing traffic demand in the western Bakersfield metropolitan area to consideration of a new transportation facility to meet projected demand within the planning horizon for this project (i.e., year 2030). The alternatives considered for the proposed project included:

- Westside Parkway Truxtun Option
- Westside Parkway Oak Option
- Increase capacity of Rosedale Highway
- New transportation facility on six different alignments (Seventh Standard Road, Hageman Road, Brimhall Road, Rosedale Highway, Westside Parkway SR58 East Option, and Southern Alignment)
- Mass transit

- Transportation system management
- No Action Alternative

All of the alternatives except for the Westside Parkway Truxtun Option, the Westside Parkway Oak Option and the No Action Alternative were withdrawn from further consideration. Alternatives were withdrawn in the Tier 1 EIS/EIR (and this document) because they did not meet the purpose and need of the proposed action and/or they resulted in environmental impacts that were determined to be unacceptable.

The following table provides a summary of the differences between the two build alternatives.

Table ES-1. Design Differences Between Alternatives

Westside Parkway Truxtun Option	Westside Parkway Oak Option
Easterly terminus consists of an at-grade signalized intersection at Truxtun Avenue.	Easterly terminus consists of two elevated signalized intersections at Oak Street.
Requires highly skewed bridge crossings at CVC, Kern River, and Truxtun Avenue.	Requires bridge crossings at CVC, Kern River, and Truxtun Avenue; however, shorter bridge spans would be required due to more perpendicular crossing geometrics.
Would require City Corporation Yard to be relocated to another site.	Would affect westerly portion of the BNSF rail yard and developed commercial property located between Truxtun Avenue and Carrier Canal.
CVC would be realigned east of Mohawk Street.	CVC would not require realignment east of Mohawk Street.
High profile where alignment crosses BNSF railroad tracks.	Lower profile since this alternative does not cross BNSF railroad tracks. The alignment parallels, and remains south of, the tracks.
No modifications to Oak Street overhead bridge.	Would require modifications to the existing Oak Street overhead bridge that crosses the BNSF tracks and rail yard.

ES-4 SELECTION OF THE PREFERRED ALTERNATIVE

The City of Bakersfield selected the Truxtun Option as the preferred alternative for the proposed Westside Parkway, and FHWA has concurred with that recommendation. This selection was based on consideration of the purpose and need for the project, environmental impacts, and relocation of the BNSF Bakersfield rail yard.

The No Action Alternative would not approach the purpose and need for the project. It would not reduce congestion on existing east-west arterials or improve connectivity of the existing transportation network in west Bakersfield, it would not support Bakersfield's current and planned development west of SR99, and it would not facilitate connection of the planned transit system for the Bakersfield metropolitan area with the existing roadway network in west Bakersfield.

Both the Westside Parkway Truxtun and Oak options approach the purpose and need for the project, and both alternatives provide the same transportation improvements. The alternatives would reduce congestion on existing east-west arterials in west Bakersfield relative to the No Action Alternative, increase the options for motorists to access the Central Business District (CBD) from west Bakersfield,

reduce traffic on SR99, Coffee Road, and to some extent Calloway Drive, and reduce out-of-direction travel for motorists that would be accessing the Westside Parkway. Both the Truxtun and Oak options support Bakersfield's current and planned development west of SR99, and both alternatives provide sufficient right of way to construct dedicated busways that are consistent with Golden Empire Transit's (GET) long-range plans for public transit.

Environmental impacts projected for the Truxtun and Oak options are similar. Because of differences in the orientation of the Westside Parkway bridge across the Kern River with the two options, the Truxtun option would increase the 100-year flood elevation immediately upstream of the bridge by about 0.02 m (0.07 foot) more than the Oak option (0.23 foot [0.07 meter] versus 0.16 foot [0.05 meter]). Neither alternative would result in a substantial increase in flood risk to surrounding properties or the public. The Kern River bridge orientation for the Truxtun option would also result in the removal of 0.1 hectare (0.3 acre) more of Great Valley cottonwood riparian forest and 0.17 hectare (0.41 acre) more of non-wetland waters of the U.S. than the Oak option.

Other differences in impacts between the alternatives involve visual resources and relocations. The Truxtun option would have a higher bridge over the Kern River than the Oak option. The Oak option could involve two more parcels potentially containing hazardous waste than the Truxtun option. The Oak option would also displace approximately 18 percent of the BNSF rail yard and relocate two more commercial businesses than the Truxtun option.

The relocation of the BNSF Bakersfield yard was estimated by BNSF to cost the City of Bakersfield approximately $220 million. This estimate does not include the cost the City would incur in demolition of structures at the existing yard and remediating any contamination that may be present there. This cost makes the Oak option impracticable. The Truxtun option was selected as the preferred alternative for the Westside Parkway because of the high cost of relocating the BNSF Bakersfield rail yard with the Oak option, and because both alternatives are similar in their ability to meet the project purpose and need and have similar environmental impacts.

ES-5 Environmental Consequences and Mitigation

Construction of either of the Westside Parkway options would result in the loss of 32 hectares (79 acres) of Prime Farmland. Conversion of these lands is consistent with the Metropolitan Bakersfield General Plan and zoning land use designation and ongoing development in the project area.

Construction of the Westside Parkway Truxtun Option or Westside Parkway Oak Option would have similar impacts on the physical environment. A new bridge across the Kern River for the Truxtun Option or Oak Option would increase the water surface elevation immediately upstream of the bridge by 0.07 meter (0.23 foot) or 0.05 meter (0.16 foot), respectively. A new bridge across the Kern River for the Mohawk Street extension proposed for both options would increase the water surface elevation in the immediate vicinity of the bridge by 0.04 meter (0.13 foot). This would not substantially increase flood risk in the Kern River floodplain.

The Westside Parkway would have a longitudinal encroachment on an overflow area of the 100-year floodplain of the Kern River between the Friant-Kern Canal and Mohawk Street. With the encroachment, flooding would be eliminated in this overflow area. This encroachment is not within the main flowpath of the Kern River floodplain and would have no effect on the river's hydraulic characteristics at the peak flow.

The Westside Parkway is in the 2004 Kern Council of Governments financially constrained Regional Transportation Improvement Program (RTIP). It is the first transportation facility project within the Route 58 corridor described in the Route 58 Route Adoption Project Tier 1 EIS/EIR. In accordance with 40 CFR Parts 51 and 93, the Federal Highway Administration (FHWA) found that the 2004 RTIP conforms to the appropriate portion of the State Implementation Plan for air quality, and included the RTIP in the Federal Transportation Improvement Plan (FTIP).

Approximately 34 and 38 assessor parcels with known or potential hazardous waste sites are located within or adjacent to the Westside Parkway Truxtun Option and the Westside Parkway Oak Option, respectively. Most of these sites consist of water wells where portable diesel generators were used to power the pumps or petroleum production-related activities. Both options cross two former waste disposal ponds within the Shell Bakersfield Refinery and a former storage pile of waste petroleum coke south of the refinery. The ponds were closed under a formal closure plan accepted by the Central Valley Regional Water Quality Control Board (CVRWQCB) and California Department of Toxic Substances Control (DTSC). Remediation is being conducted at the former waste petroleum coke storage pile under the oversight of DTSC. The Westside Parkway Oak Option also crosses four sites within the BNSF railroad right of way and rail yard that may contain hazardous waste.

The Westside Parkway Truxtun Option would impact 42.7 hectares (105.5 acres) of non-native grassland, 33.5 hectares (82.8 acres) of agricultural land, and 0.5 hectare (1.3 acres) of Great Valley cottonwood riparian forest near the Kern River. The Westside Parkway Oak Option would impact less Great Valley cottonwood riparian forest and more non-native grassland resulting in impact totals of 42.8 hectares (105.8 acres) of non-native grassland, 33.5 hectares (82.8 acres) of agricultural land, and 0.4 hectare (1.0 acre) of Great Valley cottonwood riparian forest. The project has the potential to impact kit fox through loss of individuals and possible disruption of travel corridors near the Kern River in the City of Bakersfield. Potential impacts to other special-status species include the loss of individuals and burrows of blunt-nosed leopard lizards, western burrowing owls, San Joaquin antelope squirrels, and Tipton kangaroo rats during project construction. Because the blunt-nosed leopard lizard is a "fully protected species" in California, no take authorization can be granted by the California Department of Fish and Game (CDFG). Take-minimization measures for the blunt-nosed leopard lizard specific to the Westside Parkway project would be developed with input from that agency. The conversion of agricultural land to a transportation facility would affect Swainson's hawk foraging habitat.

The Westside Parkway Truxtun Option and Westside Parkway Oak Option would not result in any residential relocations. The Truxtun Option would require the relocation of the Bakersfield Corporation Yard plus up to four commercial business relocations along Mohawk Street. The Oak Option may require two additional commercial relocations, the Paragon Day Spa and a medical-dental building east of the

location where the alignment crosses the Kern River and Truxtun Avenue plus up to four commercial business relocations along Mohawk Street.

East of the Kern River and Truxtun Avenue, the Westside Parkway Oak Option would affect the existing BNSF rail yard south of the mainline BNSF tracks. Rail yard operations would need to be modified if this alternative were implemented as the selected alternative. Coordination between the BNSF railroad and the City of Bakersfield is ongoing to evaluate right of way options for this property.

The Westside Parkway Truxtun Option and Westside Parkway Oak Option would take 4.5 hectares (11.1 acres) of the existing Rosedale-Rio Bravo Water Storage District (RRBWSD) spreading basin area west of Allen Road. Spreading basins impacted by the project are being replaced by approximately 12 hectares (30 acres) of new basins on the east side of Allen Road concurrent with ongoing residential development in that area.

The Westside Parkway would increase noise levels at adjacent sensitive receptors along most of the alignment west of Coffee Road. Peak-noise-hour traffic sound would reach or exceed 66 dBA L_{eq} at some receptors north and south of the alignment. In some cases, noise may be increased by more than 12 dBA above ambient conditions.

Impacts to visual resources would be the same for both Westside Parkway options. The freeway would have a moderate impact on the Kern River landscape where bridges for the options cross the river in the vicinity of the BNSF bridge and where the Mohawk Street bridge crosses the river.

The only cultural resource within the Area of Potential Effect (APE) of the Westside Parkway alternatives eligible for or listed in the National Register of Historic Places is the Friant-Kern Canal. The Westside Parkway alternatives cross the canal east of Coffee Road. The State Historic Preservation Officer has concurred with FHWA's determination that the proposed project would have no adverse affect on the Friant-Kern Canal because of project design and construction provisions.

Mitigation measures would be implemented to reduce adverse effects of the Westside Parkway. Those measures are summarized in Table ES-2.

ES-6 COORDINATION

A variety of local, regional, State, and Federal agencies were consulted during the course of environmental studies for the proposed project. A scoping meeting was held at the beginning of environmental studies to gain input from the public. As a result of this coordination, the following major areas of concern were identified:

- Air quality
- Biological resources
- Cultural resources
- Hazardous waste and hazards
- Noise

- Recreational resources
- Circulation and access
- Water quality/hydrology

The EA/DEIR was circulated for public review from March 16, 2006 through May 6, 2006. Two public hearings were held on the adequacy of the EA/DEIR on April 19 and 20, 2006. This EA/FEIR has been revised, as necessary, in response to comments received during the public review period of the draft environmental document, and the EA/FEIR contains responses to all comments received during the public review period.

Permits would be required from the U.S. Army Corps of Engineers (Section 404), the California Department of Fish and Game (Section 1602), and the California Reclamation Board for disturbances to waters of the U.S. at the Kern River crossings. The San Joaquin Valley Air Pollution Control District would require an Air Impact Assessment for construction emissions. See Section 7.2.3 for project permit requirements.

Table ES-2. Mitigation Measures

Area	Potential Impact	Mitigation
Seismic	Structural damage	Standard design based on geotechnical investigations
Mineral Resources	Loss of oil reserves	Avoidance of encroachment on wells and coordination with active oil and gas operators and the Division of Oil, Gas, and Geothermal Resources
Hydrology	Flooding	Runoff collection and retention
	Loss of groundwater recharge basin	Replacement
Water Quality	Pollution from roadway runoff and hazardous material spills	Runoff collection and retention
Hazardous Waste	Spread existing contamination	Site remediation
Biological Resources	Truxtun Option: Loss of 33.5 hectares (82.8 acres) of agricultural land, 42.7 hectares (105.5 acres) of non-native grassland, and 0.5 hectare (1.3 acres) of Great Valley cottonwood riparian forest Oak Option: Loss of 33.5 hectares (82.8 acres) of agricultural land, 42.8 hectares (105.8 acres) of non-native grassland, and 0.4 hectare (1.0 acre) of Great Valley cottonwood riparian forest	Preservation of lands near the project in accordance with SR58 Route Adoption Project Biological Opinion or participation in Metropolitan Bakersfield Habitat Conservation Plan
	Truxtun Option: Loss of 0.25 hectare (0.61 acre) of non-wetland waters of the U.S. Oak Option: Loss of 0.08 hectare (0.20 acre) of non-wetland waters of the U.S.	Participation in Metropolitan Bakersfield Habitat Conservation Plan
	Direct and indirect impacts to San Joaquin kit fox, blunt-nosed leopard lizard, Swainson's hawk, western burrowing owl, loggerhead shrike, Tipton kangaroo rat and San Joaquin antelope squirrel	Preservation of lands near the project in accordance with SR58 Route Adoption Project Biological Opinion or participation in Metropolitan Bakersfield Habitat Conservation Plan; implementation of terms and conditions of SR58 Route Adoption Project Biological Opinion; pre-construction surveys and avoidance of disturbance to nesting Swainson's hawks and burrowing owls during construction Coordination with CDFG to minimize take of blunt-nosed leopard lizard
Land Use	Loss of 32 hectares (79 acres) of Prime Farmland	Relocation assistance and real property acquisition policies
Relocations	Displacement of up to six commercial businesses and a portion of the BNSF rail yard	Relocation assistance and real property acquisition policies
Visual Resources	Reduction in visual quality	Landscaping; bridge and noise barrier aesthetic treatments
Noise	Increased traffic noise levels	Construction of eight noise barriers and/or use of "low-noise pavement"
Historical Resources	Cross Friant-Kern Canal	Span canal in accordance with SHPO's Finding of No Adverse Effect

1.0 PURPOSE OF AND NEED FOR THE PROJECT

1.1 INTRODUCTION

The City of Bakersfield, Caltrans, and FHWA have prepared a joint Tier 2 EA/EIR for a proposed transportation facility referred to as the Westside Parkway. Generally, the Westside Parkway project would be constructed between Heath Road and SR99, a distance of approximately 13 km (8.1 miles), in the metropolitan Bakersfield area. Full access interchanges are proposed at Allen Road, Calloway Drive, Coffee Road, and Mohawk Street. At its westerly terminus, the Westside Parkway would tie into Stockdale Highway near Heath Road. At its easterly terminus near SR99, several alternatives have been considered including tying into Truxtun Avenue west of SR99 and tying into Oak Street east of SR99. The purpose of the EA/EIR is to address social, economic, and environmental effects relating to construction of the Westside Parkway project. This EA/EIR has been prepared to satisfy the environmental review requirements of both NEPA and CEQA.

Formerly, the Westside Parkway project was studied as a new alignment for SR58 between I-5 and SR99. That process, known as Route Adoption, initiated preliminary engineering and environmental review of alternative corridor alignments to replace existing SR58. The No Project alternative was also studied which would have maintained existing SR58 in its current location. In 1991, a Tier 1 EIS/EIR for the SR58 Route Adoption project was initiated. The objective of the Tier 1 EIS/EIR was to consider alternative corridors and identify a preferred corridor alignment that could be utilized for right of way acquisition and corridor protection. The Tier 1 EIS/EIR studied environmental impacts that were differentiators between the corridor alternatives considered. The Tier 1 EIS/EIR was certified by FHWA and Caltrans in May 2001 and a Record of Decision was adopted in February 2002, recommending a preferred alternative. As specific transportation projects are identified in the Tier 1 corridor, Tier 2 environmental documents would be prepared to evaluate the specific impacts of those transportation projects. Construction-level impacts of the Westside Parkway project are addressed by this Tier 2 EA/EIR based upon the preferred alternative selected in the Tier 1 studies.

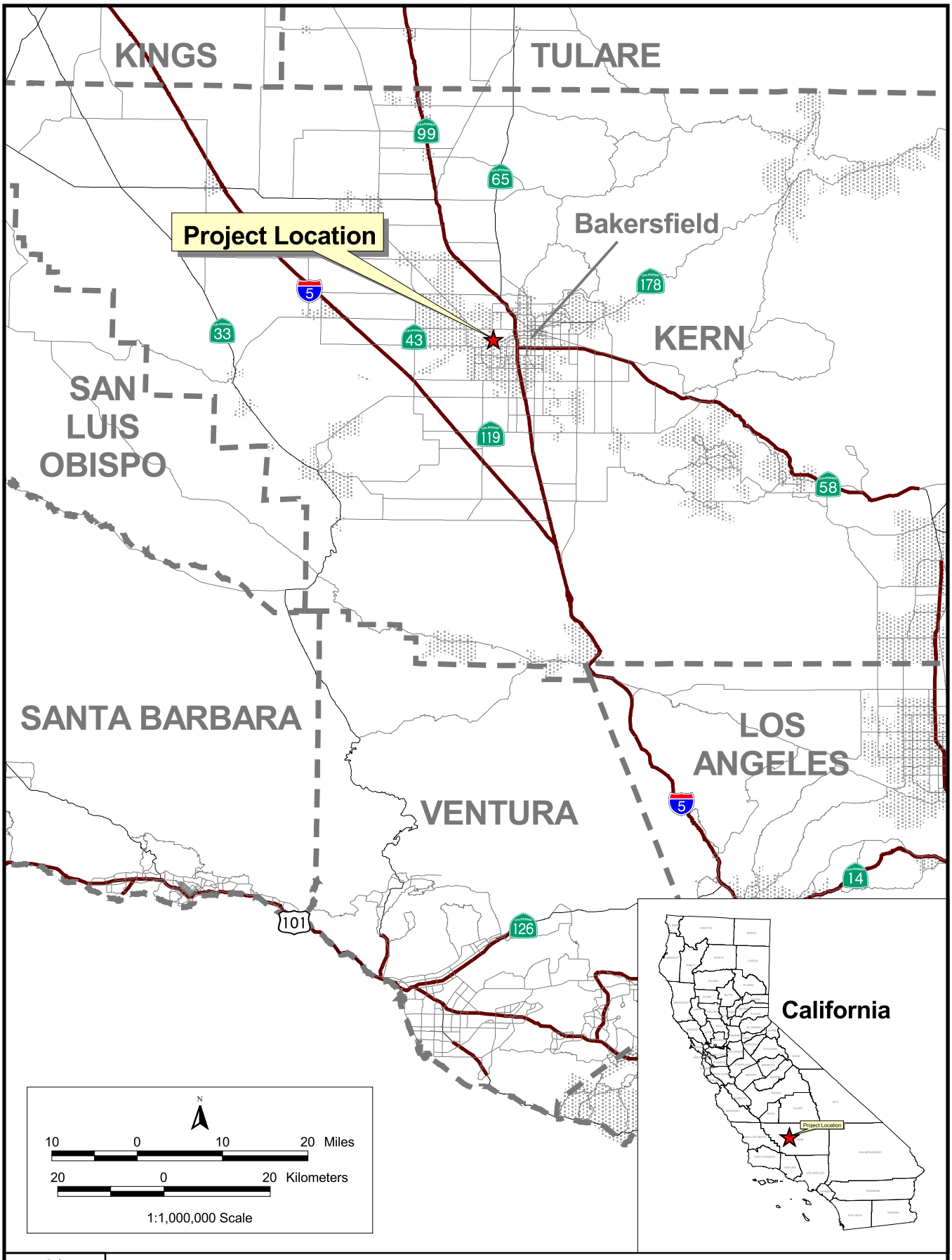
The footprint of the Westside Parkway is nearly identical to the eastern segment of the Tier 1 preferred alignment, which was called the CVC Alignment. Since completion of the Tier 1 studies, the Westside Parkway alignment has been refined in several areas to reduce environmental impacts or to enhance circulation while keeping within the general location of the Tier 1 preferred alternative corridor location. This section of the EA/EIR describes the general Westside Parkway project area, the purpose and need for the project, and the environmental process used to evaluate the project.

The project is included in the Kern Council of Governments (Kern COG) financially constrained 2004 Regional Transportation Improvement Program and the 2004 State Implementation Plan. It is also included in the Kern COG Regional Transportation Plan.

1.2 PROJECT AREA

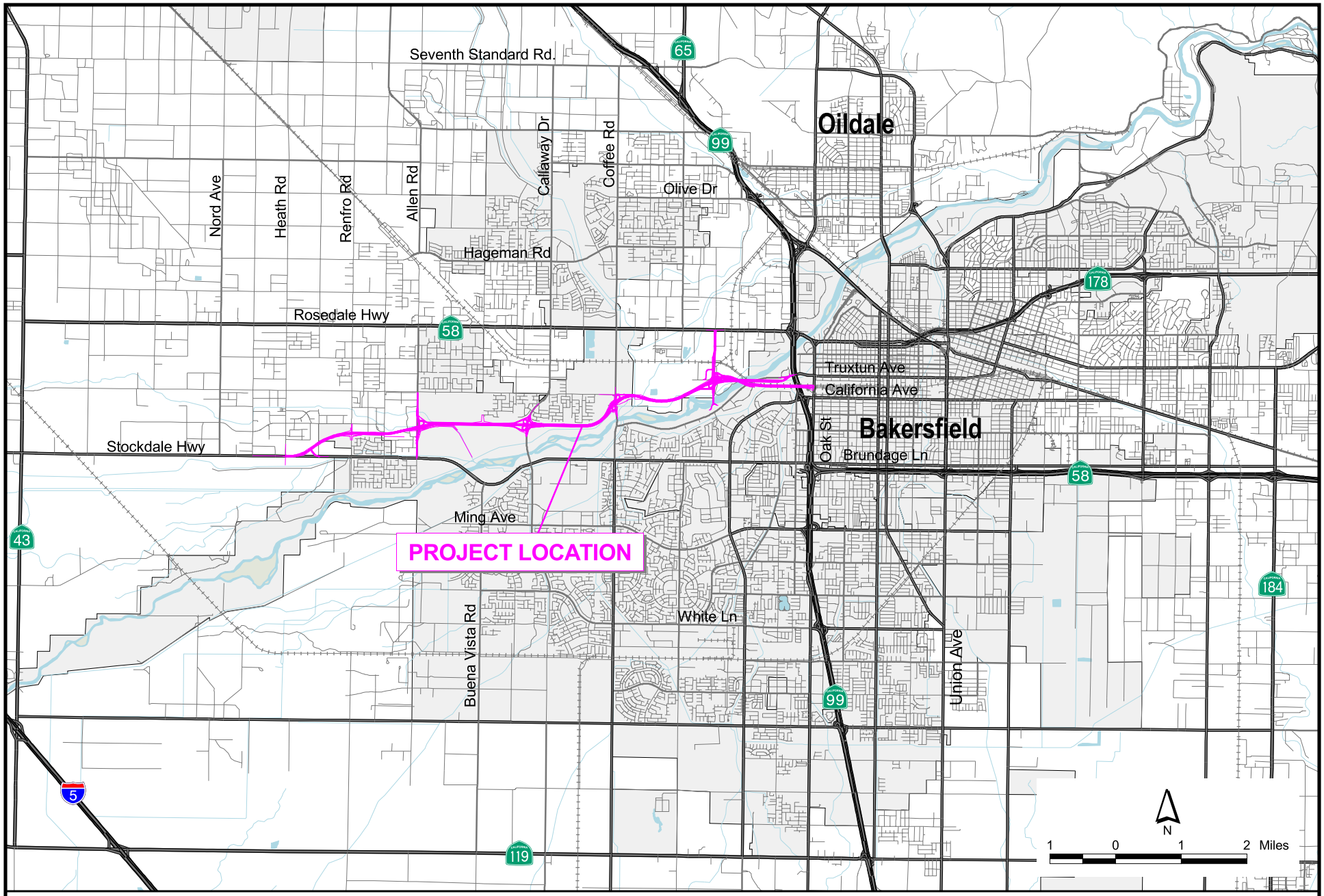
1.2.1 Project Location

The proposed Westside Parkway project is located in west Bakersfield and Kern County, California (refer to Figure 1.2-1). Kern County is the third largest county in California, covering approximately 21,088 km^2 (8,142 square miles). The City of Bakersfield is located approximately 160 km (100 miles) north of Los Angeles and 470 km (290 miles) southeast of San Francisco. Smaller cities and unincorporated communities within a 40-km (25-mile) radius include Shafter, Wasco, Delano, Lamont, and Arvin.



REGIONAL LOCATION MAP

Project No. 29866227	December 2004	Westside Parkway Project	Figure 1.2-1



PROJECT VICINITY MAP

Project No.: 29866227	Date: DECEMBER 2004	Project: WESTSIDE PARKWAY	Figure 1.2-2

1.3 BACKGROUND

1.3.1 Planning History

Since the early 1970's, a number of planning studies have been conducted which considered and/or evaluated the need for a high-capacity transportation facility to serve west Bakersfield. These studies include the following:

- 1990 Transportation Plan and Program, 1973
- Rosedale General Plan, 1980
- Analysis of the Westside Highway/State Highway 99 Interchange, 1982
- Preliminary Route Adoption Analysis for Route 58 from Interstate 5 to Route 99, 1985
- Route 178 Corridor Study
- Final Environmental Impact Report for the Proposed General Plan Amendment to the Circulation Elements of the Kern County and Rosedale General Plans (Westside Thoroughfare), 1986
- Westside Corridor Study, 1988
- Metropolitan Bakersfield 2010 General Plan, 1990
- Project Study Report On Route 58 Between Renfro Road and Route 99 (PM 45.0 to PM 52.3), 1992
- Metropolitan Bakersfield Major Transportation Investment Strategy, 1997
- Metropolitan Bakersfield Transportation Systems Study, 2001
- Tier I Route Adoption Project EIS/EIR, 2002
- Metropolitan Bakersfield General Plan [Update], 2002

In late 2001, it was determined that the conceptual connection of a transportation facility on the Tier 1 SR58 corridor to SR99 would require closing existing interchanges along SR99 and limiting future capacity improvements on SR99 through portions of Bakersfield. In mid-2002, the City of Bakersfield began development of a local freeway project on a portion of the Tier 1 alignment to meet the Tier 1 purpose of improving east-west circulation in west Bakersfield. The Tier 2 construction project would not connect with SR99 at this time as originally proposed in the Tier 1 document.

This Tier 2 EA/EIR focuses on the implementation of the proposed Westside Parkway project, and evaluates the potential impacts of specific design alternatives being considered for the Proposed Action. This information is used to identify specific environmental effects of the project design. The Tier 2 EA/EIR identifies changes that may have occurred since the preparation of the Tier 1 document.

1.3.2 Programming History

Funding for the Westside Parkway project is expected to come primarily from metropolitan Bakersfield's share of Regional Improvement Program (RIP) funds. The Westside Parkway is estimated to cost between $150 and $200 million. Initial funding for the first phase of the project is programmed in fiscal year 2005/06 to begin construction by fiscal year 2006/07. Construction packages and a sequence of implementation would be developed that would allow for construction of the Westside Parkway project

over several years. Funding that has been identified for construction of the Westside Parkway requires the completion of construction-level environmental analyses.

Another associated Tier 2 project that is under consideration at this time would extend the Westside Parkway a minimum of one mile to the west (at least to Nord Road). Currently there is a master plan being developed for the land west of Heath Road. In this master planning process, right –of way identified in the Tier 1 EIS is being protected through City and County adopted specific plan lines that extend to I-5. As development extends west of Heath Road, this project would be included in the Regional Transportation Plan.

1.4 PURPOSE

The purpose of the proposed Westside Parkway project is to construct a high-capacity, east-west transportation corridor that meets the following criteria:

- Reduces congestion on existing east-west arterials in west Bakersfield;
- Supports Bakersfield's current and planned development west of SR99;
- Improves connectivity of the existing transportation network in west Bakersfield; and
- Accommodates potential future multimodal transportation facilities.

This purpose flows directly from and is fully consistent with the Tier 1 purpose to "provide an alignment for future multimodal transportation facilities that reduces congestion on the transportation network in the western Bakersfield metropolitan area." (FHWA and Caltrans, 2002) This project combined with future Tier 2 projects could ultimately satisfy the additional Tier 1 purpose of continuity for State Route 58.

The proposed Westside Parkway project is consistent with Kern COG's Regional Transportation Plan and the Circulation Element of the Metropolitan Bakersfield General Plan.

1.5 NEED

The need for the proposed Westside Parkway project is based on:

- An assessment of existing and proposed land uses versus the existing transportation network;
- Estimated future east-west traffic congestion; and
- The ability of existing north-south arterials to distribute traffic among the available east-west arterials in west Bakersfield.

Each of these needs is discussed in detail in the following sections.

1.5.1 Land Use and the Existing Transportation Network

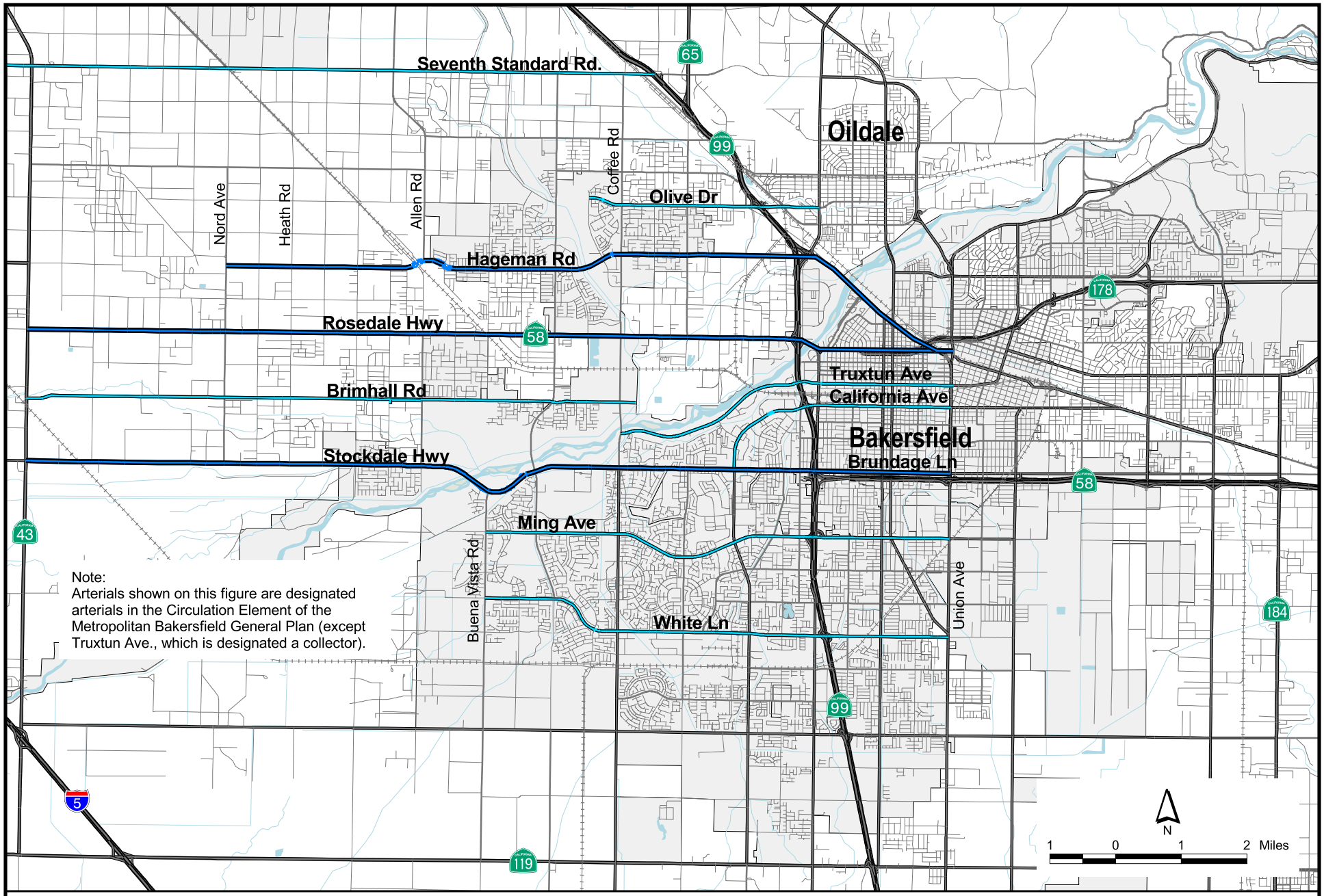
The northwest and southwest quadrants of the Bakersfield metropolitan area contain largely residential land uses. The City's sphere of influence extends west to approximately Nord Avenue, which coincides with the planned westerly extent of urban development in this area. Bakersfield's Central Business District (CBD) is generally located between F Street and Union Avenue and between 24th Street and

California Avenue with a core of civic center buildings clustered along Truxtun Avenue. Much of Bakersfield's employment base is within the CBD; therefore, it has always been a commuter destination for outlying residential areas. Commuters from residential communities in the northwest and southwest quadrants of the City traveling to the CBD are concentrated onto only a few east-west arterials that are viable routes from west Bakersfield to the CBD.

The northwest quadrant, generally located north of the Kern River and west of SR99, includes large-lot rural residences and local- and regional-serving commercial development. During the past 10 to 15 years, this area has experienced a rapid rate of primarily residential development. Due to changing land uses in the area, continued residential growth is expected. Existing east-west arterials in the area include Olive Drive, Hageman Road, Rosedale Highway, and Brimhall Road. Of these choices, only Rosedale Highway and Hageman Road run uninterrupted from Allen Road to SR99. The other arterials, Olive Drive and Brimhall Road, are discontinuous. Olive Drive is interrupted in the west by the Riverlakes Golf Course and the Friant-Kern Canal. Brimhall Road terminates near Coffee Road at the Friant-Kern Canal due to the canal and Shell Bakersfield Refinery to the east. Olive Drive and Brimhall Road depend upon north-south routes to collect and distribute traffic between Hageman Road and Rosedale Highway to eventually connect with the City's CBD. People also use Coffee Road as a connector between Hageman Road, Rosedale Highway, and Brimhall Road to Truxtun Avenue to connect with the City's CBD.

During the 1960's and 1970's, southwest Bakersfield, generally located south of the Kern River and west of SR99, grew into a primarily residential area with suburban type single-family residences with supporting neighborhood commercial areas. Similar to northwest Bakersfield, this concentration of residential land uses is heavily dependent on east-west connections to the downtown CBD. Again, there are only a few choices available for east-west mobility including Truxtun Avenue, California Avenue, Stockdale Highway, Ming Avenue, and White Lane. Stockdale Highway is the only continuous route through this area of Bakersfield. Truxtun Avenue terminates at Coffee Road due to the Kern River and CVC west of Coffee Road and existing residential development further west. California Avenue, which is an important east-west arterial east of SR99, does not continue west due to the Carrier Canal and Kern River; therefore it turns south ending at New Stine Road. Ming Avenue and White Lane both currently terminate at Buena Vista Road. These two roads could be extended west for another few miles before reaching the Kern River.

After the planned extension of Hageman Road to Golden State Avenue, there will essentially be three continuous east-west arterial corridors connecting west Bakersfield directly with the downtown CBD: Hageman Road, Rosedale Highway, and Stockdale Highway/Brundage Lane. These three existing east-west corridors are shown in Figure 1.5-1.



EXISTING EAST-WEST ARTERIALS

Project No.: 29866227	Date: SEPTEMBER 2004	Project: WESTSIDE PARKWAY	Figure 1.5-1

1.5.2 Population Growth and Traffic Congestion

Between 1970 and 2000 the population of metropolitan Bakersfield has more than doubled. The greatest population increase in the metropolitan area has occurred in the northwest and southwest quadrants of the City where new residential construction continues to be a major growth factor. There is no indication that this growth is going to diminish in the near future as large areas of vacant land are approved for new residential development.

Utilizing California Department of Finance projections, metropolitan Bakersfield's population is anticipated to grow from 404,000 in 2000 to 876,500 by 2030. This indicates another doubling of population in the metropolitan Bakersfield area within the next 30 years. According to the Metropolitan Bakersfield General Plan, much of this future growth will occur in the northwest quadrant of the metropolitan area.

Traffic volume projections are forecast throughout all of Kern County by Kern COG's regional travel demand model. The traffic model, developed by Kern COG in association with City of Bakersfield and Kern County planning staffs, is based on trip destination studies, land use plans and population projections. The traffic model indicates that projected future population growth, coupled with continued increases in Bakersfield commerce, will continue to generate increasing traffic demand, burdening the existing local circulation network.

Traffic volume projections indicate that traffic in metropolitan Bakersfield is expected to increase substantially over the next 30 years. In order to compare existing average daily traffic (ADT) volumes to projected 2030 ADT volumes, a screenline analysis was conducted. The screenline analysis established a theoretical line running north and south along the west side of Coffee Road and Gosford Road. Traffic volumes on existing east-west routes that are crossed by this line were identified and then totaled to give an idea of the magnitude of existing east-west traffic versus the expected growth in traffic volumes that is forecast for the west Bakersfield area. The results of this screenline analysis, shown in Table 1.5-1, indicate a substantial increase in traffic on individual east-west roadways and an increase in cumulative east-west traffic within the corridor of over two and a half times.

Table 1.5-1. Screenline Analysis of East-West Routes

Roadway	Average Daily Traffic (ADT) Volume	
	Existing	2030 No Action
Seventh Standard Road	7,200	31,400
Snow Road	1,700	6,900
Olive Drive	2,100	35,100
Hageman Road	17,100	39,400
Rosedale Highway	29,200	51,200
Brimhall Road	14,200	34,700
Stockdale Highway	22,300	49,500
Ming Avenue	29,000	51,700
White Lane	17,700	40,000
Panama Lane	1,200	17,100
Total	141,700	356,700

With the projected growth in traffic, traffic operations and mobility are expected to degrade to below acceptable levels of service throughout the metropolitan area. The City of Bakersfield has established level of service (LOS) C as the threshold for acceptable LOS. LOS is an indicator of operating conditions on a roadway or at an intersection and is defined in categories ranging from A to F. These categories can be viewed much like school grades, with A representing the best traffic flow conditions and F representing poor conditions (refer to Figure 1.5-2). LOS A indicates free-flowing traffic and LOS F indicates substantial congestion with stop-and-go traffic and long delays at intersections. Table 1.5-2 provides definitions of LOS for signalized intersections as specified in the Highway Capacity Manual. In urban areas, because intersections are spaced relatively close together, intersection capacities generally control traffic operations on the arterials. Therefore, the LOS at signalized intersections gives a good indication of the overall operating conditions throughout the transportation network.

Table 1.5-2. Signalized Intersection Level of Service Criteria
Highway Capacity Manual Operational Analysis Method

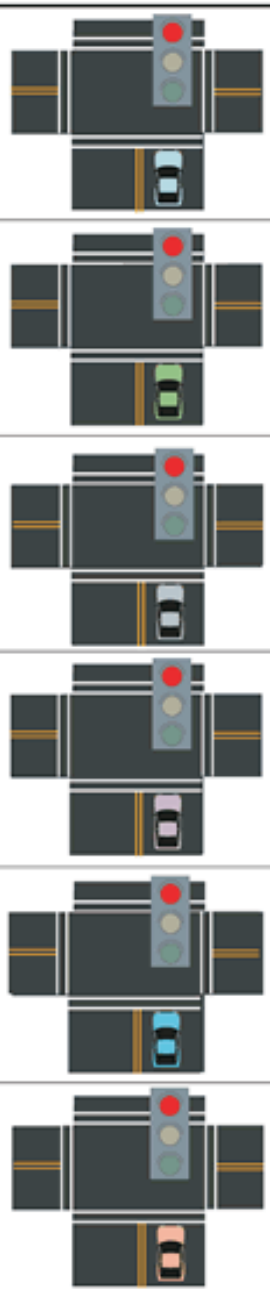
Level of Service[1]	Control Delay per Vehicle (seconds/vehicle)	Operational Characteristics
LOS A	≤ 10	Very low delay. Progression is extremely favorable. Most vehicles arrive during the green phase and do not stop at all.
LOS B	>10 and ≤20	More vehicles stop than with LOS A, causing higher levels of average delay.
LOS C	>20 and ≤35	The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.
LOS D	>35 and ≤55	At LOS D, the influence of congestion becomes more noticeable. Many vehicles stop, and the proportion of vehicles not stopping declines.
LOS E	>55 and ≤80	There is generally a high ratio of traffic volume to roadway capacity at this level.
LOS F	>80	This level, considered to be unacceptable to most drivers, often occurs with over saturation; that is, when arrival flow rates exceed the capacity of the intersection.

[1] Source: 2000 Highway Capacity Manual, TRB Special Report 209

LEVELS OF SERVICE

for Intersections with Traffic Signals

Level of Service	Delay per Vehicle (seconds)
A	≤10
B	11-20
C	21-35
D	36-55
E	56-80
F	>80



Factors Affecting LOS of Signalized Intersections

Traffic Signal Conditions:
- Signal Coordination
- Cycle Length
- Protected left turn
- Timing
- Pre-timed or traffic activated signal
- Etc.

Geometric Conditions:
- Left- and right-turn lanes
- Number of lanes
- Etc.

Traffic Conditions:
- Percent of truck traffic
- Number of pedestrians
- Etc.

Source: 2000 HCM, Exhibit 16-2, Level of Service Criteria for Signalized Intersections

LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS

Project No.: 29866227	Date: SEPTEMBER 2004	Project: WESTSIDE PARKWAY PROJECT	Figure: 1.5-2

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There are five key east-west travel corridors within the study area in west Bakersfield; Rosedale Highway, Brimhall Road, Truxtun Avenue, California Avenue and Stockdale Highway. Twenty-six intersections existing in 2000 (there are now 27 key intersections in the study area) along these five key corridors were studied and analyzed for current morning and evening peak hour conditions. Table 1.5-3 summarizes the year 2000 a.m. and p.m. peak hour levels of service and calculated average delays per vehicle at existing signalized intersections within the project study area. The table is grouped into subdivisions of the five east-west corridors by heavy lines.

The existing levels of service shown in Table 1.5-3 indicate that intersections throughout the study area are generally operating at acceptable levels of service. There are only two signalized intersections that are currently operating at an LOS below the Bakersfield standard of LOS C. Those intersections are the southbound SR99 exit ramp intersection to California Avenue in the morning and the northbound SR99 exit ramp intersection to Rosedale Highway in the evening, both of which are operating at LOS D (shaded cells in Table 1.5-3). The levels of service of these two intersections associated with SR99 indicate that there are probably heavy morning traffic volumes coming south on SR99 from east-west connections such as Olive Drive and Rosedale Highway destined for downtown Bakersfield and heavy evening traffic flows going north on SR99 from downtown.

Table 1.5-3. Peak Hour Intersection Levels of Service - Existing Conditions (Year 2000)

Intersection	AM Peak Hour		PM Peak Hour	
	Del/Veh	LOS	Del/Veh	LOS
Allen Road / Rosedale Highway	26.9	C	29.2	C
Calloway Drive / Rosedale Highway	27.3	C	29.3	C
Coffee Road / Rosedale Highway	23.9	C	29.0	C
Fruitvale Avenue / Rosedale Highway	17.2	B	21.8	C
Mohawk Street / Rosedale Highway[1]	141.9	F	667.3	F
SR99 SB Ramps / Rosedale Highway	13.8	B	10.8	B
SR99 NB Ramps / Rosedale Highway	26.6	C	41.0	D
Allen Road / Brimhall Road	23.4	C	22.3	C
Jewetta Avenue / Brimhall Road	13.1	B	12.1	B
Calloway Drive / Brimhall Road	25.8	C	27.1	C
Coffee Road / Brimhall Road	21.4	C	22.5	C
Coffee Road / Truxtun Avenue	24.9	C	26.1	C
Mohawk Street / Truxtun Avenue	17.8	B	21.2	C
Empire Drive / Truxtun Avenue	4.9	A	10.1	B
Oak Street / Truxtun Avenue	27.4	C	31.7	C
Mohawk Street / California Avenue	22.6	C	29.9	C
SR99 SB Ramps / California Avenue	37.7	D	31.0	C
SR99 NB Ramps / California Avenue	24.9	C	21.8	C
Oak Street / California Avenue	25.0	C	30.5	C
Nord Avenue / Stockdale Highway	11.1	B	12.1	B
Heath Road / Stockdale Highway	14.4	B	14.7	B
Renfro Road / Stockdale Highway	17.0	C	19.1	C
Allen Road / Stockdale Highway	20.2	C	19.3	B
Calloway Drive / Stockdale Highway	25.0	C	24.4	C
Coffee Road / Stockdale Highway	29.2	C	30.3	C
California Avenue / Stockdale Highway	29.1	C	33.0	C

[1] Unsignalized
Del/Veh = Average delay per vehicle in seconds.
SB = Southbound
NB = Northbound

To understand the level of traffic congestion that could be expected to occur within the project area if no improvements are made to increase east-west mobility, a future No Action Alternative has been studied. The future year No Action Alternative assumes that population and traffic continue to grow based on forecasts of housing, employment and other factors within the region. Each of the key intersections along the five key east-west routes was analyzed for future year operating conditions in 2030, along with the new intersection at Jewetta Avenue and Stockdale Highway. The results of these analyses are presented in Table 1.5-4.

Table 1.5-4. Peak Hour Intersection Levels of Service - 2030 No Action Conditions

Intersection	AM Peak Hour		PM Peak Hour	
	Del/Veh	LOS	Del/Veh	LOS
Allen Road / Rosedale Highway	23.4	C	25.9	C
Calloway Drive / Rosedale Highway	57.2	E	47.7	D
Coffee Road / Rosedale Highway	44.8	D	54.1	D
Fruitvale Avenue / Rosedale Highway	32.4	C	100.0	F
Mohawk Street / Rosedale Highway	33.8	C	43.5	D
SR99 SB Ramps / Rosedale Highway	22.4	C	8.6	A
SR99 NB Ramps / Rosedale Highway	84.5	F	159.5	F
Allen Road / Brimhall Road	23.9	C	24.3	C
Jewetta Avenue / Brimhall Road	19.1	B	15.0	B
Calloway Drive / Brimhall Road	29.1	C	34.3	C
Coffee Road / Brimhall Road	39.0	D	47.2	D
Coffee Road / Truxtun Avenue	46.7	D	121.0	F
Mohawk Street / Truxtun Avenue	31.6	C	47.3	D
Empire Drive / Truxtun Avenue	5.8	A	10.0	B
Oak Street / Truxtun Avenue	31.9	C	66.7	E
Mohawk Street / California Avenue	28.7	C	71.0	E
SR99 SB Ramps / California Avenue	75.6	E	47.0	D
SR99 NB Ramps / California Avenue	18.6	B	20.4	C
Oak Street / California Avenue	25.9	C	31.8	C
Nord Avenue / Stockdale Highway	7.5	A	9.6	A
Heath Road / Stockdale Highway	7.2	A	9.0	A
Renfro Road / Stockdale Highway	6.6	A	5.9	A
Allen Road / Stockdale Highway	28.3	C	23.3	C
Jewetta Avenue / Stockdale Highway	18.2	B	44.1	D
Calloway Drive / Stockdale Highway	30.7	C	31.1	C
Coffee Road / Stockdale Highway	70.7	E	122.7	F
California Avenue / Stockdale Highway	35.5	D	92.5	F

Del/Veh = Average delay per vehicle in seconds.
NB = Northbound
SB = Southbound

The future year No Action Alternative levels of service shown in Table 1.5-4 indicate that severe reductions in operational conditions are forecast to occur between the year 2000 and 2030. Whereas in 2000 only one intersection in the morning and one intersection in the evening operated below the City's acceptable level of service, LOS C, by 2030 there would be eight intersections in the morning and 14 intersections in the evening predicted to operate at below LOS C (shaded cells in Table 1.5-4).

If each key east-west corridor is considered individually, the impacts of future traffic growth on east-west mobility is even more apparent. Considering the evening peak hour, which is often the critical peak period for commuters, over half of the intersections are forecasted to degrade to levels of service below LOS C by 2030. This includes five out of seven intersections along Rosedale Highway, three out of eight intersections along Stockdale Highway, and three out of four intersections along Truxtun Avenue.

These decreases in levels of service will severely reduce mobility in west Bakersfield. Congestion would increase, along with travel times. Motorists would be impacted by substantially longer delays at intersections, possibly causing drivers to seek out alternative travel routes not intended for area-wide east-west travel. In certain cases, traffic may divert to short-cuts through residential areas to by-pass overloaded arterials by avoiding stopped conditions at over-crowded signalized intersections.

Another method for measuring traffic congestion is to consider the average stopped vehicle delays at the intersections within the study area. If the individual vehicle delays along any of the key east-west corridors are added together, the average amount of time that a driver might be expected to be stopped in traffic signal queues while traversing the particular corridor can be estimated. For example, during the evening peak hour a driver traveling the length of Rosedale Highway from SR99 to Allen Road would be stopped waiting in traffic an average of less than three minutes under existing conditions. The time stopped in traffic would increase to over seven minutes by 2030, an increase of over two and one half times. There would also be slower speeds and longer travel times between intersections as the existing transportation corridors become over saturated.

The increased delays are even more dramatic along Truxtun Avenue between Oak Street and Coffee Road in the evening peak hour. Existing stopped waiting time at the four study intersections (Oak Street, Empire Drive, Mohawk Street and Coffee Road) is currently estimated at a cumulative total of less than one and a half minutes. This delay is projected to increase to over four minutes by 2030, an increase of nearly three times.

Based on the data provided in Table 1.5-2, Table 1.5-3 and Table 1.5-4, east-west streets in the study area will experience a substantial increase in traffic congestion by the year 2030 without implementation of east-west mobility improvements. Stop-and-go traffic can be expected along most of the arterials in the area with long queues of vehicles and motorists delayed for one or more signal cycles at most intersections. Half of the intersections studied degrade to unacceptable levels of service (i.e., below LOS C) under 2030 No Action Alternative conditions. As traffic volumes increase and operational conditions degrade on the major arterials, motorists will increasingly use collector streets and even secondary residential streets to avoid traffic congestion and time delays. This will worsen conditions on collector streets to unacceptable levels, further increasing delay times.

1.5.3 North-South Linkages Between East-West Corridors

To maximize the congestion relief and mobility improvement opportunity that would be available from a new east-west transportation corridor, vehicles need to be adequately collected and distributed to the facility from the surrounding transportation network. Existing east-west arterials that are not continuous between west Bakersfield and the CBD, such as Olive Drive, Truxtun Avenue, and California Avenue (see Figure 1.5-1) can be enhanced if properly connected to the Westside Parkway via adequate north-south routes. Connecting Olive Drive, Hageman Road, Rosedale Highway, Truxtun Avenue, and California Avenue with a new north-south arterial is particularly important because of the lack of any alternative north-south arterial in this area of west Bakersfield. This missing linkage within the existing circulation system requires a new crossing of the Kern River to complete the transportation network and

provide for adequate connectivity between the available east-west arterials, as well as, the proposed Westside Parkway and the surrounding transportation system grid.

To illustrate the need for a new north-south arterial in west Bakersfield that functions as a connection between existing east-west arterials and the Westside Parkway, a screenline analysis was prepared. The screenline analysis draws a theoretical line across existing north-south routes, generally between and parallel to Rosedale Highway and the Kern River. Traffic volumes along existing north-south routes that are intersected by this theoretical line are reported in Table 1.5-5 for both existing and future year No Action Alternative conditions. The data shows that traffic on individual north-south routes will grow substantially over the next 30 years. The distance between current north-south routes is greater between SR99 and Coffee Road than between any of the other existing north-south linkages. This gap forces north-south demand to concentrate on SR99, Coffee Road, and to some extent Calloway Drive; over-burdening these arterials and causing out-of-direction travel for motorists that would be accessing the Westside Parkway.

Table 1.5-5. Screenline Analysis of North-South Routes

Roadway	Average Daily Traffic (ADT) Volume	
	Existing	2030 No Action
SR99	113,900	199,900
Coffee Road	25,800	57,100
Calloway Drive	15,300	46,700
Jewetta Avenue	3,100	10,200
Allen Road	5,900	10,700
Jenkins Road	3,200	6,000
Renfro Road	2,900	9,100
Nord Avenue	2,900	7,200
Total	173,000	346,900

2.0 ALTERNATIVES

2.1 INTRODUCTION

As required by Section 15126.6 of the State CEQA Guidelines, 40 Code of Federal Regulations (CFR) 1508.9(b) and Section 1502.14 of the NEPA Implementation Procedures, this section describes the proposed action and the design alternatives that have been considered to meet the stated purpose and need for the project. The proposed action addressed in this document is the construction of a new four- to eight-lane east-west freeway generally within the Tier 1 alignment for SR58 between Heath Road and SR99, a distance of approximately 13 km (8.1 miles), in the City of Bakersfield and Kern County, California. The proposed action also includes the extension of Mohawk Street south across the Kern River to Truxtun Avenue. Two alternatives are being considered for the eastern terminus of the new freeway: tying into Truxtun Avenue west of SR99 and tying into Oak Street east of SR99. The No Action Alternative is also evaluated in this document.

The purpose of the proposed project is to reduce congestion on existing east-west arterials in west Bakersfield; support Bakersfield's current and planned development west of SR99; improve connectivity of the existing transportation network in west Bakersfield; and accommodate potential future multimodal transportation facilities. Bakersfield's Central Business District (CBD) is generally located east of SR99. It has always been a commuter destination for outlying residential areas. Commuters from the rapidly growing residential neighborhoods in Bakersfield west of SR99 currently have only a few continuous east-west arterials to commute to the CBD. Population growth in west Bakersfield over the next 30 years is projected to increase traffic volumes on existing east-west arterials by over two and one half times, resulting in a substantial decrease in level of service on these roads. A new east-west freeway would reduce this congestion. To maximize the congestion relief and mobility improvement opportunity that would be available from a new east-west freeway, vehicles need to be adequately collected and distributed to the freeway from the surrounding transportation network. The utility of existing east-west arterials that are not continuous between west Bakersfield and the CBD can be enhanced if connected to the proposed freeway by adequate north-south routes. The extension of Mohawk Street to Truxtun Avenue would connect five major east-west arterials in west Bakersfield, as well as the proposed freeway.

A range of reasonable alternatives that could potentially meet the stated purpose of the Proposed Action were considered over the course of project planning. The Tier 1 EIS/EIR evaluated alternatives that ranged from reducing traffic demand in the western Bakersfield metropolitan area to consideration of several strategies for meeting projected traffic demand within the planning horizon for this project (i.e., year 2030). This Tier 2 EA/EIR builds upon the Tier 1 work efforts and approvals and evaluates alternatives related to the specific design of the roadway alignment approved by the Tier 1 EIS/EIR. Features to reduce or eliminate negative impacts, many of which were suggested by private citizens and jurisdictional agencies through the scoping process, have been incorporated into the project alternatives. The alternatives considered herein for the Proposed Action include:

- Increasing capacity of existing Rosedale Highway;

- Construction of a new high-capacity, east-west transportation facility that accommodates potential multimodal elements;
- Mass transit;
- Transportation system management; and
- No Action Alternative.

Although most of these alternatives were rejected in the Tier 1 EIS/EIR, a fresh look at alternatives in the Tier 2 document confirms the alignment chosen in the Tier 1 EIS/EIR. Therefore, all of these alternatives except for the construction of a new transportation corridor on the Westside Parkway Truxtun Option or the Westside Parkway Oak Option alignments and the No Action Alternative were withdrawn from further consideration during project planning because they did not meet the purpose and need of the proposed action and/or they resulted in environmental impacts that were determined to be unacceptable.

The City of Bakersfield included a westside highway (termed the Kern River Freeway) in the Circulation Element of the Metropolitan Bakersfield 2010 General Plan. The Metropolitan Bakersfield General Plan update includes a westside highway (termed the Westside Parkway) in the current Circulation Element. On April 22, 1991, the Kern County Board of Supervisors adopted a specific plan line for a Kern River Freeway. This alignment, developed in conjunction with the City of Bakersfield, and subsequently adopted by the City on July 17, 1991, extends from 0.8 kilometer (0.5 mile) west of State Route 43 (SR43) to east of Mohawk Street. The alignment is similar to the proposed alignments for the Westside Parkway Truxtun Option and Westside Parkway Oak Option addressed in this Environmental Assessment/Draft Environmental Impact Report (EA/DEIR).

The City of Bakersfield and Kern County have acquired property along the City's and County's plan line, representing a portion of the total right of way that would be required for a transportation facility on one of the alternative alignments addressed in this EA/DEIR. Funds to acquire right of way have come from the Metropolitan Transportation Impact Fee Program (Chapter 15.84 of the Bakersfield Municipal Code). That program requires a person commencing a land development activity which generates or attracts traffic and who is applying to the City or County for the issuance of a building permit for a type of land development activity specified in the program to pay a fee. Funds collected from the transportation impact fee are used for the purpose of capital improvements to transportation facilities associated with the Regional Transportation Facilities List developed by the City and County. Funds are used exclusively for capital improvements within the City or for projects outside the City but within the Bakersfield metropolitan plan area, which are a direct benefit to the City or County.

FHWA, Caltrans, and the City of Bakersfield have conducted the alternatives evaluation presented in this document independent of actions taken by the City and Kern County. A reasonable range of transportation corridor alternatives were identified based on engineering and environmental considerations and input from the public and commenting agencies. FHWA and the City of Bakersfield continue to independently evaluate the alternatives by weighing their social, economic, and environmental effects and benefits along with input received from the public and commenting agencies to reach a final decision regarding the proposed project.

This section of the EA/DEIR begins with a discussion of the planning principles used to identify and evaluate alternatives to the proposed project. It then describes the alternatives evaluated in the EA/DEIR and the reasons for selecting the preferred alternative. A description of the alternatives withdrawn from consideration is provided in the section along with the reasons for their withdrawal. The section concludes with the identification of other transportation projects within the Bakersfield metropolitan area that could influence potential environmental impacts associated with the proposed project.

2.2 PROJECT PLANNING PROCESS

The need for an enhanced transportation system in the Bakersfield metropolitan area west of SR99 was identified in the 1990 Transportation Plan and Program (Kern COG 1973), one of the earliest formal regional transportation plans developed for Kern County. That plan was prepared jointly by Kern COG and the Golden Empire Transit District (GET), the principal transit provider in the Bakersfield metropolitan area. Development of the plan included an extensive outreach program for both the public and other government agencies. A technical advisory committee composed of expert staff from local agencies and a citizen's advisory committee were formed to assist in identification and evaluation of alternatives. Public meetings were held to gain insight into community transportation needs and concerns. Environmental effects of transportation alternatives were evaluated in an EIR prepared in accordance with the 1974 CEQA Guidelines. This planning process also considered funding of transportation improvements such as new roads, improvements to existing roads, and expansion of the bus transit system, and included a financial element that identified costs of improvements and availability of funding.

The 1980 Rosedale General Plan, which identified the "Westside Freeway" as a major circulation element, included public workshops to gain community input on the planning process. The environmental implications of all of the elements of this plan were evaluated in a 1980 EIR.

Preparation of the Final Environmental Impact Report for Proposed General Plan Amendments to the Circulation Elements of the Kern County and Rosedale General Plans (certified in 1986), which revised the alignment for the proposed westside highway, involved local government agencies, public workshops, and a public hearing. Funding for a future transportation facility was also considered during this planning process.

The Circulation Element of the Metropolitan Bakersfield 2010 General Plan fully integrated the regional transportation planning process and Bakersfield's community planning process. GET was a cooperative agency in developing the plan. An extensive public involvement program, including a citizen's advisory committee and numerous public workshops, was implemented to actively incorporate community opinions in the planning process. The Circulation Element of the plan incorporated the City's short-term and long-term transportation plans expressed in the 1990 Regional Transportation Plan (RTP). The RTP included a financial element that identified specific funding needs and sources over the planning period.

The Circulation Element identified the need for three new freeways in the metropolitan area to avoid congestion that would result from buildout of the Land Use Element of the Metropolitan Bakersfield General Plan: the Crosstown Freeway, the Westside Freeway, and the North-South Freeway. These facilities are now termed the Crosstown Freeway, the Westside Parkway, and the West Beltway in the

updated Metropolitan Bakersfield General Plan. The Crosstown Freeway is the extension of State Route 178 (SR178) from Baker Street around the south side of downtown Bakersfield to SR99. The Westside Parkway consists of a freeway along a corridor roughly paralleling the Kern River. According to the Circulation Element, these two freeways would provide necessary capacity for east-west travel and relieve congestion on SR178, Rosedale Highway, California Avenue, and other existing east-west routes. The West Beltway would be located on the western fringe of the Bakersfield metropolitan area. It would provide a bypass to SR99, which would otherwise be congested, and it would provide an important link across the Kern River from southwest Bakersfield to the Westside Parkway.

Consistent with this planning process; FHWA, Caltrans, and Kern COG began the environmental review of a route adoption project for a new corridor for SR58 in Kern County in 1991. The proposed action for that project was the adoption of a multimodal transportation corridor wide enough, and with an appropriate layout for, a variety of transportation facilities including dedicated busways, light rail, high occupancy vehicle (HOV) lanes, and inter-city high-speed rail. Project planning included a multimodal transportation study that evaluated how alternative transportation corridors would be incorporated into the long-range transit plans of GET. That study also evaluated the ability of transit to reduce the need for a high-volume, single-occupancy vehicle transportation facility such as a freeway. The Tier I EIS/EIR for the SR58 Route Adoption project was certified by FHWA and Caltrans in May 2001 and a Record of Decision was issued by FHWA in February 2002. As indicated in Section 1.3, a portion of the Tier 1 alignment is now the Westside Parkway project.

GET, the City of Bakersfield, Kern County, Kern COG, Caltrans, and the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) prepared a Major Investment Study (MIS) for metropolitan Bakersfield in 1997 titled Metropolitan Bakersfield Transportation Investment Strategy (MTIS). The MIS is a publicly approved plan for a total transportation system in the Bakersfield metropolitan area that includes provisions for highway, pedestrian, non-motorized vehicle, and transit projects to the year 2015. The MTIS identifies an east-west transportation facility from SR99 to Renfro Road as a fundable roadway project to be constructed in the planning period of this study.

2.3 PROJECT ALTERNATIVES

The alternatives for the Westside Parkway have been designed to either connect to the local transportation network on the west side of SR99 (Truxtun Option) or the east side of SR99 (Oak Option). The current configuration of the Westside Parkway does not preclude the possibility of ultimately connecting it to SR58 east of SR99. This future extension and connection would be considered as part of the Centennial Loop project currently under development by the City of Bakersfield. Whether or not the Centennial Loop project proceeds, the Westside Parkway is projected to meet the purpose and need for the project, as discussed further in this document. The Westside Parkway has “independent utility” in reducing traffic congestion in the Metropolitan Bakersfield Area and it has been designed with logical termini.

2.3.1 Westside Parkway Truxtun Option

The Westside Parkway Truxtun Option alternative begins on Stockdale Highway at Heath Road (west terminus), running east and northeast generally paralleling the Cross Valley Canal and Kern River, then

crosses the Kern River before connecting to Truxtun Avenue west of SR99 (east terminus). The total distance of the freeway is approximately 13 km (8.1 miles). Mohawk Street would be improved and extended from Rosedale Highway to Truxtun Avenue, interchanging with the Westside Parkway and crossing the Kern River. Figure 2.3-1 shows the general location of this alignment and Figures 2.3-1a through 2.3-1f and Figures 2.3-2a through 2.3-2c show more specific geographic information for the Westside Parkway Truxtun Option. The facility would be designed to accommodate an ultimate eight-lane freeway with potential multimodal elements. The project would cross a number of existing features such as other roadways, canals and the Kern River. In addition to connecting to Stockdale Highway and Truxtun Avenue; interchanges would be provided at Allen Road, Calloway Drive, Coffee Road, and Mohawk Street. Grade-separations would be constructed at Jewetta Avenue and Renfro Road to carry local roadways over the Westside Parkway.

2.3.1.1 Geometry

The Westside Parkway Truxtun Option would meet the objective of providing a high-capacity, east-west transportation facility in the western Bakersfield metropolitan area and improving connectivity of the existing transportation network. The following sections individually discuss four key design elements from the preliminary geometric design of the Westside Parkway Truxtun Option including horizontal alignment, vertical profile, cross section and access points to the facility, i.e. interchange connections. The Westside Parkway Truxtun Option would generally meet American Association of State Highway and Transportation Officials (AASHTO) geometric standards to the extent practical and feasible as determined by the City of Bakersfield.

2.3.1.1.1 Horizontal Alignment

The Westside Parkway Truxtun Option alternative begins on Stockdale Highway at the intersection of Heath Road, which is the west terminus of the project (Figure 2.3-1a). This intersection would be signalized. The west leg of this existing intersection would transition directly into the Westside Parkway alignment. Stockdale Highway would be realigned to connect to the Westside Parkway via a three-way, signalized intersection approximately 600 meters (2,000 feet) east of Heath Road. The Westside Parkway alignment would continue in a northeasterly direction across open land, which is undergoing conversion from agricultural land uses to commercial and residential developments.

The alignment curves to the east between planned residential developments, crosses under Renfro Road and continues east within property owned by the City of Bakersfield. Several large-lot, ranch style residences exist north of the alignment and a residential housing development exists to the south. Between Jenkins Road and Allen Road the alignment crosses undeveloped land owned by the RRBWSD (Figure 2.3-1b). Continuing east past Allen Road, the alignment passes through land owned by Castle and Cooke who is currently constructing residential housing tracts both north and south of the proposed alignment. In consideration of the Westside Parkway, the developments have been designed to accommodate the footprint of the project. Negotiations are underway to acquire the necessary land from Castle and Cooke between Allen Road and Calloway Drive. Halfway between these major arterials, Jewetta Avenue has been constructed from Brimhall Road south to Stockdale Highway, crossing the Westside Parkway Truxtun Option (Figure 2.3-1c).

East of Calloway Drive, the alignment passes adjacent residential developments to the north and parallels the CVC to the south. Near the easterly limit of the adjacent residential developments, the alignment curves northeast again, generally following the alignment of the CVC, over undeveloped land currently zoned for commercial land uses (Figure 2.3-1e). The alignment curves back to the east and crosses Coffee Road near Kern County Water Agency (KCWA) facilities that exist east of Coffee Road and south of Brimhall Road (Figure 2.3-1f).

The alignment crosses over the Friant-Kern Canal and proceeds east across undeveloped land primarily owned by the Shell Bakersfield Refinery, but south of refinery buildings and facilities. The alignment then dips south as it passes the refinery to minimize impacts to refinery operations. South of the alignment the CVC continues to parallel the proposed alignment for the Westside Parkway Truxtun Option. Curving to the northeast, the alignment crosses the existing location of the CVC; however, this section of the canal would be realigned by the KCWA to remain south of and parallel to the proposed Westside Parkway alignment. The alignment in this location crosses the former Tosco petroleum coke storage and production facility property, on which environmental remediation activities have been initiated and are scheduled to be completed prior to acquisition of the property for the project. The alignment extends northeasterly across active oil fields to the planned extension of Mohawk Street. Mohawk Street would be widened and improved from Rosedale Highway to Truxtun Avenue. The extension of Mohawk Street would provide a crossing of the Kern River east of Coffee Road. It would allow north-south traffic to access major east-west arterials south of the Kern River including California Avenue, which has an interchange with SR99.

From Heath Road to Mohawk Street, the horizontal alignment of the Westside Parkway Truxtun Option is the same as the other Westside Parkway alignment alternatives. From Mohawk Street the alignment for the Westside Parkway Truxtun Option heads directly east, crossing the CVC, Kern River, BNSF railroad, Truxtun Avenue and the Carrier Canal. The alignment passes through the existing City Corporation Yard then curves northeast to join directly into Truxtun Avenue west of SR99 (east terminus). The east terminus is described in more detail in Section 2.3.1.1.4.

2.3.1.1.2 Vertical Profile

Beginning at the Stockdale Highway/Heath Road intersection, the profile of the Westside Parkway Truxtun Option would be essentially at the same elevation as the surrounding ground surface. This profile continues through the proposed at-grade intersection with realigned Stockdale Highway. West of the Westside Parkway/Stockdale Highway intersection, the vertical alignment would cut below existing grade and pass under the future West Beltway and existing Renfro Road in a fully-depressed cut section, which would maintain existing Renfro Road at its current elevation.

The profile climbs back up to existing grade east of Renfro Road and extends across the RRBWSD spreading basins at an elevation that is approximately the same level as the existing access and maintenance roads that are within the RRBWSD property. These access roads are raised 1 to 2 meters (3 to 6 feet) above the elevations of the spreading basins. This slightly raised segment of the project would help minimize contact between the spreading basins and the transportation facility and ensures that the project would be protected from potential flooding. New spreading basins have been constructed in

conjunction with ongoing residential development south of the Westside Parkway alignment and east of Allen Road.

The Westside Parkway Truxtun Option would cross Allen Road near the same elevation as existing Allen Road to avoid impacting the RRBWSD intake canal box culvert. The project would continue at a level near the existing ground elevations until again dropping down partially below grade west of Jewetta Avenue. The profile would be depressed approximately 5 meters (16 feet) below the existing ground level as it passes under the raised profile of Jewetta Avenue. An existing underground sewer line constrains the depth to which the profile can be depressed in this location. Jewetta Avenue has been constructed approximately 3 meters (10 feet) above the surrounding ground elevations to accommodate the Westside Parkway underneath the roadway. The project's vertical alignment would continue, depressed in a cut section where it passes under existing Calloway Drive, which would maintain existing Calloway Drive at its current elevation. East of Calloway Drive, the Westside Parkway Truxtun Option profile would remain depressed, but gradually rises up to approximately 2 meters (6 feet) below grade, at the east limit of existing housing tracts north of the project. The depressed segments of the project are intended to facilitate grade-separations between the Westside Parkway and north-south City streets, including Renfro Road, Jewetta Avenue, Calloway Drive, and Mohawk Street as well as help minimize visual and noise impacts of the project to the extent possible.

Near the east end of the residential developments the project would begin to rise out of the cut section, pass under existing Pacific Gas and Electric (PG&E) aerial transmission lines and climb up on an embankment east of Coffee Road. The profile would cross over Coffee Road, which would be maintained at its current elevation. The vertical alignment remains elevated to bridge over the Friant-Kern Canal and would continue on an elevated embankment east of the canal approximately 3 to 4 meters (10 to 13 feet) above the adjacent ground surfaces. This segment of the Westside Parkway Truxtun Option is elevated for several reasons. The raised profile should provide enhanced views of the Kern River to the south and allows a better balance of earthwork throughout the project with respect to cuts and fills.

West of Mohawk Street the profile begins to drop back down toward existing grade to pass under existing PG&E aerial transmission lines. The profile continues to drop, cutting below existing grade approximately 5 meters (16 feet) as it crosses under the extension of Mohawk Street. Similar to Jewetta Avenue, Mohawk Street would be raised about 4 meters (13 feet) above the surrounding ground elevations. Continuing east from the Mohawk Street interchange, the profile would climb up, from the partially depressed alignment at the interchange, to an above-grade alignment on an embankment as it approaches the CVC. The canal would be realigned at this crossing point to eliminate two existing bends in the current canal alignment and to provide a more perpendicular intersecting alignment at the crossing.

The Westside Parkway Truxtun Option profile would remain elevated on a relatively high bridge structure crossing over the CVC, the Kern River, the BNSF railroad tracks and Truxtun Avenue on a severely skew intersecting angle. The elevation of the Westside Parkway Truxtun Option profile where it passes over the BNSF tracks would be as high as 13 meters (42 feet) above the surrounding ground elevations. Embankment fill would carry the alignment east of Truxtun Avenue; however the profile would transition downward close to existing grade. The alignment would cross the Carrier Canal either on a bridge

structure or the canal may be passed under the project through a box culvert. At this same location, the alignment passes under existing PG&E aerial transmission lines. The profile continues to descend back to existing grade east of the Carrier Canal at the existing City Corporation Yard property before joining Truxtun Avenue.

The objective of the vertical profile for the proposed project is to, as closely as possible, provide a balanced cut and fill. Minimal export and borrow material is expected to be required for the project alternatives.

2.3.1.1.3 Cross Section

Right of way for the Westside Parkway Truxtun Option is being acquired to accommodate improvements for a potential ultimate eight-lane freeway facility. The right of way required for this size facility is generally 64 meters (210 feet) wide, expanding at grade-separations and interchanges to allow for ramps and side slopes. The typical 64-meter (210-foot) width accommodates four 3.6-meter (12-foot) lanes in each direction, 3.0-meter (10-foot) left and right shoulders; plus space for landscaped side slopes, drainage facilities and maintenance access along both sides of the project. The cross section also allows for potential future conversion of inside lanes to mass transit usage such as HOV lanes, bus lanes or possibly bus rapid transit systems. The freeway cross section would narrow through the RRBWSD property to 42 meters (138 feet) wide to minimize impacts within the spreading basins.

The ultimate median width would generally be 11.2 meters (37 feet) wide, inclusive of the inside shoulders. This width allows for a concrete barrier at the edge of shoulder adjacent to each direction of travel and 4.0 meters (13 feet) of landscaped median between the protective barriers. Median widths may transition to narrower cross sections through interchanges to reduce the overall size of the interchanges and to minimize the span lengths of bridges crossing the Westside Parkway. The concrete barriers may also shift from one side of the median to the other around curves to provide enhanced sight lines for drivers in the inside lane as they traverse through the curve. Through the RRBWSD property the Westside Parkway ultimate median would be narrowed to 6.6 meters (22 feet) to minimize the impact of the cross section on the spreading basins.

While the right of way would accommodate the ultimate build-out of an eight-lane freeway, traffic projections for the year 2030 indicate that fewer lanes would be required initially. Therefore, it is planned to construct only the number of lanes necessary within each segment of the corridor, to maintain acceptable levels of operation on the freeway through the design year of 2030. Bridges for the Westside Parkway and bridges over the Westside Parkway would be constructed to their ultimate widths and lengths, to accommodate the ultimate transportation facility build-out.

The required number of lanes generally decreases as the alignment extends from east to west, that is, as it travels further west of the downtown CBD. Stockdale Highway, which consists of two lanes west of the Westside Parkway Truxtun Option, would transition to a four-lane freeway cross section beginning at the Heath Road intersection. Turn lanes at the intersection would also be required. The four-lane freeway would continue through the new realigned Stockdale Highway intersection, plus appropriate turn lanes at the intersection. The Westside Parkway would consist of four lanes up to the Allen Road interchange. The

volumes of traffic connecting with the Westside Parkway at the Allen Road interchange require that six mainline lanes be constructed from this point east to maintain acceptable levels of service. Six lanes are predicted to be necessary from Allen Road to the Coffee Road interchange and seven lanes (four eastbound and three westbound) are predicted to be necessary from Coffee Road to Mohawk Street. Six lanes are predicted to be required from Mohawk Street to the east terminus of the project. To connect with the local arterial system at the east terminus, the six-lane section would transition down from six lanes to four lanes near the east terminus.

The mainline right of way (64 meters/210 feet) acquired for the Westside Parkway is narrower than the corridor adopted in the Tier 1 Route 58 Route Adoption EIS/EIR, which was 91 meters (300 feet). The Tier 1 corridor width was selected to provide flexibility in the design of future transportation facilities. The Tier 1 corridor provided for an ultimate eight-lane freeway (depressed and elevated sections) and a median that could accommodate other transportation facilities. The Westside Parkway provides for an ultimate eight-lane freeway generally at grade, and a median that could accommodate other transportation facilities such as bus lanes or possibly bus rapid transit systems.

2.3.1.1.4 Facility Access/Interchanges

Access to the Westside Parkway Truxtun Option would be controlled to facilitate high-speed, high-capacity operations on the mainline lanes and ramps. There would be six points of access, generally spaced equally along the alignment. These are planned at Stockdale Highway (west terminus), Allen Road, Calloway Drive, Coffee Road, the Mohawk Street extension, and either Truxtun Avenue or Oak Street, depending on the alternative selected as preferred for the east terminus. Each connection is described individually from the west end of the project to the east end in the following sections.

Stockdale Highway (West Terminus) [Figure 2.3-1a]

The Westside Parkway Truxtun Option would be accessed at the west terminus directly from Stockdale Highway. Eastbound traffic on Stockdale Highway would connect directly into the eastbound lanes of the Westside Parkway, while westbound traffic from the Westside Parkway would join directly into the existing westbound Stockdale Highway. To maintain continuity of Stockdale Highway, east of the Westside Parkway west terminus, Stockdale Highway would be realigned to connect with the Westside Parkway at an at-grade, three-way, signalized intersection approximately 600 meters (2,000 feet) east of Heath Road.

Allen Road Interchange [Figure 2.3-1c]

Allen Road is a two-lane roadway at the location where the Westside Parkway Truxtun Option would intersect Allen Road. A tight diamond interchange with one loop ramp in the northeast quadrant is planned at this connection point (Figure 2.3-1c). Allen Road would be reconstructed to its full General Plan width of six lanes plus bicycle lanes and realigned to the east of its current alignment to minimize the interchange's impact on the RRBWSD property west of existing Allen Road. This shift in alignment would also facilitate traffic control during construction by allowing existing Allen Road to remain open to two-way traffic for a majority of the time that the interchange is under construction. The profile of Allen Road would be raised approximately 7 to 8 meters (22 to 26 feet) to pass over the Westside Parkway. The Westside Parkway profile is constrained by the RRBWSD intake canal box culvert that would cross under

existing Allen Road and the proposed interchange. The profile of the Westside Parkway at Allen Road remains above grade to minimize the affects of potentially high groundwater in the area.

The interchange configuration has been coordinated with development east of realigned Allen Road. This development includes new housing tracts and new RRBWSD spreading basins to replace those that would be taken by construction of the Westside Parkway west of Allen Road (Figure 2.3-1c). The housing tracts and new spreading basins south of the Westside Parkway alignment have been configured to accommodate the footprint of the new interchange. The City, RRBWSD, and the residential developer are working to realign the RRBWSD intake canal in conjunction with ongoing residential development. Realignment of the box culvert under Allen Road would be constructed with the Westside Parkway project to maintain connectivity between the intake canal and the spreading basins west of Allen Road.

The tight diamond and one loop ramp layout for the interchange was chosen primarily to reduce impacts on the RRBWSD property and to provide the best fit with development to the east. The tight diamond eastbound ramps are designed as close to the mainline as possible while minimizing the need for retaining walls. For the eastbound exit ramp, this minimizes the additional width needed for the ramp as it diverges away from the mainline lanes and climbs to connect with elevated Allen Road. The tight eastbound entrance ramp minimizes the right of way needing to be acquired in the southeast quadrant of the interchange, which provides the maximum area available for new spreading basins, the intake canal and homes that will be built by the developer. By utilizing a loop configuration for the westbound entrance ramp, there is practically no interchange impact on the RRBWSD property in the westbound direction.

Calloway Drive Interchange [Figure 2.3-1d]

Existing Calloway Drive has already been constructed to its full standard major arterial width of three lanes plus bicycle lanes in each direction. To minimize disruption to traffic and potential conflicts with driveway accesses along existing Calloway Drive, the Westside Parkway Truxtun Option would be completely depressed under Calloway Drive. A grade-separation bridge would need to be constructed to carry Calloway Drive over the Westside Parkway.

The interchange configuration planned at this connection point consists of loop ramps in both the northwest and southwest quadrants. Traffic southbound on Calloway Drive would have direct access to the Westside Parkway via the southwest quadrant loop ramp without needing to pass through a traffic signal. Traffic westbound on the Westside Parkway can exit to northbound Calloway Drive on a diamond exit ramp, while traffic destined for southbound Calloway Drive would exit via the loop ramp in the northwest quadrant, transitioning smoothly to Calloway Drive without requiring a left-turn movement at a signalized intersection. The only left-turns required at this interchange would be eastbound traffic exiting to northbound Calloway Drive and northbound traffic on Calloway Drive accessing the diamond entrance ramp to westbound Westside Parkway. The traffic volumes projected for these two left-turn movements are modest enough for the interchange to provide acceptable operational conditions through the design year of 2030.

Coffee Road Interchange [Figure 2.3-1f]

Coffee Road is built out to the maximum major arterial width of three lanes plus bicycle lanes in each direction, similar to Calloway Drive. However, at this location the Westside Parkway Truxtun Option cannot be depressed below grade because it must cross over the Friant-Kern Canal, which is only about 500 meters (1600 feet) east of Coffee Road. To provide the grade-separation between the Westside Parkway and Coffee Road, it was decided to elevate the Westside Parkway on an embankment to the west of Coffee Road and bridge over existing Coffee Road. This concept would allow traffic on Coffee Road to remain relatively uninterrupted throughout construction of the bridge over Coffee Road.

The interchange configuration at Coffee Road is a typical partial cloverleaf layout with loop ramps and sweep entrance ramps accessing the Westside Parkway from Coffee Road (Figures 2.3-1e and 2.3-1f). All connections from Coffee Road to the Westside Parkway at this interchange would be free-flow, meaning that they do not make left-turns through signalized intersections and right-turns are more efficient due to loop ramps or larger radius curb returns at the approaches to the entrance ramps.

Signalized left-turns are required for exiting eastbound traffic heading northbound on Coffee Road and exiting westbound traffic heading southbound on Coffee Road. A short left-turn pocket would be provided southbound on Coffee Road at the eastbound exit ramp terminal intersection to allow signalized access to the KCWA facilities east of Coffee Road. Traffic making this left-turn is expected to be limited, since it would primarily be used as maintenance access to the water facilities.

The eastbound exit and loop entrance ramps would be required to bridge over the CVC at this location. The existing Coffee Road bridge over the CVC would be widened on the west side to accommodate the entrance taper approaching the southbound to eastbound loop entrance ramp. The sweep entrance ramps to the Westside Parkway (northbound to eastbound and southbound to westbound) are designed relatively tight to the mainline to minimize impacts to the KCWA property and to increase the spacing from the existing Brimhall Road/Coffee Road intersection, respectively.

The westbound exit ramp would depart from the mainline east of the Friant-Kern Canal, requiring that it bridge over the canal along with the mainline. The ramp profile would then transition down to grade, becoming the east leg of the Brimhall Road/Coffee Road intersection. Access to existing commercial properties along the north side of Brimhall Road east of Coffee Road would be maintained via a parallel eastbound lane with left-turn pockets at selected driveways.

Mohawk Street Interchange [Figure 2.3-2a]

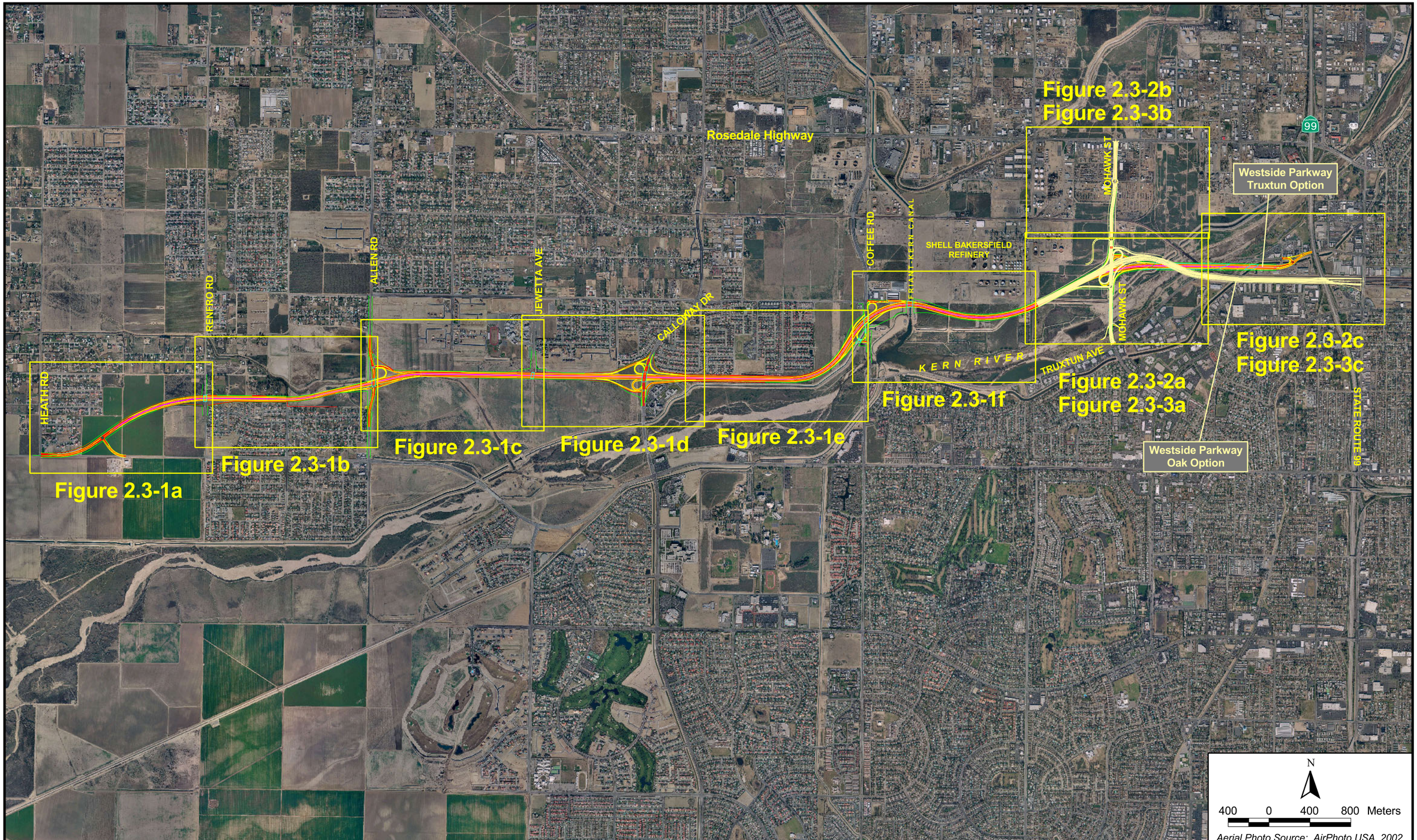
The Mohawk Street interchange would be created by the extension of existing Mohawk Street. Existing Mohawk Street is a two-lane road from Rosedale Highway to approximately the BNSF railroad tracks, at which point the roadway curves west and becomes Refinery Avenue leading into the east gate of the Shell Bakersfield Refinery. The proposed design would widen Mohawk Street to its full General Plan width of three lanes in each direction plus bicycle lanes from Rosedale Highway, across the Kern River, connecting to Truxtun Avenue.

The interchange configuration planned at this access point to the Westside Parkway Truxtun Option is similar in plan view to the Coffee Road interchange; however, the grade-separation at Mohawk Street

would be accomplished in reverse of the Coffee Road configuration, with the Westside Parkway Truxtun Option partially depressed through the interchange and Mohawk Street elevated approximately 4 meters (13 feet) above the surrounding ground elevations (Figure 2.3-2a). The interchange layout is a partial cloverleaf concept with loop ramps and sweep entrance ramps accessing the Westside Parkway from Mohawk Street. All connections to the Westside Parkway at this interchange would be free-flow. The only signalized left-turns required would be exiting the Westside Parkway, eastbound to northbound Mohawk Street and westbound to southbound Mohawk Street. The ramp alignments and profiles have been planned to avoid existing PG&E transmission towers and aerial cables that cross through the interchange area.

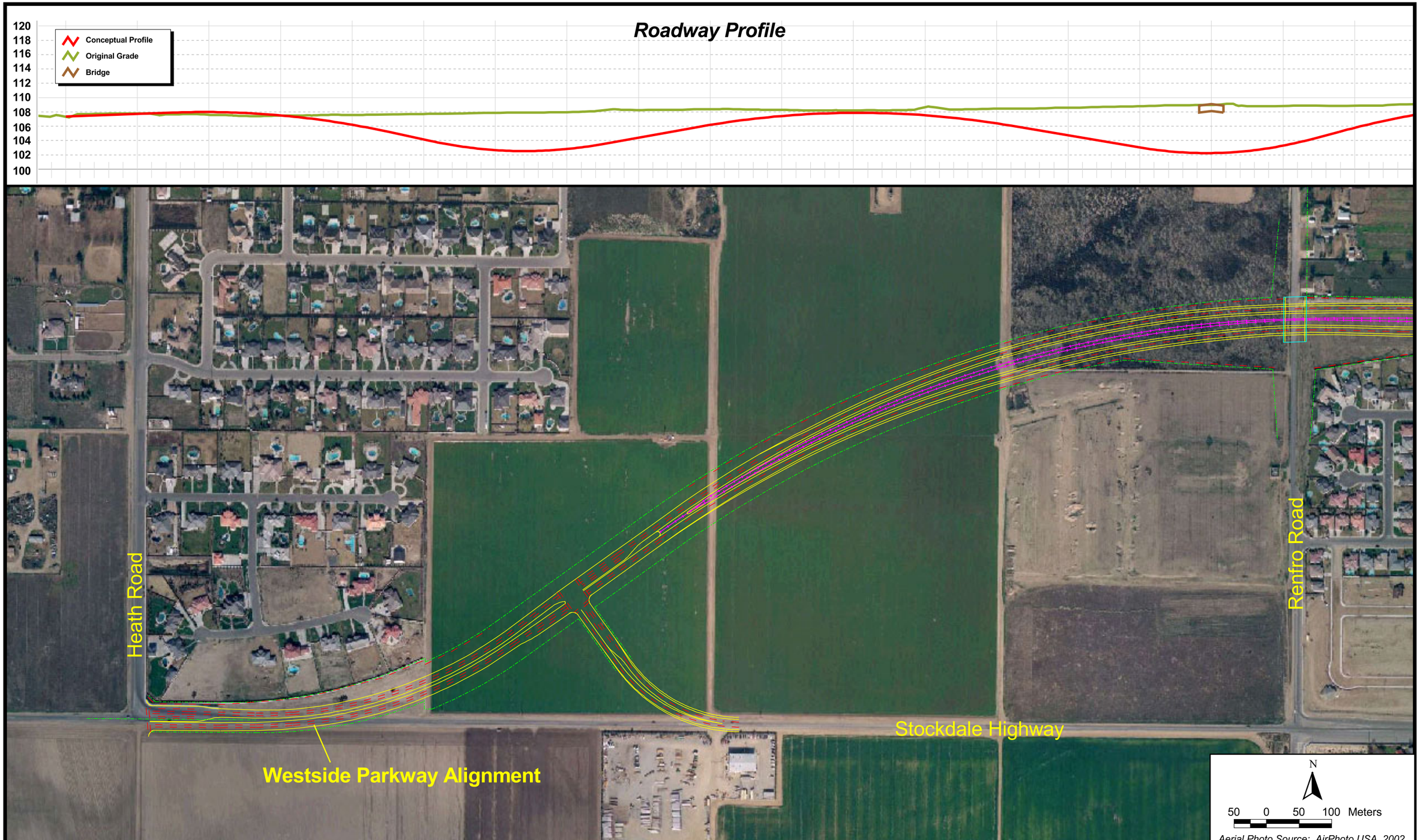
East Terminus [Figure 2.3-2c]

The sixth and final access point to the Westside Parkway Truxtun Option would be at the east terminus. Westbound traffic on Truxtun Avenue would connect directly into the westbound lanes of the Westside Parkway Truxtun Option, while eastbound traffic on the Westside Parkway would join directly into existing Truxtun Avenue. To maintain continuity of Truxtun Avenue west of the project, Truxtun Avenue would be realigned to connect with the Westside Parkway at an at-grade, signalized intersection approximately 200 meters (650 feet) west of the Truxtun Avenue undercrossing at SR99. The Westside Parkway Truxtun Option would require that the City Corporation Yard be relocated to another site. The alignment then curves northeast and joins with Truxtun Avenue as described previously. This alternative provides direct access to the downtown CBD by creating continuity between the Westside Parkway and Truxtun Avenue, which continues to the downtown core after passing though the existing Truxtun Avenue/Oak Street intersection.



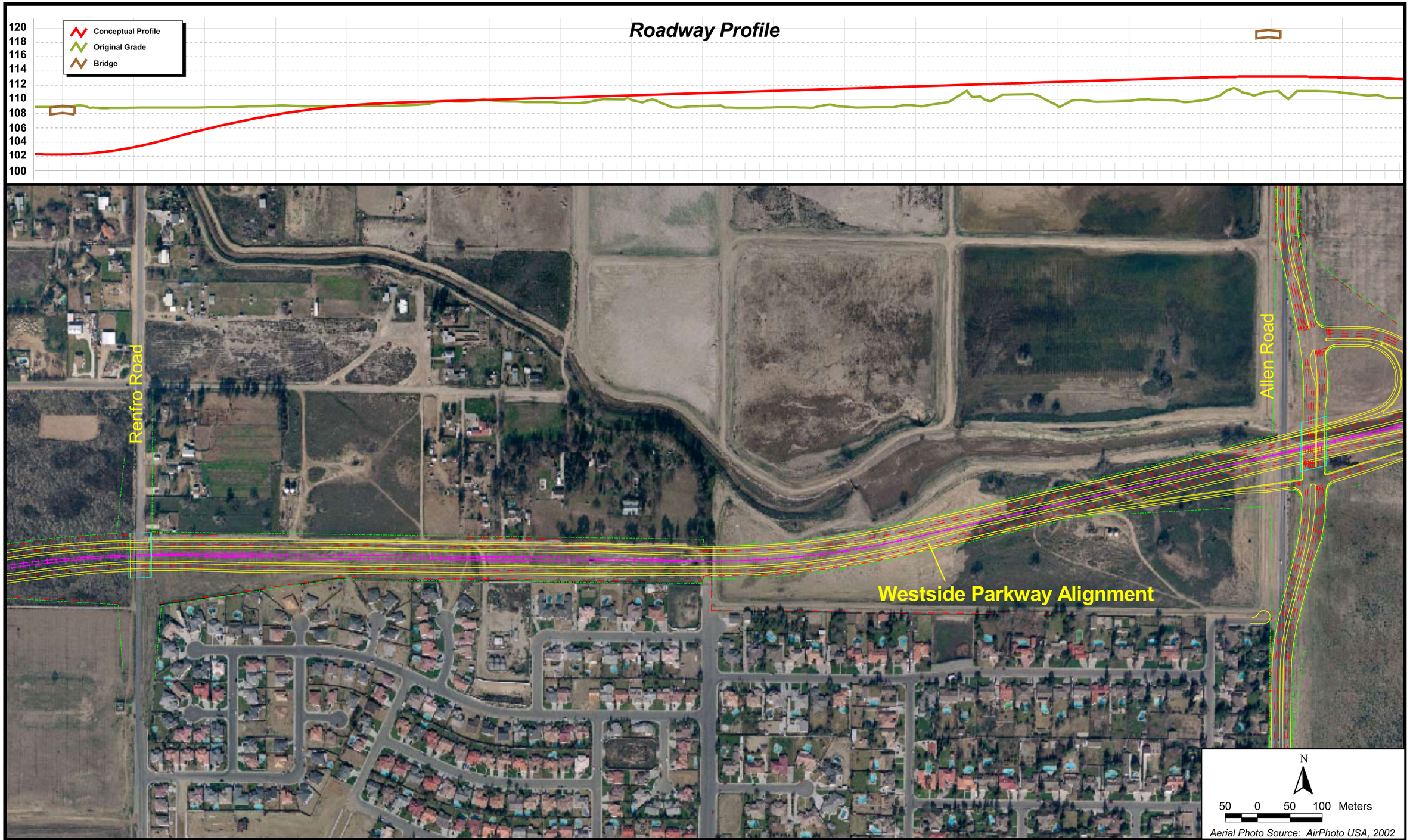
WESTSIDE PARKWAY ALIGNMENT INDEX MAP

Project No. 29866227	March 2005	Westside Parkway Project	Bakersfield, California	Figure 2.3-1



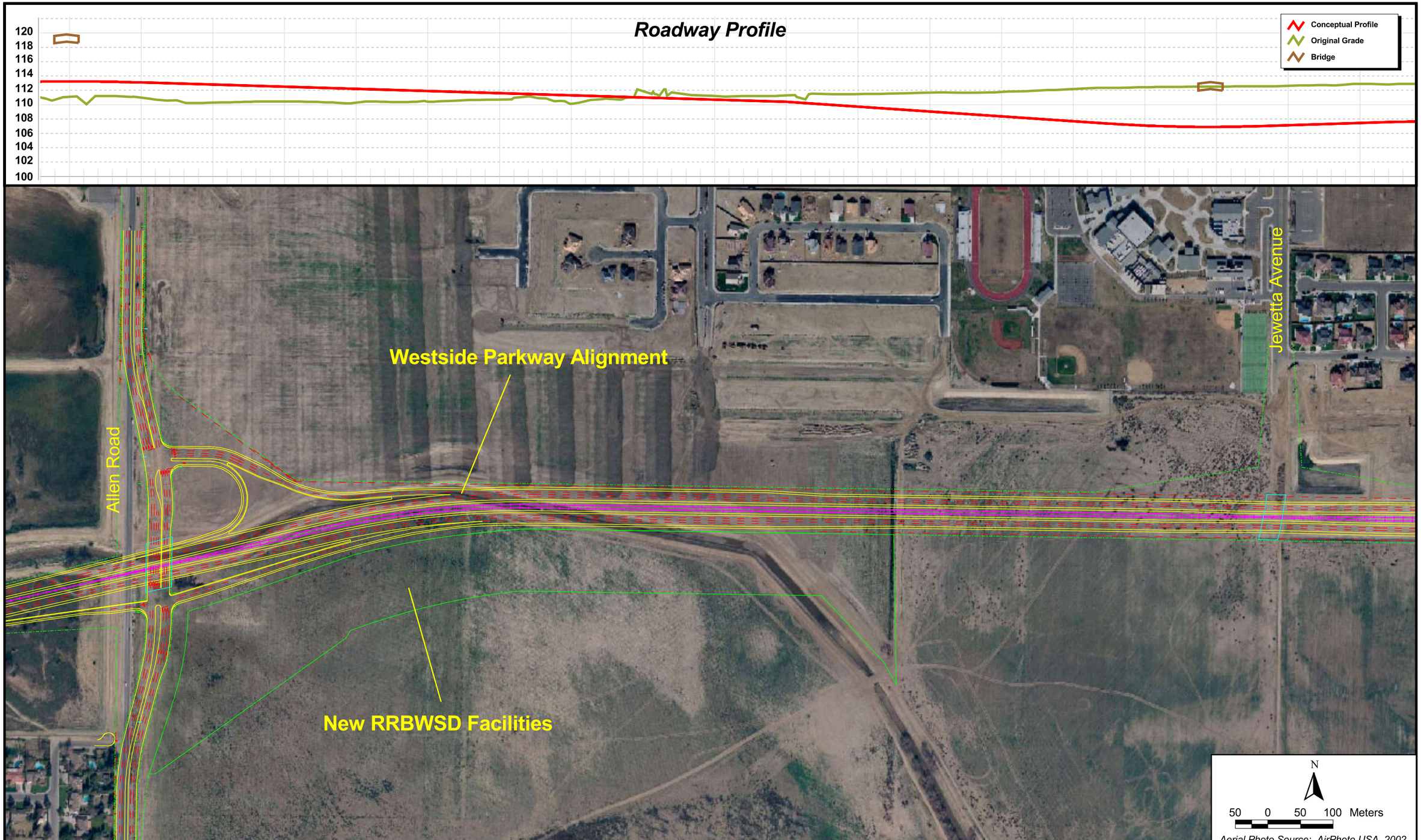
WESTSIDE PARKWAY ALIGNMENT

Project No. 29866227	September 2005	Westside Parkway Project	Bakersfield, California	Figure 2.3-1a



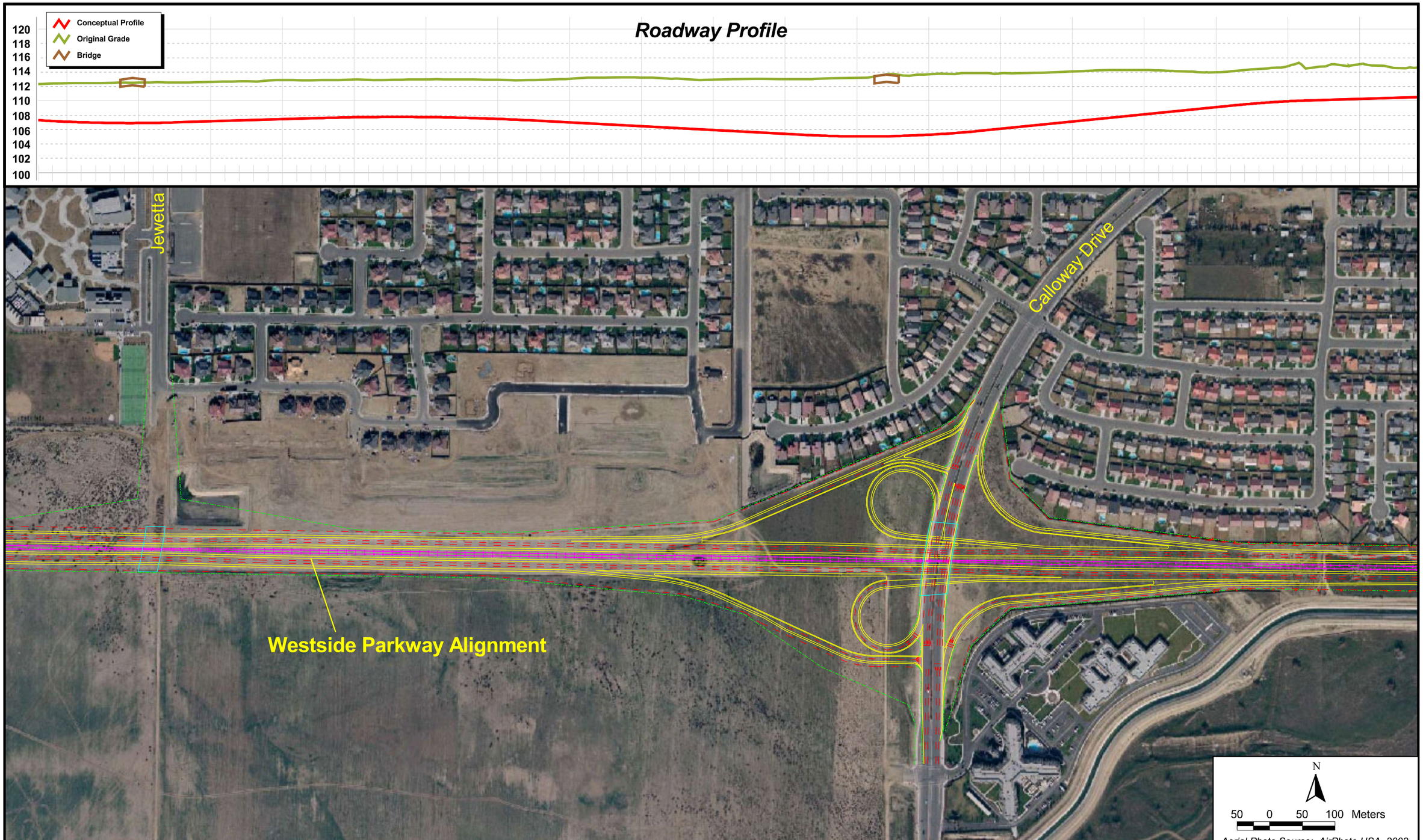
WESTSIDE PARKWAY ALIGNMENT

Project No. 29866227	September 2005	Westside Parkway Project	Bakersfield, California	Figure 2.3-1b



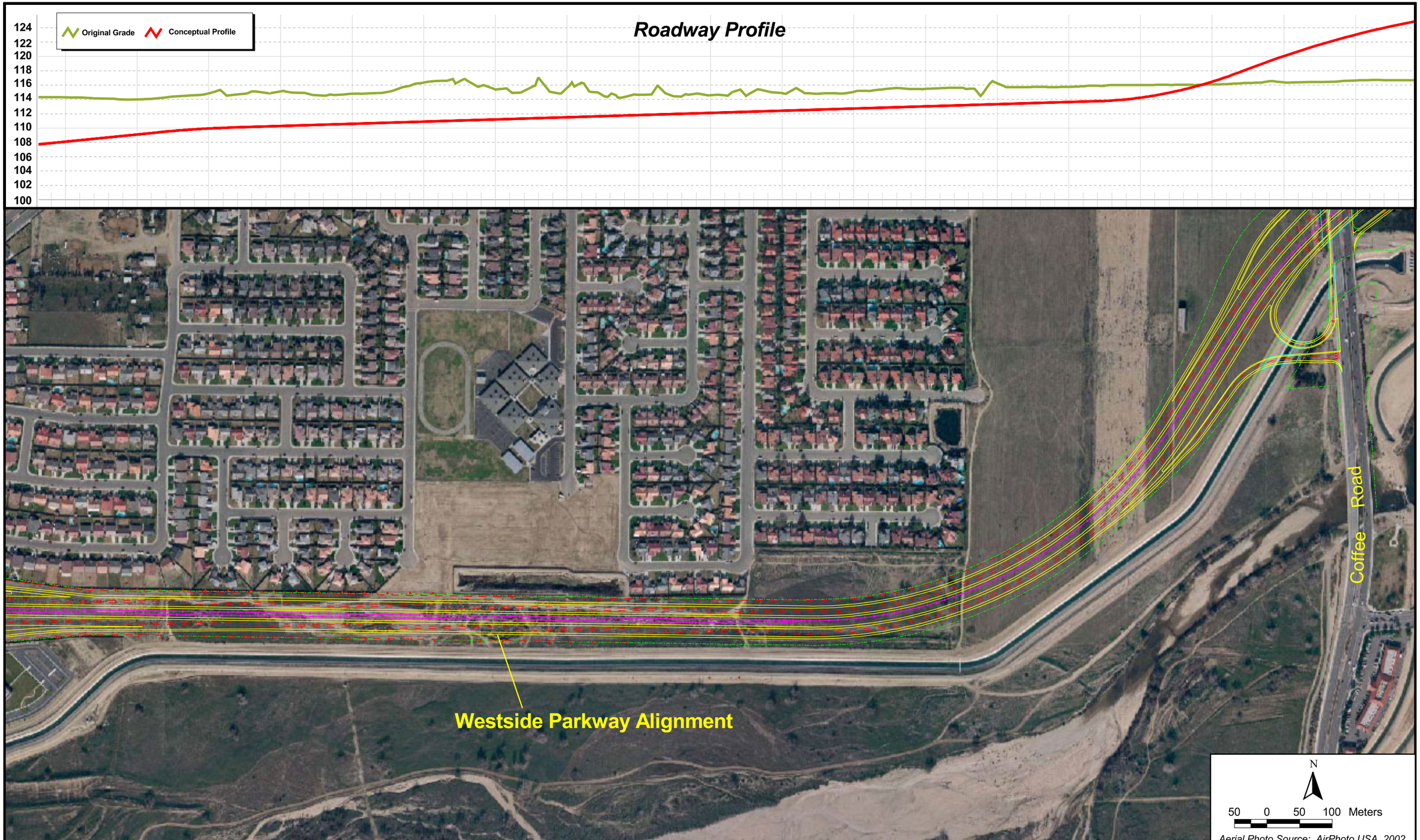
WESTSIDE PARKWAY ALIGNMENT

Project No. 29866227	September 2005	Westside Parkway Project	Bakersfield, California	Figure 2.3-1c



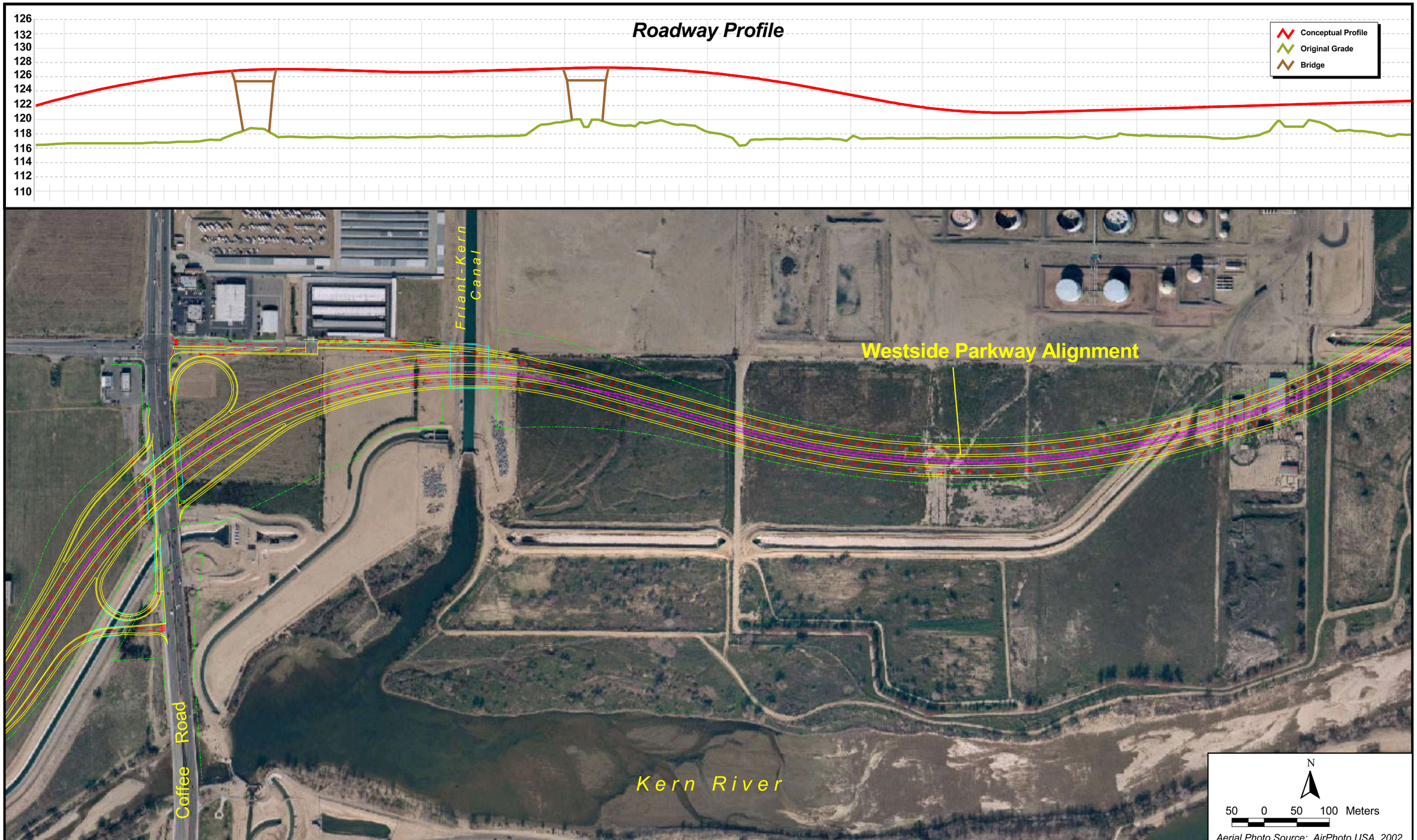
WESTSIDE PARKWAY ALIGNMENT

Project No. 29866227	September 2005	Westside Parkway Project	Bakersfield, California	Figure 2.3-1d



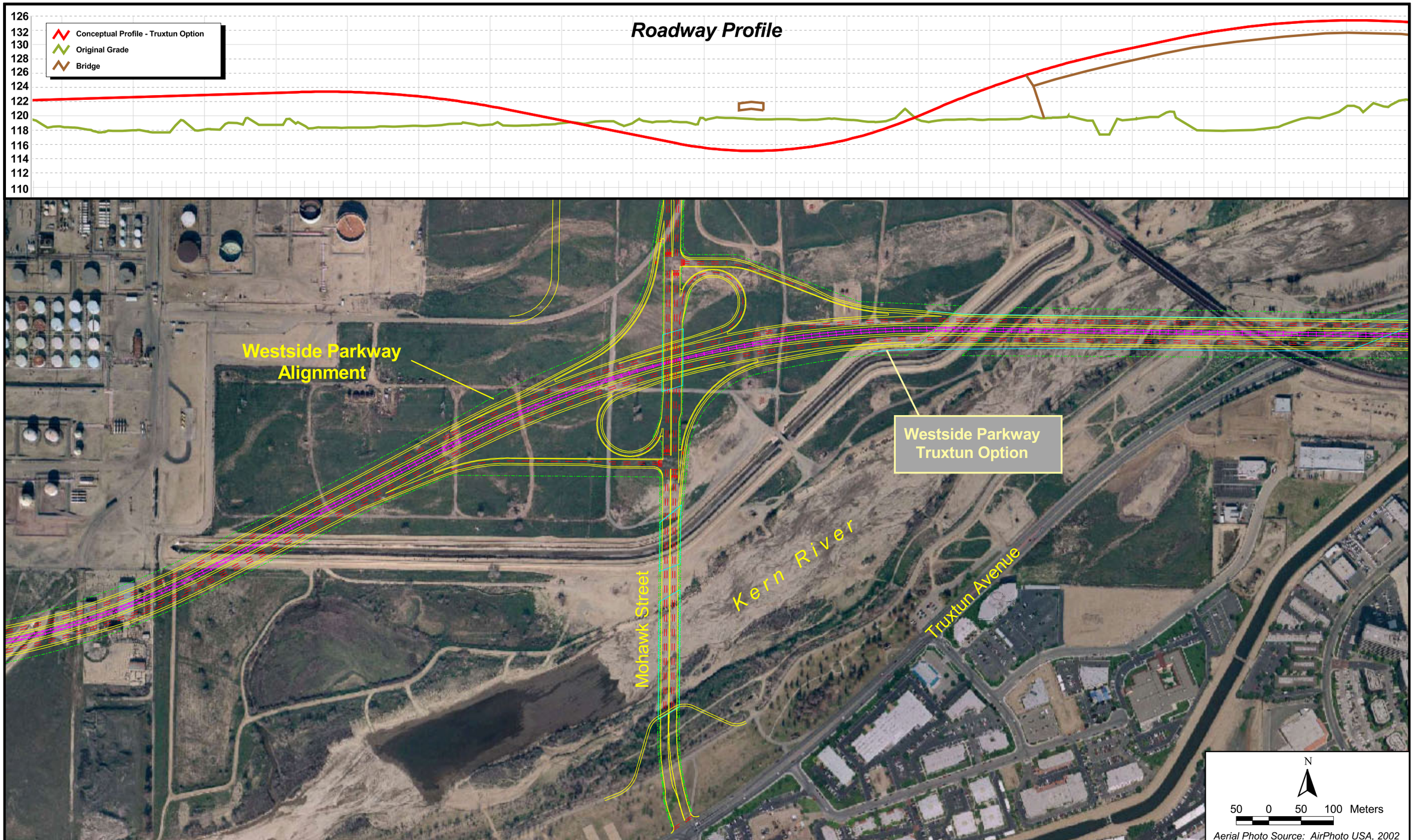
WESTSIDE PARKWAY ALIGNMENT

Project No. 29866227	March 2005	Westside Parkway Project	Bakersfield, California	Figure 2.3-1e



WESTSIDE PARKWAY ALIGNMENT

Project No. 29866227	September 2005	Westside Parkway Project	Bakersfield, California	Figure 2.3-1f

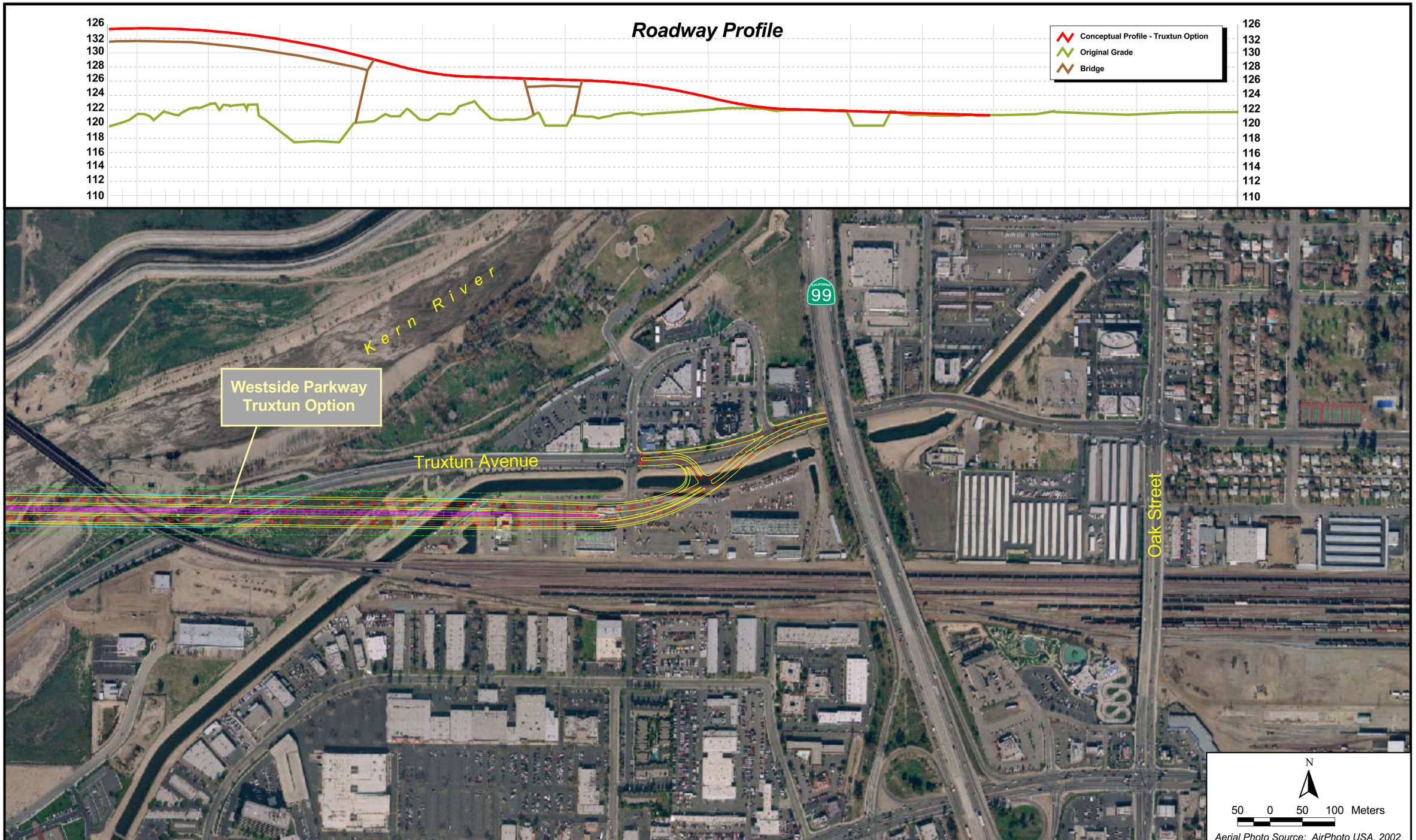


WESTSIDE PARKWAY TRUXTUN OPTION ALIGNMENT

Project No. 29866227	September 2005	Westside Parkway Project	Bakersfield, California	Figure 2.3-2a

WESTSIDE PARKWAY TRUXTUN OPTION ALIGNMENT

Project No. 29866227	March 2005	Westside Parkway Project	Bakersfield, California	Figure 2.3-2b



WESTSIDE PARKWAY TRUXTUN OPTION ALIGNMENT

Project No. 29866227	September 2005	Westside Parkway Project	Bakersfield, California	Figure 2.3-2c

2.3.2 Westside Parkway Oak Option

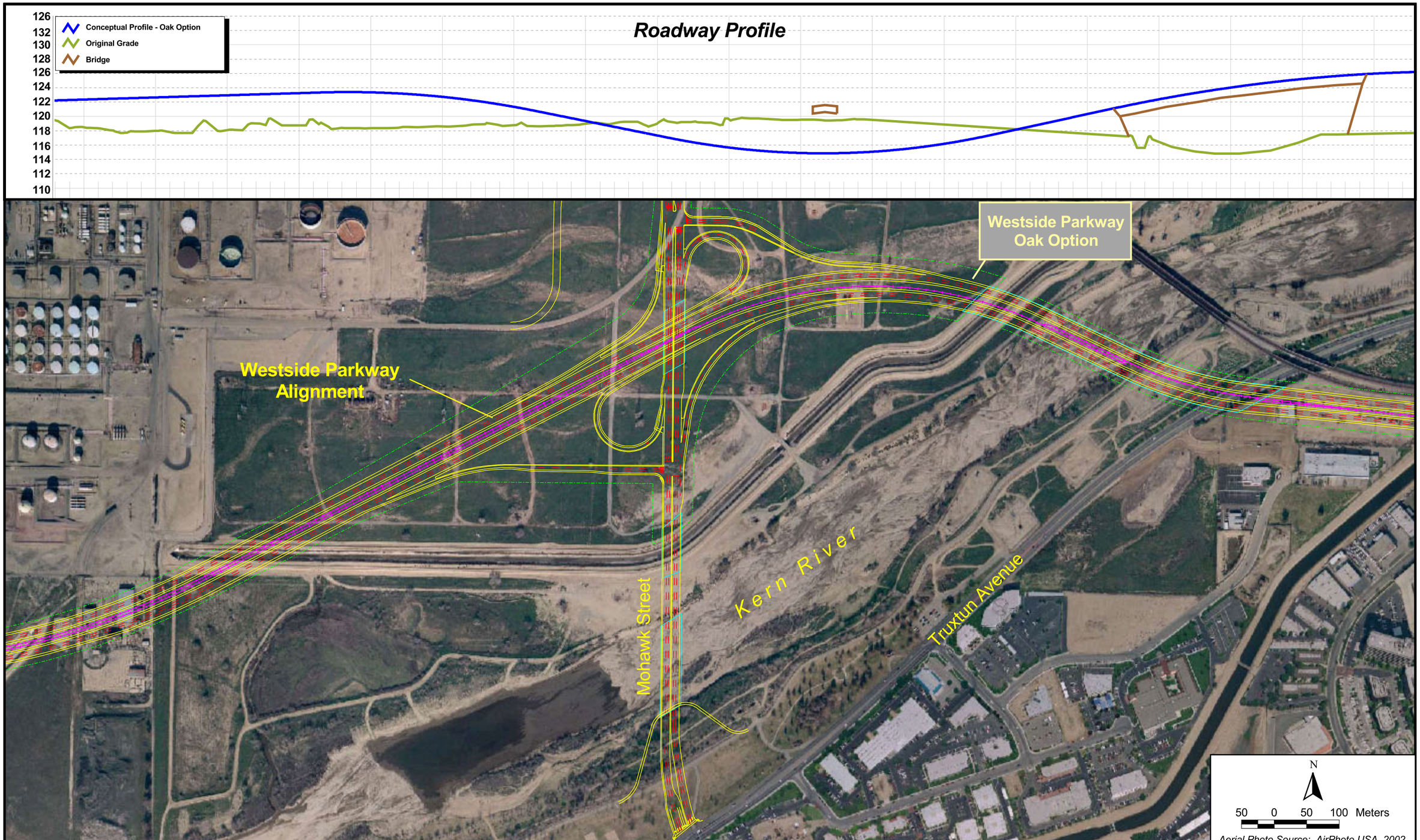
The Westside Parkway Oak Option is the same as the Westside Parkway Truxtun Option, except at the east terminus of the project. The alignment for the Westside Parkway Oak Option begins to deviate from the Westside Parkway Truxtun Option at the Mohawk Street interchange. Instead of traversing directly east, this alternative would curve through the Mohawk Street interchange until it is aligned in a southeasterly direction, nearly paralleling and remaining south of the BNSF railroad tracks where they cross the Kern River. This alignment provides a nearly perpendicular crossing at the CVC, the Kern River and Truxtun Avenue; allowing for shorter bridge spans. The alignment would curve back in an easterly direction adjacent and parallel to the BNSF mainline. Between Truxtun Avenue and the Carrier Canal, this alternative would impact a developed commercial property. As the Westside Parkway Oak Option continues east, it would affect the westerly portion of the BNSF rail yard (Figures 2.3-3a through 2.3-3c).

The Westside Parkway Oak Option would connect the east end of the Westside Parkway to Oak Street east of SR99, Figure 2.3-3c. The Westside Parkway Oak Option would join Oak Street via two-lane ramp connections, one ramp eastbound and one ramp westbound. Eastbound traffic from the Westside Parkway would exit to a new three-way, signalized intersection allowing for right- and left-turns to Oak Street. Traffic could then access downtown Bakersfield from two directions, turning north (left), vehicles would travel to Truxtun Avenue for destinations in the CBD through the Oak Street/Truxtun Avenue intersection; and turning south (right), vehicles would travel to California Avenue for destinations such as Bakersfield High School, Centennial Gardens and the Bakersfield Convention Center through the Oak Street/California Avenue intersection. Traffic wanting to go westbound on the Westside Parkway Oak Option would access the facility from a new three-way, signalized intersection at the westbound entrance ramp on Oak Street. Left- and right-turns would be provided to access the westbound entrance ramp.

The design of the Westside Parkway Oak Option would generally meet American Association of State Highway and Transportation Officials (AASHTO) geometric standards for this type of highway to the extent practical and feasible as determined by the City of Bakersfield. The profile of the Westside Parkway Oak Option would be somewhat lower than the Westside Parkway Truxtun Option because it does not cross over the railroad tracks, which require 7 to 7.5 meters (23 to 25 feet) of vertical clearance over the tracks. The Westside Parkway Oak Option profile would climb up, from the partially depressed alignment at the Mohawk Street interchange, to an above-grade alignment on embankment as it approaches the CVC. The canal would not require realignment because the Westside Parkway Oak Option alignment crosses the canal at a different location. The Westside Parkway Oak Option would be carried on a bridge structure over the CVC and the Kern River, reaching its highest elevation at approximately 8 meters (26 feet) above the surrounding terrain. South of the river, the bridge structure could be continued over Truxtun Avenue or a separate bridge could be constructed for the Truxtun Avenue crossing.

The profile then drops down from Truxtun Avenue nearly to existing ground elevations and passes over the Carrier Canal (either on a bridge or over a box culvert) and under PG&E's aerial transmission lines. East of the canal crossing, the vertical alignment would be essentially at grade as it passes under the existing SR99 overhead bridge structure. East of SR99 the alignment would split into the eastbound and westbound elevated ramp connections to Oak Street. This alternative would require modifications to the

existing Oak Street overhead bridge that crosses the BNSF tracks and rail yard, such as widening for turn lanes.

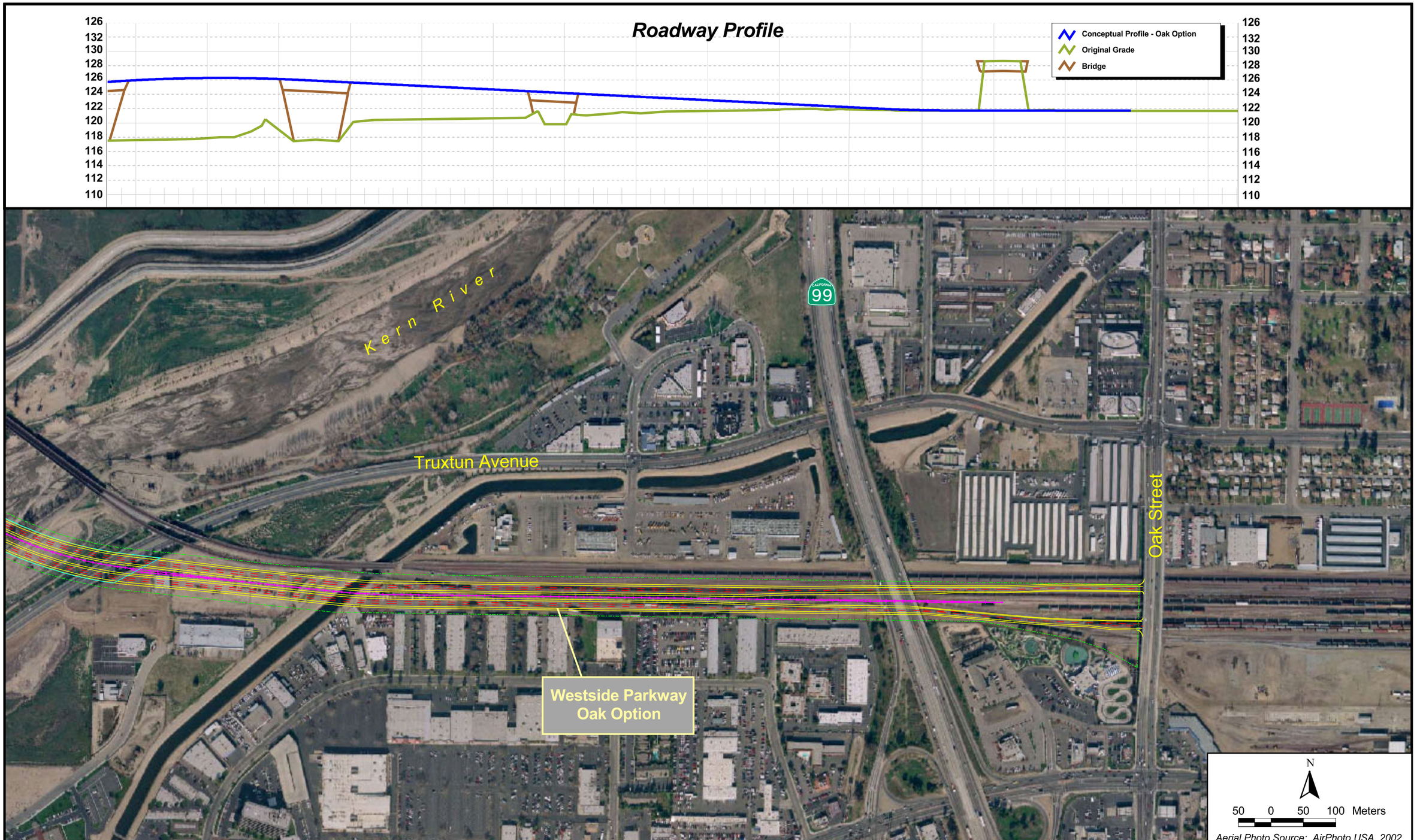


WESTSIDE PARKWAY OAK OPTION ALIGNMENT

Project No. 29866227	September 2005	Westside Parkway Project	Bakersfield, California	Figure 2.3-3a

WESTSIDE PARKWAY OAK OPTION ALIGNMENT

Project No. 29866227	March 2005	Westside Parkway Project	Bakersfield, California	Figure 2.3-3b



WESTSIDE PARKWAY OAK OPTION ALIGNMENT

Project No. 29866227	September 2005	Westside Parkway Project	Bakersfield, California	Figure 2.3-3c

2.3.3 Westside Parkway Alternatives – Other Project Features

Certain preliminary design features of the Westside Parkway are the same for both alternatives. These preliminary design elements include non-motorized transportation modes, drainage, landscaping and aesthetics, and utilities. The following sections describe these features, which apply equally to both alternatives, along with the expected construction phasing, schedule and cost of the proposed project.

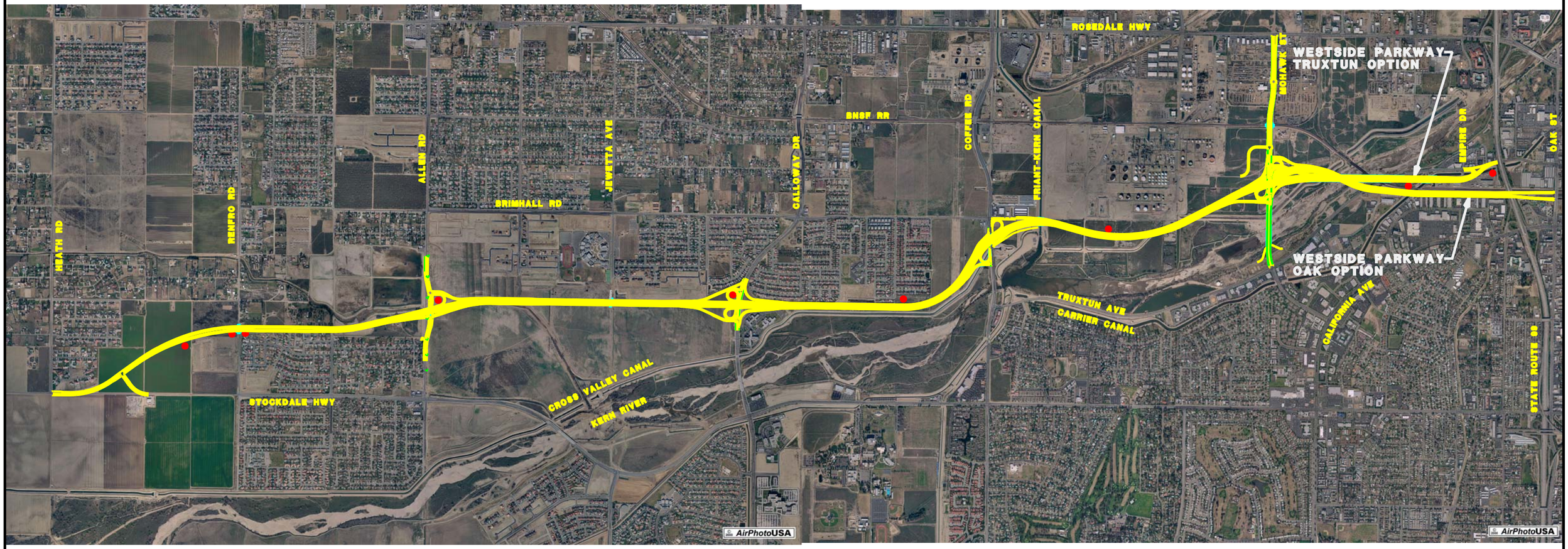
2.3.3.1 Non-motorized Transportation Modes (Pedestrians and Bicycles)

Sidewalks and paved areas for bicycle lanes (Class II and Class III Bikeways[1]) would be provided on all streets that cross over and under the proposed project. The paved area would be striped for bicycle lanes where bikeways currently exist. In addition, crosswalks would be provided at freeway on- and off-ramps to provide pedestrian pathways through interchange areas where pedestrian traffic is expected. All non-motorized facilities would be designed and built to comply with the Americans with Disabilities Act requirements.

2.3.3.2 Drainage

Stormwater runoff from the project would be contained in retention basins constructed within or near the project's right of way and would not be discharged directly to surface/receiving waters. Preliminary retention basin locations are shown in Figure 2.3-4. Retention basins would be sized to accommodate runoff from a 24-hour, 100-year storm event in accordance with City of Bakersfield drainage criteria. Runoff would be conveyed to retention basins by a combination of dikes, curbs, gutters, overside drains, lined and unlined ditches, and underground pipe systems. In areas where the project may be depressed below grade, stormwater pumping plants/lift stations and piping would be constructed to carry stormwater to the appropriate retention basin. Runoff flows generated outside the project right of way would be conveyed across the facility by means of cross culverts.

[1] Class II Bikeway (bike lane) provides a striped lane for one-way bike travel on a street or highway. Class III Bikeway (bike route) provides for shared use with pedestrian or motor vehicle traffic. See Chapter 1000 of the Highway Design Manual.



NOT TO SCALE

LEGEND

● Potential Retention Basin

RETENTION BASIN CONCEPTUAL LOCATION MAP

Project No.: 29866227	Date: March 2005	Project: WESTSIDE PARKWAY	FIGURE 2.3-4

In both the Westside Parkway alternatives, the project alignment would cross surface waters at the Kern River, Friant-Kern Canal, Carrier Canal, and Cross Valley Canal. Bridges crossing the Kern River would be curbed so that stormwater runoff is conveyed to either side of the river crossing where it would discharge into a dike, drain, or ditch for conveyance to a retention basin. Bridges across the Kern River would be designed to pass the 100-year river flow without substantially increasing [i.e., less than 0.3 meter (1.0 foot] the depth of water upstream of the bridge. The canals would be crossed by bridges with no columns constructed in the surface waters.

2.3.3.3 Landscaping and Aesthetics

The proposed project would be landscaped to create a park-like transportation corridor. Large-canopy trees, flowering trees, shrubs, groundcovers, and vines with a variety of color combinations would be planted in the median, on both sides of the facility, and at the interchanges. Vines would be planted at soundwalls and retaining walls to enhance the aesthetics, screen undesirable views, and to minimize potential for graffiti.

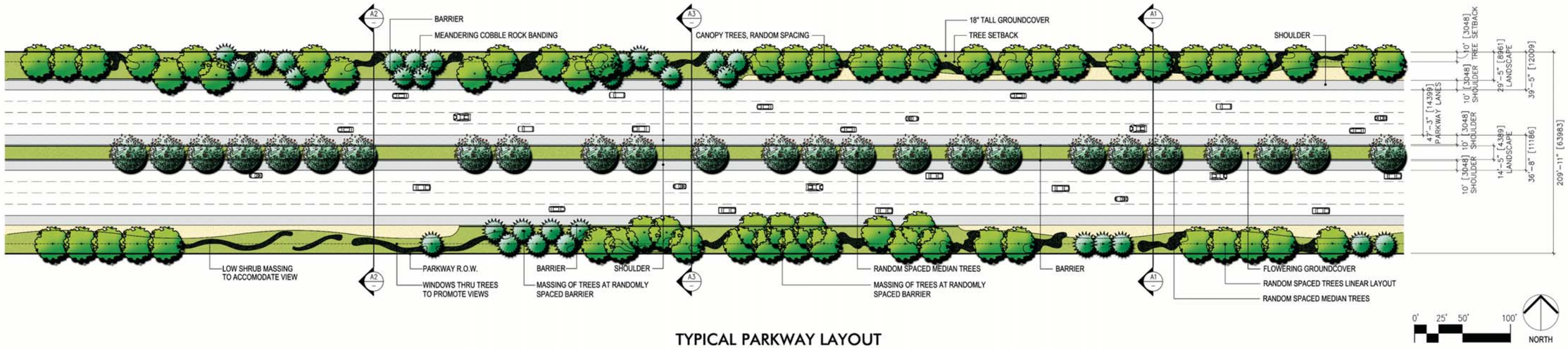
Aesthetics and landscaping for the project would have a distinctive theme that is compatible with the surrounding environment. A uniform color palette would be used for decorative hardscape and a seasonal color palette would be used for landscape. The aesthetic theme would be incorporated in various areas of the facility. Bridges may include graceful arches, interesting railings, and visually pleasing walls and columns. Barriers and walls may have graphic imprints or other attractive visual features.

A project theme and conceptual landscaping plan for the project is under development. Examples of landscape concepts proposed for implementation in the freeway project are depicted in Figure 2.3-5 and Figure 2.3-6.

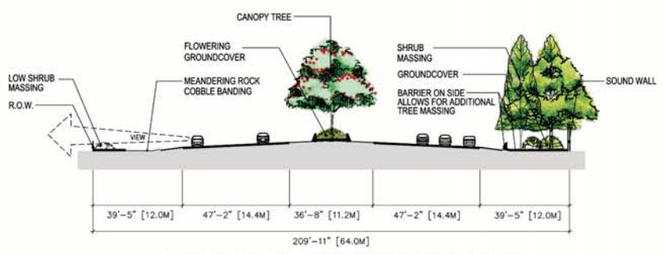
2.3.3.4 Utilities

Existing utilities; including water and wastewater pipelines, oil and gas pipelines, electric transmission lines, and communication lines (telephone, cable television and data); cross the project at various locations along the corridor. Existing utilities are shown in Figure 2.3-7. Relocation and/or protection of these utilities may be necessary, depending upon the ultimate location and design of the proposed project. In addition, new utilities would be required to serve the transportation facility's lighting and landscaping needs.

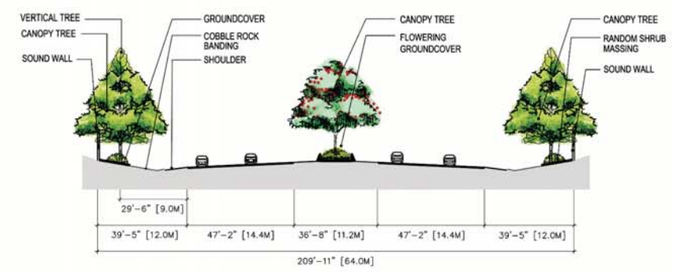
Westside Parkway-Conceptual Aesthetics



TYPICAL PARKWAY LAYOUT

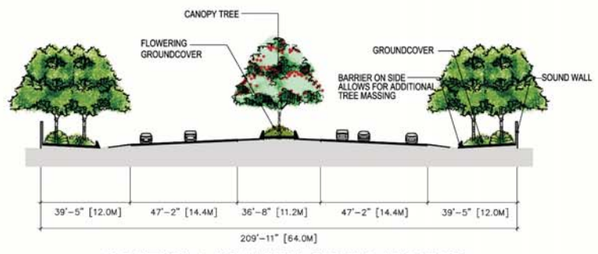


SECTION A2 @ GRADE PARKWAY



SECTION A1 DEPRESSED PARKWAY

0' 15' 30' 75'



SECTION A3 WITH SIDE BARRIERS

CONCEPTUAL PARKWAY LANDSCAPE DESIGN	
Project: WESTSIDE PARKWAY PROJECT	
Project No.: 29866227	Figure 2.3-5
Date: JULY 2004	

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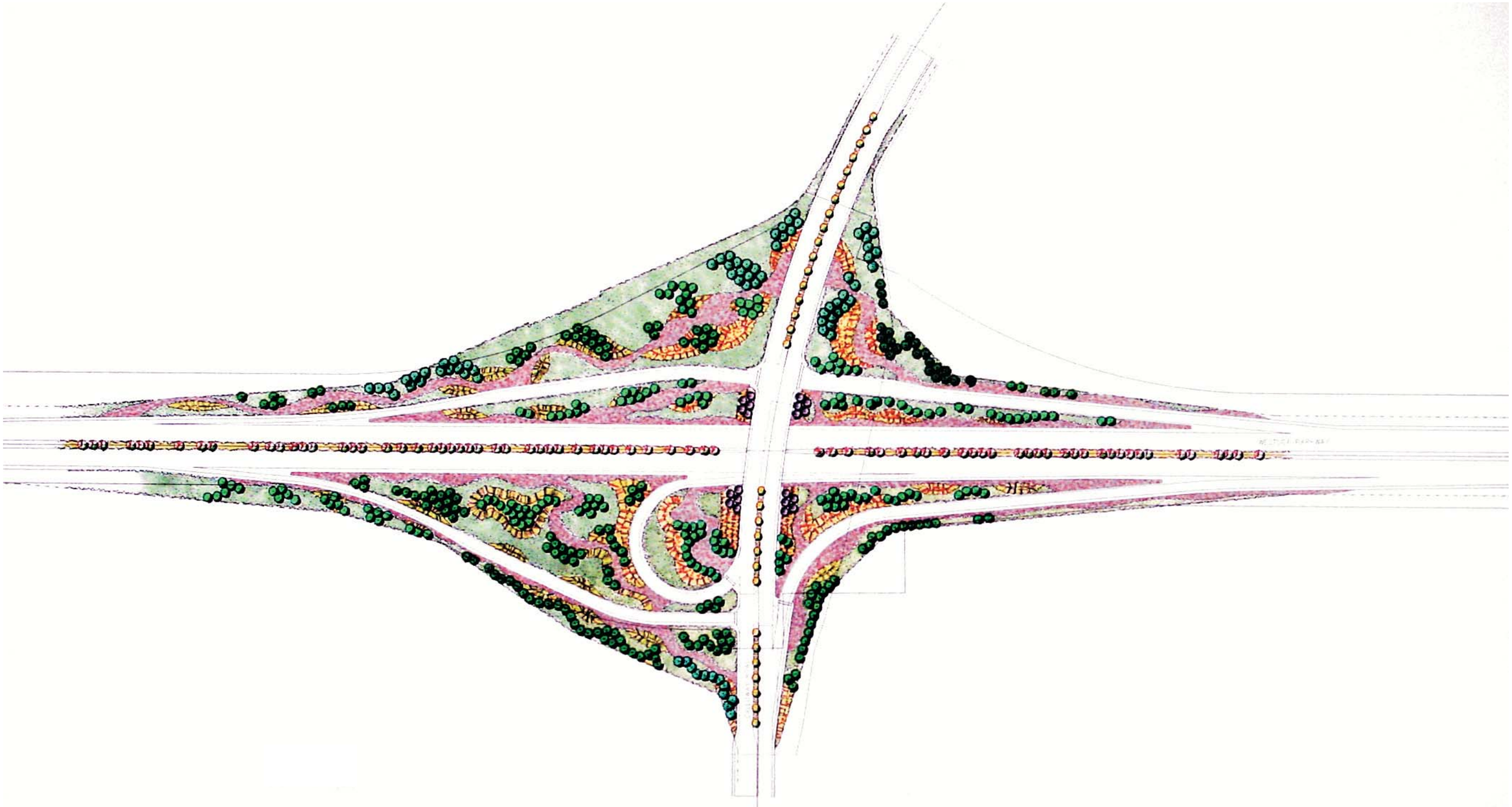

0 200'

Scale in Feet

TYPICAL INTERCHANGE

Conceptual Interchange Landscape Design

Project:	WESTSIDE PARKWAY PROJECT
Project No.: 29866227	Figure 2.3-6
Date: SEPTEMBER 2004	

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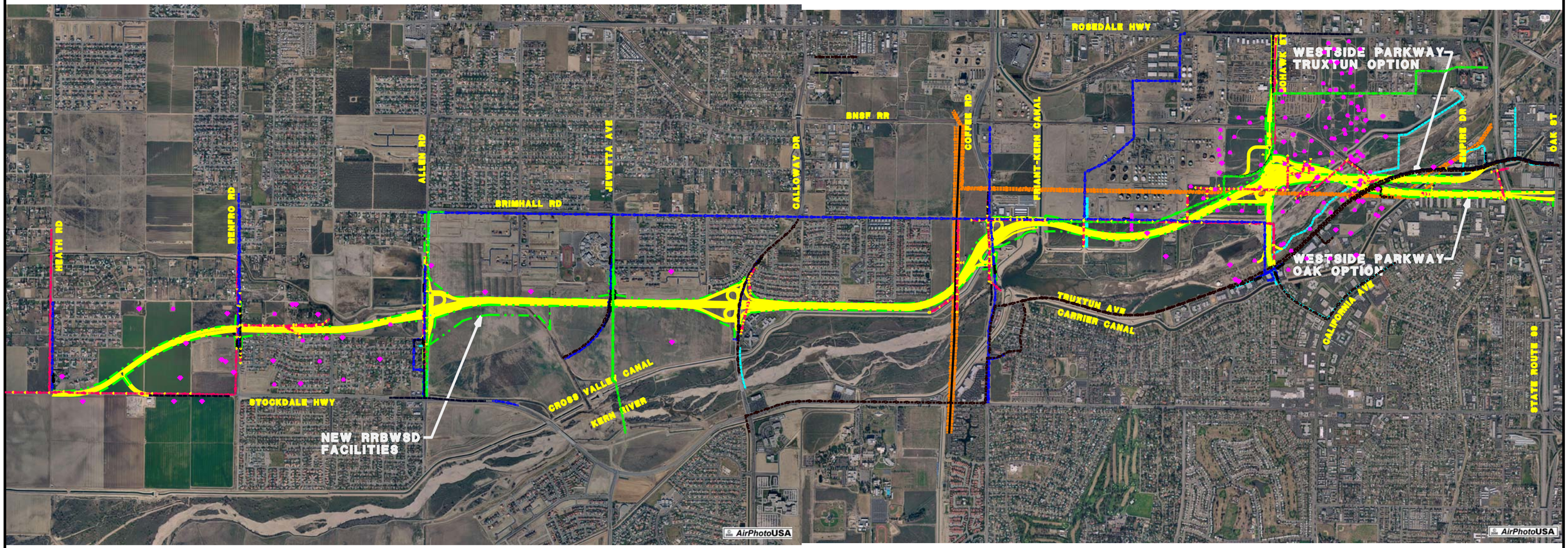


LEGEND

- OVERHEAD POWER TRANSMISSION
- OVERHEAD ELECTRIC
- NATURAL GAS
- SEWER
- WATER
- OIL
- OIL WELL (ACTIVE)
- OIL WELL (ABANDONED)
- OIL WELL (ACTIVE, VERIFY LOCATION)

NOT TO SCALE

EXISTING UTILITIES WITHIN THE PROJECT LIMITS

Project No.: 29866227	Date: March 2005	Project: WESTSIDE PARKWAY	FIGURE 2.3-7

2.3.3.5 Construction Phasing

The proposed project would be constructed in phases over a period of several years, as generally outlined in the following sequence:

- **Phase 1 –** Mohawk Street improvements and bridge.
- **Phase 2 –** Mainline between the east terminus and Coffee Road, including interchanges at Mohawk Street and Coffee Road.
- **Phase 3 –** Mainline between Coffee Road and Allen Road, including interchanges at Calloway Drive and Allen Road.
- **Phase 4 –** Mainline between Allen Road and the west terminus.

Construction of the project would occur over an estimated four to six years, with an initial design of four lanes between Heath Road and Allen Road, six lanes between Allen Road and Coffee Road, seven lanes (four eastbound and three westbound) between Coffee Road and Mohawk Street, and six lanes from Mohawk Street to the east terminus. The improvements would be developed to the full alignment width, with initial lanes configured on the outside of the alignment, allowing for future lane widening in the median. Overcrossings and bridges would be built such that they would meet horizontal and vertical clearance criteria of a potential future eight-lane facility. Construction access is expected to occur via existing public streets. Construction staging areas would generally be located within the project's right of way.

Construction sequencing would be similar within each particular phase of construction. Construction would generally begin with the establishment of any necessary temporary facilities or detours for local roadways. In the case of overcrossing structures proposed to carry local roads over the mainline, they would be built after any necessary temporary routes are completed.

2.3.3.6 Schedule and Cost

Funding for the project is expected to come primarily from metropolitan Bakersfield's share of RIP funds. Construction of the project is estimated to cost between $150 and $200 million. Initial funding for the first phase of the project is programmed in fiscal year 2005/06 to begin construction by fiscal year 2006/07.

2.3.4 No Action Alternative

Under the No Action Alternative, no new high-capacity, east-west transportation facility would be constructed in the western Bakersfield metropolitan area and the highway system would primarily exist as it does today, augmented by those additional projects which are reasonably expected to be in place without completion of the project. These would include projects planned by the City of Bakersfield and County of Kern in the current RTP and short-term minor rehabilitation and reconstruction projects for example safety and maintenance improvements.

As indicated in Table 1.5-1, average daily traffic under the No Action Alternative is projected to substantially increase on individual east-west arterials in west Bakersfield by 2030. Cumulative traffic

along all of these arterials is projected to be over two and a half times greater than existing conditions. Under the No Action Alternative, eight of 27 intersections evaluated in 2030 are projected to operate at unacceptable levels of service (LOS); that is, LOS D to LOS F during the a.m. peak hour, and 14 intersections are projected to operate at LOS D to LOS F during the p.m. peak hour by 2030 (shaded cells in Table 1.5-4). Considering the evening peak hour, which is often the critical peak period for commuters, over half of the intersections evaluated are forecast to degrade to an LOS below C by 2030.

This decrease in LOS will reduce mobility in west Bakersfield. Motorists will be impacted by substantially longer delays at intersections, possibly causing drivers to seek out alternative travel routes not intended for area-wide east-west travel. In some cases, motorists may divert to short-cuts through residential areas to by-pass overloaded arterials.

Increased congestion under the No Action Alternative would increase vehicle idle times, stop-and-go traffic and out-of-direction travel. All of these factors would decrease the efficiency of vehicle operations resulting in a decrease in air quality.

Circulation and access constraints resulting from the No Action Alternative would impair economic potential in west Bakersfield. Increased congestion over time would result in difficulties for potential employers, service vehicles, and customers of commercial centers in west Bakersfield, particularly along Rosedale Highway and new and existing industrial uses along Rosedale Highway near SR99. Growth and development of the residential subdivisions in the northwestern sector of Bakersfield would cause increased congestion on Rosedale Highway and Stockdale Highway and adjacent east-west arterials.

The No Action Alternative would not be consistent with, or support the achievement of, goals and policies contained in the Metropolitan Bakersfield General Plan Land Use or Circulation Elements.

2.3.5 Comparison of Alternatives

Table 2.3-1 provides a comparison of the project alternatives and the No Action Alternative based on criteria that measure the ability of the alternatives to meet the purpose and need for the project. There are 27 existing intersections along the five key east-west arterials in west Bakersfield. Improvement in the LOS of these intersections in 2030 was used as a measure to determine the ability of the alternatives to reduce congestion on existing east-west arterials in west Bakersfield. As indicated in Table 2.3-1, 19 of the intersections are projected to operate at LOS C or better in 2030 under the No Action Alternative during the a.m. peak hour and 13 are projected to operate at LOS C or better during the p.m. peak hour. Under the Westside Parkway Truxtun Option, 24 of the intersections are projected to operate at LOS C or better in the a.m. peak hour and 17 are projected to operate at LOS C or better during the p.m. peak hour. Under the Westside Parkway Oak Option, 24 of the intersections are projected to operate at LOS C or better in the a.m. peak hour and 18 are projected to operate at LOS C or better during the p.m. peak hour. In addition, the Westside Parkway options would improve the LOS at five intersections projected to operate at LOS E or F during the p.m. peak hour under the No Action Alternative to an LOS of D.

In addition to reducing congestion on existing east-west arterials, a purpose of the proposed project is to improve connectivity of the existing transportation network in west Bakersfield to provide motorists with

more options for north-south and east-west travel through this sector of the metropolitan area. Under the No Action Alternative, Seventh Standard Road, Hageman Road, Rosedale Highway and Stockdale Highway provide continuous east-west routes through west Bakersfield between Heath Road and SR99; while Olive Drive, Brimhall Road, Truxtun Avenue, and California Avenue provide partial east-west access through the area (Figure 1.5-1). Under the No Action Alternative, there are no north-south arterials that connect all of these east-west roads. Calloway Drive and Coffee Road are the only north-south arterials providing a connection to most of the major east-west arterials in west Bakersfield. The Mohawk Street extension proposed as part of the Westside Parkway would provide another north-south connection between the major east-west arterials in the western sector of the metropolitan area, connecting Hageman Road and Rosedale Highway to Truxtun Avenue and California Avenue, providing another route for motorists to connect with Stockdale Highway. This would substantially increase the options for motorists to access the Central Business District (CBD) from west Bakersfield. In addition, the Westside Parkway Oak Option would provide motorists the opportunity of connecting to either Truxtun Avenue or California Avenue via Oak Street to access the CBD.

Another purpose of the proposed project is to support Bakersfield's current and planned development west of SR99. The criterion used to evaluate this purpose was the consistency of the alternatives with the Land Use and Circulation Elements of the Metropolitan Bakersfield General Plan. The No Action Alternative is not consistent with these elements. Both the Westside Parkway Truxtun Option and the Westside Parkway Oak Option are consistent with the plan elements.

The Westside Parkway options have been designed to allow for mass transit in the future. This includes providing sufficient right of way to construct dedicated busways. The extension of Mohawk Street would also allow access from major arterials north of the Kern River to a potential station location on California Avenue for a future fixed guideway transit[2] system envisioned in the Long Range Public Transportation Study (1993) prepared by GET. The No Action Alternative would not facilitate connection of this planned transit system with the existing roadway network in west Bakersfield.

Table 2.3-1. Comparison of Project Alternatives

Criteria		No Action Alternative	Westside Parkway Truxtun Option	Westside Parkway Oak Option
Number of Existing Intersections Projected to Operate at LOS C or Better in 2030 (total of 27 intersections)	AM	19	24	24
	PM	13	17	18
Number of Existing Intersections Projected to Operate at LOS E or F (total of 27 intersections)	AM	4	1	1
	PM	7	2	2
Increase Connectivity of Arterial Grid in West Bakersfield		No	Yes	Yes
Consistent with Metropolitan Bakersfield General Plan		No	Yes	Yes
Consistent with Long Range Transit Plans		No	Yes	Yes

[2] Fixed guideway transit refers to any of several suitable transit technologies including light rail transit, heavy rail transit, monorail, or guided busways.

Table 2.3-2 provides a summary of the environmental effects of the No Action Alternative and the Westside Parkway Truxtun Option and Westside Parkway Oak Option.

Table 2.3-2. Summary of Environmental Effects of No Action Alternative and Project Alternatives

Impact Area	No Action	Westside Parkway Truxtun Option	Westside Parkway Oak Option
Geologic hazards	No geologic hazards that cannot be resolved by proven engineering practices	No geologic hazards that cannot be resolved by proven engineering practices	No geologic hazards that cannot be resolved by proven engineering practices
Floodplain encroachment	None	2 transverse and one longitudinal encroachment of Kern River floodplain	2 transverse and one longitudinal encroachment of Kern River floodplain
Known or potential assessor parcels with hazardous waste	None	34	38
Loss of farmland	None	33.5 ha (82.8 acres)	33.5 ha (82.8 acres)
Impacts to jurisdictional wetlands	0	0	0
Impacts to waters of the U.S.	0	0.25 ha (0.61 acre)	0.08 ha (0.20 acre)
Impacts to special-status plants	None	None	None
Impacts to special-status animals	None	Tipton kangaroo rat, San Joaquin kit fox, western burrowing owl, blunt-nosed leopard lizard, San Joaquin antelope squirrel, Swainson's hawk	Tipton kangaroo rat, San Joaquin kit fox, western burrowing owl, blunt-nosed leopard lizard, San Joaquin antelope squirrel, Swainson's hawk
Consistency with local plans	Not consistent	Consistent	Consistent
Residential relocations	0	0	0
Commercial businesses displaced	0	Up to 4	Up to 6
Encroachment on public recreation facilities	None	None	None
Congestion on local transportation network	Increase	Decrease	Decrease
Impact to archaeological sites	None	1	1

2.4 ALTERNATIVES CONSIDERED BUT WITHDRAWN FROM FURTHER EVALUATION (INFORMATION FROM TIER 1 EIS/EIR)

Numerous alternatives were considered over the course of engineering and environmental studies for the projects that were withdrawn from consideration in the Tier 1 EIS/EIR. The Tier 2 document confirms that the proposed Tier 2 project is consistent with the alignment chosen in the Tier 1 EIS/EIR. The alternatives considered included widening existing Rosedale Highway; alternative east-west transportation facility alignments; mass transit; and a transportation system management (TSM)

alternative. Potential alternatives were first given a preliminary analysis using existing engineering and environmental information to determine whether they were reasonable alternatives that satisfied the purpose and need for the project. Alternatives passing this first level of review were studied in more detail. If it became clear during the course of subsequent detailed studies that an alternative would have substantial impacts that could not be mitigated or that an alternative did not adequately satisfy the purpose and need for the project, it was eliminated from further consideration. Table 2.4-1 summarizes the reasons that alternatives were withdrawn from further evaluation. A brief description of the alternatives that were eliminated is provided below along with the reasons for their withdrawal from consideration.

Table 2.4-1. Reasons for Withdrawing Alternatives from Further Consideration

	Alternatives Eliminated During Initial Screening				Alternatives Eliminated During Detailed Engineering and Environmental Studies					
		New Alignment Alternatives			New Alignment Alternatives			Mass Transit		
	Widening Rosedale Highway	Hageman Road	Brimhall Road	Southern Alignment	Seventh Standard Road	Rosedale Highway	Kern River South Option	Bus	Light Rail	Transportation System Management
Does not improve continuity of Route 58	X	X		X	X			X	X	X
Does not reduce traffic congestion on local transportation network	X	X	X	X	X		X	X	X	X
High right of way costs	X	X	X			X				
Unacceptable number of relocations	X		X			X	X			
Impacts large number of archaeological sites		X								
Incompatible with land use planning	X	X	X	X	X	X	X			

2.4.1 Description of Alternatives Considered in the Tier 1 EIS/EIR

2.4.1.1 Widening Rosedale Highway

This alternative consists of increasing the capacity of existing Rosedale Highway (SR58) between Heath Road and SR99. This would be done by adding sufficient lanes to meet peak hour traffic demand projected to occur by the year 2030.

2.4.1.2 Alignment Alternatives

Land ownership and development in the western Bakersfield metropolitan area is in a grid pattern. A one-mile grid is also used as the basis for transportation planning in the area. This grid pattern allows for logical identification of potential east-west transportation corridors that generally follow the alignments of existing arterials or other east-west trending features such as the Kern River. A variety of alternative east-west alignments that followed this general concept were initially considered. These alternatives roughly follow the alignments of Hageman Road, Brimhall Road and the Kern River. Alignments that parallel the

Kern River have been termed the Kern River alternatives. Hageman Road and Brimhall Road are both arterial roads in varying stages of completion (i.e., they are not yet continuous through the western Bakersfield metropolitan area). Both serve new residential subdivisions that are centrally located in the western Bakersfield metropolitan area, and both arterials are being extended westward as new subdivisions are platted and built. The Kern River alignments lie between residential and commercial development in the northwest and southwest sectors of the metropolitan area and could serve both of these sectors.

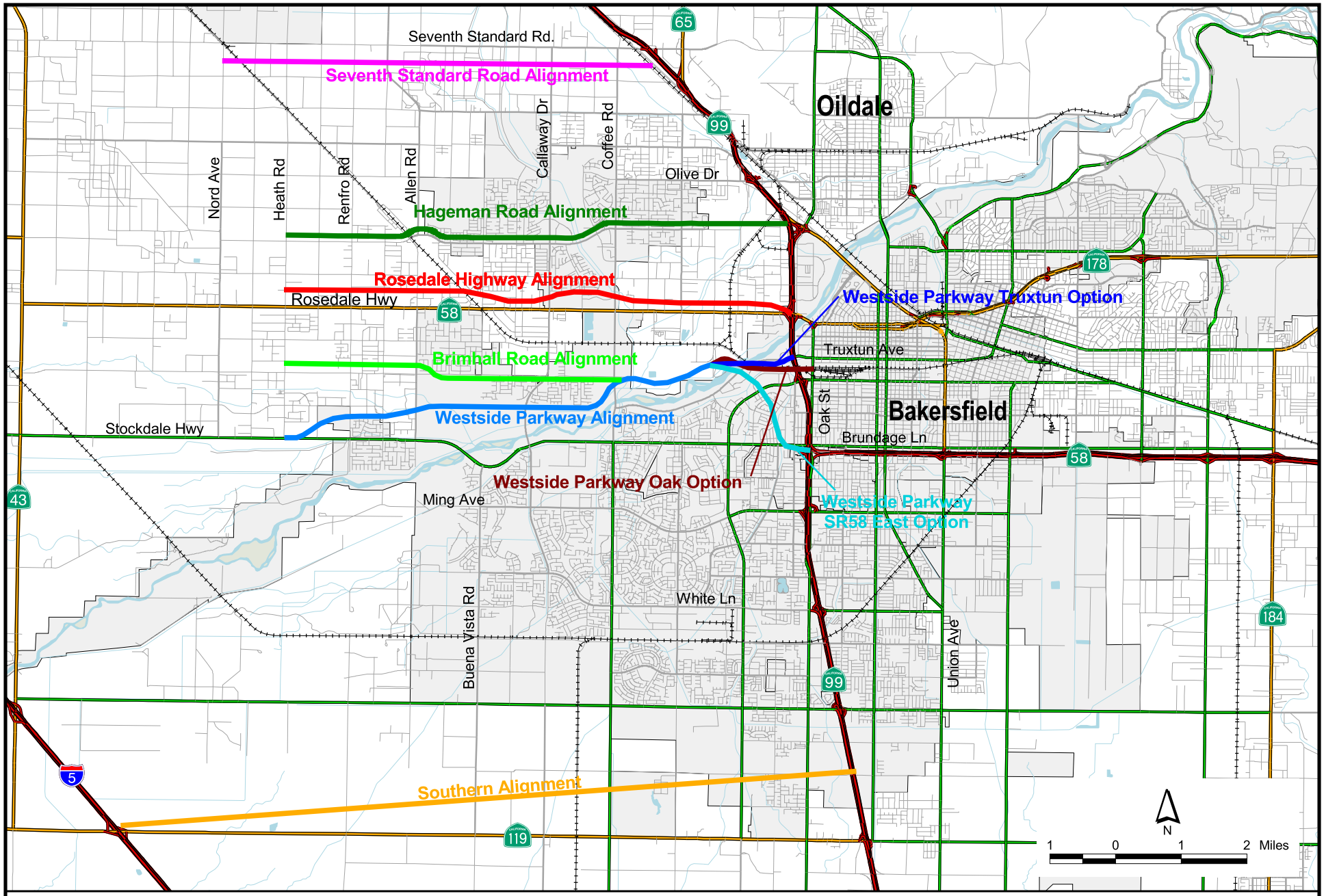
An alternative alignment paralleling Rosedale Highway was added to the study for the same reasons that the Hageman Road and Brimhall Road alignments were considered for an east-west transportation corridor. Rosedale Highway is centrally located to many of the expanding residential areas in the western Bakersfield metropolitan area, it is a major commercial corridor for the western metropolitan area, and it is a principal east-west commuter corridor.

An alternative alignment paralleling Seventh Standard Road was added to the study as a result of public comments received during early City and County hearings on their SR58 plan line corridor. This alternative was recommended because it is north of most development occurring in the western Bakersfield metropolitan area; therefore, it would be less disruptive to existing residential and commercial development.

An alternative alignment paralleling Panama Lane (Southern Alignment) was added to the study as a result of public comments provided to the California Transportation Commission. This alternative was recommended for the same reasons as the Seventh Standard Road alignment. It would be south of most development occurring in the western Bakersfield metropolitan area; therefore, it would be less disruptive to existing residential and commercial development.

Other alignments could be identified through the western Bakersfield metropolitan area between Heath Road and SR99. However, the six mentioned above represent a reasonable range of alternatives. The selection of other alternative alignments would duplicate the benefits and impacts of the alternatives considered for this study. The alignments examined for the project study are briefly described below and shown on Figure 2.4-1.

- **Seventh Standard Road Alignment.** This alternative alignment begins at Santa Fe Way near the future projection of Heath Road. The alignment begins south of existing Seventh Standard Road and runs parallel to and approximately 0.4 kilometer (0.25 mile) south of Seventh Standard Road to SR99.
- **Hageman Road Alignment.** This alternative begins at Heath Road and parallels Rosedale Highway approximately 0.8 kilometer (0.5 mile) to the north to Renfro Road where it curves northeastward and then parallels Hageman Road about 150 meters (500 feet) to the north to Calloway Drive. After crossing Calloway Drive, the alignment turns southeastward, following the Friant-Kern Canal for about 0.8 kilometer (0.5 mile), crossing the canal and extending about 1.6 kilometers (1 mile) before turning northeastward and terminating at SR99 at the existing SR99/SR204 interchange.
- **Rosedale Highway Alignment.** This alternative alignment begins at Heath Road and runs parallel to and about 0.4 kilometer (0.25 mile) north of Rosedale Highway to SR99. In order to



ALTERNATIVE ALIGNMENTS

Project No.: 29866227	Date: DECEMBER 2004	Project: WESTSIDE PARKWAY	Figure 2.4-1

- provide for safe traffic movements, connection of a new highway facility to SR99 on this alignment requires major new structures along SR99 for about 3.2 kilometers (2 miles) south of Rosedale Highway and a new interchange at SR99/Rosedale Highway.
- **Brimhall Road Alignment.** This alternative begins at Heath Road approximately 0.8 kilometer (0.5 mile) north of existing Brimhall Road. At this point, the alignment turns southeastward and continues east to Calloway Drive where it parallels the Kern River to a future extension of Mohawk Street. From Calloway Drive to SR99, the Brimhall Road Alignment is the same as the Kern River Alignments. Two alignment options are available east of Mohawk Street. The northern option continues east to SR99 at Truxtun Avenue. The southern option turns southeasterly, terminating at SR99 at the SR99/SR58 East interchange.
- **Kern River Alignment.** This alternative alignment has three alternatives at its terminus near SR99. From Heath Road, the Kern River Alignments parallel the CVC and Kern River to about Fruitvale Avenue. The three alignments diverge from each other near this point. The southernmost alternative (Kern River South Option) turns southeasterly, crossing the Kern River and terminating at the SR99/SR58 East interchange, the same as the Brimhall Road south option. The northernmost alternative (Tier 2 Westside Parkway Truxtun Option) is the same as the northern option of the Brimhall Road Alignment, joining Truxtun Avenue west of SR99. The third alternative (Tier 2 Westside Parkway Oak Option) joins Oak Street east of SR99.
- **Southern Alignment.** This alternative alignment begins at a theoretical southern projection of Heath Road at the I-5/State Route 119 (SR119) interchange. The alignment proceeds east terminating at SR99 at Hosking Road.

2.4.1.3 Mass Transit

The Mass Transit Alternative was considered as a method of reducing traffic demand on the transportation network in the western Bakersfield metropolitan area. If this could be accomplished, it would satisfy at least a portion of the purpose and need for the project, although it would not directly improve the connectivity of the existing transportation network. Bus and light rail transit were considered for this alternative.

2.4.1.4 Transportation System Management

Transportation System Management (TSM) consists of methods designed to increase the efficiency of moving people over the existing roadway system. It includes measures to increase the number of person-trips that can be carried on a roadway system during peak periods without significantly increasing the design capacity of the roadway system. Typically, TSM measures provide lower cost solutions to traffic flow problems than the construction of new roadways.

2.4.1.5 Transportation Demand Management

California Government Code Section 65089 requires that every county that includes an urbanized area over 50,000 in population adopt a Congestion Management Program (CMP). Kern County is one of 31 counties that has an urbanized area of this size. The purpose of the CMP is to ensure a balanced transportation system that integrates population growth, traffic growth, and land use decisions to provide adequate levels of service and air quality improvements.

The Kern Council of Governments (Kern COG) adopted a Kern County CMP on June 6, 1996. All State highways and principal arterials are designated as part of the CMP system. Given the close similarities of the Kern County CMP and the Congestion Management System (CMS) as described in the Federal Intermodal Surface Transportation Efficiency Act, the CMP provides for the CMS.

The 2004 Kern COG Regional Transportation Plan (RTP) and CMP, San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) Rate of Progress Plan, and the adopted State Implementation Plan (SIP) document additional transportation control measures (TCMs) being implemented or planned by each agency in the project area to reduce travel demand. While not all TCM strategies implemented at the valley-wide level are reflected in the SIP, TCMs identified in the SJVUAPCD Rate of Progress Plan are incorporated into the current Kern COG RTP and CMP. The Kern County CMP includes various travel demand reduction and operation strategies to reduce reliance on single-occupancy vehicles in the project area and, thus, improve air quality. Transportation control measures include transit capital improvements, alternative fuel fleet vehicles and facilities, traffic flow improvements (signal synchronization program in the Bakersfield metropolitan area), agency-sponsored emergency traffic assistance, auto buy back program, park-and-ride lots, low-emission vehicle programs, ridesharing, and others.

The discussions in Sections 2.4.1.3 and 2.4.1.4 demonstrate that travel demand reduction and operation strategies cannot fully satisfy the need for additional east-west capacity on the west side of the Bakersfield metropolitan area. These strategies would satisfy less than five percent of the project corridor travel demand in the year 2030. The State of California, Kern COG, and SJVUAPCD are committed to implement any additional travel demand and operation strategies that can be identified as reasonable within the project corridor. The RTP, Regional Transportation Improvement Plan, and CMP along with Sections 2.4.1.3 and 2.4.1.4 demonstrate that travel demand reduction and operation strategies would not eliminate the need for additional single-occupancy vehicle capacity in the project corridor. Travel demand reduction and operation strategies would continue to be needed in addition to an increase in single-occupancy vehicle capacity to effectively manage project corridor area travel demand.

2.4.2 Alternatives Withdrawn During Initial Screening

2.4.2.1 Widening Rosedale Highway

Caltrans seeks to maintain LOS D on urban highways such as existing Rosedale Highway. For an undivided arterial, such as the Rosedale Highway, LOS D can be approximated at a maximum traffic flow rate of 600 vehicles/hour/lane. Table 2.4-2 provides peak-hour traffic projections developed by Kern COG for existing SR58 in the year 2030. As indicated in the table, by 2030, SR58 would need to be four lanes from Heath Road to Allen Road, six lanes from Allen Road to Calloway Drive, ten lanes from Calloway Drive to Coffee Road and twelve lanes from Coffee Road to SR99 to theoretically maintain an LOS D.

Table 2.4-2. Peak Hour Traffic Projections For Existing SR58 In 2030

Highway Segment	Traffic Volumes			
	Morning		Evening	
	Eastbound	Westbound	Eastbound	Westbound
Heath Rd to Allen Rd	1010	670	840	1030
Allen Rd to Calloway Dr	1600	950	1180	1710
Calloway Dr to Coffee Rd	2470	1340	1800	2680
Coffee Rd to Mohawk St	2840	2660	3040	3180
Mohawk St to SR99	3030	2450	2850	3590

Despite the increase in capacity, this alternative does not meet the connectivity enhancement criteria of the purpose and need for the project nor would the alternative accommodate multimodal opportunities. Traffic moving east-west on Rosedale Highway would continue to commingle with north-south traffic on SR99 at the east end of the project. This would exacerbate existing traffic congestion on SR99 through central Bakersfield.

SR58 currently consists of a two-lane highway from Heath Road to Allen Road, a four-lane highway from Allen Road to Camino Del Rio Court immediately west of SR99, and a short six-lane highway segment from Camino Del Rio Court to SR99. The City of Bakersfield plans to expand SR58 to six lanes from Renfro Road to Camino Del Rio Court before the year 2020. Widening to six lanes between Gibson Street and Camino Del Rio Court should begin in 2005. Planned expansion of the highway was assumed to be completed for the modeling of year 2030 traffic conditions in the western Bakersfield metropolitan area. Traffic congestion on SR58 would degrade back to existing levels by the year 2020 despite this proposed increase in capacity.

While widening the highway to twelve lanes east of Coffee Road would increase roadway capacity, it would not substantially improve the level of service of the highway. There is a point where the ability to reasonably and safely operate a vehicle becomes more important than the number of lanes in traffic circulation. Rosedale Highway is a conventional undivided highway. Access is not controlled as it is on expressways and freeways. There are driveways directly onto the highway as well as numerous at-grade intersections. Vehicles accelerating and decelerating as they go on and off the highway and traffic moving across lanes to make left- or right-turns from the highway, significantly reduces the level of service when the roadway is eight lanes wide or wider. This is borne out by the fact that the capacity of a conventional highway such as Rosedale Highway is about 2.5 times lower than a freeway with the same number of lanes. This difference in capacity is due to the limited and controlled access on and off of a freeway compared to a conventional highway. Expanding the capacity of the existing highway would not substantially improve the level of service of Rosedale Highway with the traffic demand projected for the year 2030.

This alternative would not fully meet the purpose and need for the project. It would not improve the connectivity of the existing transportation network because this alternative does not add any new linkages to the transportation network. It would not appreciably reduce congestion on existing east-west arterials in

the western Bakersfield metropolitan area because it does not provide a new east-west route to draw vehicles off of existing east-west arterials. For these reasons, it was withdrawn from further consideration.

In addition, this alternative would result in substantial economic and social impacts. Rosedale Highway is a major commercial center for the western Bakersfield metropolitan area, particularly east of Coffee Road. Widening the highway by as many as two to eight lanes, while meeting Caltrans design standards, would result in the relocation of over 35 residential units and over 38 commercial buildings.

2.4.2.2 Hageman Road Alignment

The Hageman Road Alignment was withdrawn from further consideration because it would not meet the purpose and need for the project. In addition, this alternative would result in substantial environmental impacts and right of way costs would be higher than any other alternative alignment.

Because the Hageman Road Alignment is not located near the center of the major development in the western Bakersfield metropolitan area, a transportation facility on this alignment would attract less traffic than a facility located further south on alignments such as the Rosedale Highway Alignment, Brimhall Road Alignment, or Westside Parkway Alignments. This low performance was identified in the Tier I Route 58 Adoption Project EIS/EIR (Caltrans 2001), the Preliminary Route Adoption Analysis (Caltrans 1985) and the Westside Corridor Study (Kern COG 1988). In addition, the Hageman Road Alignment would not create new linkages in the existing transportation network. For these reasons, this alternative would not substantially meet the purpose and need for the project.

The Hageman Road Alignment would also have substantial environmental impacts. The alignment crosses several new residential subdivisions and would result in the displacement of at least 200 to 250 residences and businesses. A facility constructed in the alignment would impact four times as many archaeological sites as a facility in any other alternative alignment. Because of the developed land that the Hageman Road Alignment would cross, right of way acquisition costs for this alignment would be higher than any of the other alternative alignments.

2.4.2.3 Brimhall Road Alignment

The Brimhall Road Alignment would meet the congestion relief aspect of the purpose and need for the project. A freeway on the Brimhall Road Alignment is estimated to have a traffic demand of about 255,000 ADT in the year 2020, compared to 250,000 and 252,500 ADT for a freeway facility on the Rosedale Highway and Westside Parkway Alignments, respectively. Based on the accuracy of traffic projections, these alternatives would provide essentially the same level of traffic congestion reduction on the transportation network in the western Bakersfield metropolitan area.

A transportation facility built on the Brimhall Road Alignment would have environmental impacts similar to a facility built on the Rosedale Highway or Westside Parkway Alignments except for relocation impacts. Use of the Brimhall Road Alignment would result in the relocation of at least 400 to 450 residences. This is substantially more relocations than would occur on the Rosedale Highway (about 380 residences) or Westside Parkway (no residences) Alignments. The Brimhall Road Alignment alternative

was withdrawn from further consideration because of this large relocation impact and incompatibility with land use plans.

2.4.2.4 Southern Alignment

This alternative is a variation of the South Beltway included in the Metropolitan Bakersfield General Plan. The South Beltway begins at SR58 East near the eastern edge of the metropolitan area, proceeds southwest crossing SR99 at Hosking Road, and roughly parallels Panama Lane to I-5. The Southern Alignment evaluated for this project follows the South Beltway alignment from the I-5/SR119 interchange to SR99.

This alternative was withdrawn from consideration following an initial traffic study. The study showed that in the year 2020 local traffic use of a freeway on the Southern Alignment would be low (approximately 11,000 ADT near SR99 compared to 75,000 ADT for an alignment adjacent to the Kern River). Local traffic volumes over the planning horizon for this project (i.e., year 2030) would be low on the Southern Alignment freeway because this portion of the Bakersfield metropolitan area is not expected to be developed until beyond 2030.

Construction of a freeway on the Southern Alignment would be less expensive than on any other alternative alignment considered for this project because it would traverse primarily agricultural land. The alternative was withdrawn from further consideration because it did not meet the purpose and need for the project relative to congestion relief on parallel east-west routes. It would not improve transportation connectivity in Kern County. It would not provide any improvement to the transportation network in the western portion of the Bakersfield metropolitan area, and it would be substantially under-utilized because it results in out-of-direction travel for traffic within the planning horizon (2030). This facility may be a useful addition to the transportation network as the Bakersfield metropolitan area grows to the south beyond 2030.

2.4.3 Alternatives Withdrawn During Environmental Studies

Following the initial environmental evaluation, more detailed environmental and engineering studies were conducted on the remaining alternative alignments: Seventh Standard Road, Rosedale Highway and Westside Parkway Alignments (Truxtun Option, Oak Option and SR58 East Option alternatives). During the course of the studies, the Seventh Standard Road Alignment, Rosedale Highway Alignment and the Westside Parkway SR58 East Option Alignment were withdrawn from further consideration for the reasons described below. A summary of the impacts associated with these three alignments is provided in Table 2.4-3.

2.4.3.1 Seventh Standard Road Alignment

A transportation facility built on the Seventh Standard Road Alignment would result in the fewest environmental and socioeconomic impacts of all the alternative alignments, and it would have the lowest right of way cost (approximately $40 million). However, this alignment does not meet the purpose and need for the project because it is too far north to appreciably draw traffic off existing east-west arterials in

west Bakersfield and it does not create any new linkages in the existing transportation network. Therefore, it was withdrawn from further consideration.

The Seventh Standard Road Alignment crosses agricultural land north of most of the development taking place in the western Bakersfield metropolitan area. Because it is currently in a more rural area, the alternative would result in less than 20 relocations. This is fewer relocation impacts than the Rosedale Highway Alignment alternative. A facility built on the Seventh Standard Road Alignment would result in the loss of 65 hectares (160 acres) of land that is classified as Prime Farmland or Farmland of Statewide Importance compared to 33.5 hectares (82.8 acres) for the Westside Parkway Alignments and 1 hectare (3 acres) for the Rosedale Highway Alignment. Even though the Seventh Standard Road Alignment would use the largest acreage of agricultural land, it was located primarily on the border of parcels to minimize impacts to farming activities.

The Seventh Standard Road Alignment does not cross the Kern River. Therefore, a facility built on this alignment would have no impacts to waters of the U.S. or wetlands under the jurisdiction of the U.S. Army Corps of Engineers.

2.4.3.2 Rosedale Highway Alignment

The Rosedale Highway Alignment would meet the congestion relief aspect of the purpose and need for the project. A freeway on this alignment would have greater traffic demand than the Seventh Standard Road Alignment and nearly the same demand as the Westside Parkway Alignments, particularly in the most urbanized portion of the western Bakersfield metropolitan area between Coffee Road and SR99. However, since the alignment would essentially parallel an existing major transportation facility (existing SR58/Rosedale Highway), it would do little to create improved connectivity of the existing transportation network.

Although this alternative meets the congestion reduction element of the purpose and need for the project, the Rosedale Highway Alignment was withdrawn from further consideration because it would have substantially greater relocation impacts than the Westside Parkway Alignments. As indicated in Table 2.4-3, the Westside Parkway Alignments would not displace any residential units and would displace up to four (Truxtun Option) or up to six (Oak Option) commercial businesses compared to the Rosedale Highway Alignment, which would displace about 380 residential units and 140 businesses. As indicated in Table 2.4-3, other environmental impacts would be similar for these alternative alignments. At approximately $450 million, right of way acquisition on the Rosedale Highway Alignment would be almost twice as high as on the Westside Parkway Alignments.

2.4.3.3 Westside Parkway SR58 East Option

A freeway facility built on any of the Westside Parkway Alignments (Truxtun Option, Oak Option or SR58 East Option alternatives) would carry the same volume of traffic (252,500 ADT).

The Westside Parkway SR58 East Option would alter access and circulation patterns in the Westpark neighborhood. This alignment option would cut through existing neighborhoods, requiring a number of local through streets to be terminated in cul-de-sacs. The main collector streets in the area would cross

over or under a transportation facility built on this alignment allowing continued access into and out of the neighborhoods. However, intra-neighborhood access would be limited and emergency vehicle routing would be more circuitous.

The Westside Parkway SR58 East Option would cross through relatively dense housing areas resulting in the relocation of 300 residential units. The Westside Parkway Truxtun Option and the Westside Parkway Oak Option alternatives would be less disruptive, resulting in no residential relocations. The Westside Parkway SR58 East Option would also result in the relocation of 42 commercial buildings including new office buildings in the California Avenue area.

The Westside Parkway Truxtun Option, Westside Parkway Oak Option and Westside Parkway SR58 East Option alternatives are similar to each other in their ability to meet the purpose and need for the project. The Westside Parkway SR58 East Option was withdrawn from further consideration because it would be substantially more disruptive to local traffic circulation patterns and would result in a substantial number of residential relocations compared to none resulting from the Westside Parkway Truxtun Option or Westside Parkway Oak Option alternatives.

Table 2.4-3. Summary of Environmental Impacts of Alignment Alternatives

Impact Area	Seventh Standard Road	Rosedale Highway	Westside Parkway SR58 East Option
Geologic hazards	No geologic hazards that cannot be resolved by proven engineering practices	No geologic hazards that cannot be resolved by proven engineering practices	No geologic hazards that cannot be resolved by proven engineering practices
Floodplain encroachment	None	1 transverse encroachment of Kern River floodplain	2 transverse encroachments of Kern River floodplain
Potential hazardous waste parcel owners	12	NA	9
Loss of farmland	65 ha (160 acres)	1 ha (3 acres)	33.5 ha (82.8 acres)
Impacts to jurisdictional wetlands	0	0.4 ha (1.04 acres)	0
Impacts to waters of the U.S.	0	1.2 ha (3.15 acres)	0.08 ha (0.20 acre)
Impacts to special-status plants	None	Hoover's eriastrum and recurved larkspur	None
Impacts to special-status animals	Tipton kangaroo rat, San Joaquin kit fox, western burrowing owl, blunt-nosed leopard lizard, San Joaquin antelope squirrel, Swainson's hawk	Tipton kangaroo rat, San Joaquin kit fox, western burrowing owl, blunt-nosed leopard lizard, San Joaquin antelope squirrel, Swainson's hawk	Tipton kangaroo rat, San Joaquin kit fox, western burrowing owl, blunt-nosed leopard lizard, San Joaquin antelope squirrel, Swainson's hawk
Consistency with local plans	Not consistent	Not consistent	Not consistent
Residential relocations	3	380	300
Commercial businesses displaced	4	140	250
Encroachment on public recreation facilities	None	3	None

Impact Area	Seventh Standard Road	Rosedale Highway	Westside Parkway SR58 East Option
Congestion on local transportation network	No effect	Decrease	Increase
Impact to archaeological sites	0	9	1

2.4.4 Mass Transit Alternative

As discussed below, all available information indicates that the Mass Transit Alternative would remove a relatively minor number of vehicle trips from the transportation network. Traffic congestion projected for the project area would remain high. Because none of the mass transit options would directly improve connectivity of the existing transportation network nor would they substantially reduce traffic congestion over the planning period for this project (i.e., 2030), they were withdrawn from further consideration as standalone alternatives. Discussions of each mode of mass transit considered in this study are presented in the following subsections.

Bus, light rail transit, and HOV lanes were considered for this alternative. As discussed below, all available information indicates that the Mass Transit Alternative would remove a relatively minor number of vehicle trips from the transportation network. Traffic congestion projected for the project area would remain high. Because none of the mass transit options would directly improve connectivity of the existing transportation network nor would they substantially reduce traffic congestion over the planning period for this project (i.e., 2030), they were withdrawn from further consideration as standalone alternatives. Discussions of each mode of mass transit considered in this study are presented in the following subsections.

Mass transit may become a more important component of the transportation network in future years. Transportation studies prepared by GET recommend an expansion of the existing bus system operating fleet for several key transportation corridors and addition of new routes. For these reasons, the alignment alternatives do not preclude future uses for mass transit. Sufficient right of way would be acquired up to SR99 to provide multimodal opportunities for future mass transit uses including HOV lanes, dedicated busways, express bus or bus rapid transit.

2.4.4.1 Bus System Improvements

Ridership on GET is currently approximately 6.9 million riders annually. The weekday system-wide ridership averages approximately 23,000 people/day. However, in the western Bakersfield metropolitan area, weekday ridership only averages approximately 3,000 people/day. Peak ridership is strongly correlated with school and drops significantly when school is not in session.

Given the lack of strong GET ridership in western Bakersfield, the ability of improvements to bus service alone to meet the purpose of the project is not evident. Even if GET ridership in the project area could be increased by a large amount (e.g., double ridership), it would not be sufficient to meet the purpose of the project. The capacity deficiency in the transportation network of the western Bakersfield metropolitan area is measured in hundreds of thousands of vehicle trips. A doubling of GET ridership in the project

area from its current level to about 6,000 daily riders would fall far short of what is required to reduce projected congestion. The shortfall in capacity enhancement is clear when 3,000 additional riders on GET buses is compared to the 252,500 trips that would be served by a freeway on the Westside Parkway Truxtun Option or Westside Parkway Oak Option Alignments. An increase of 3,000 daily riders is an optimistic assessment of what can be accomplished with the GET bus system given existing ridership. Generally, a large effort in terms of pricing, headway times, and ride comfort is needed to increase ridership by a moderate amount.

Although improvements to the bus system were rejected as a standalone alternative for the project, planning of the proposed transportation corridor has been coordinated with GET to ensure that sufficient right of way was available to allow future mass transit options.

2.4.4.2 Light Rail Transit

The effectiveness of light rail in the western Bakersfield metropolitan area was evaluated using: 1) ridership trends for buses; and 2) an evaluation of the presence or absence of appropriate land use and demographic characteristics in the Bakersfield metropolitan area.

2.4.4.2.1 Ridership Trends

A survey of 11 U.S. cities/areas that have existing light rail systems (Sacramento, San Diego, San Jose, San Francisco, Los Angeles County, Portland, Seattle, Pittsburgh, New York, Philadelphia, and Cleveland) indicates that light rail ridership is typically in the 10 to 15 percent range of total mass transit trips. The bulk of mass transit trips are made on buses. Coupled with the low ridership for GET, an additional increase in ridership of 10 to 15 percent provided by light rail would still leave mass transit unable to reduce traffic demand in the project area sufficiently to relieve projected traffic congestion. It should be noted that rail ridership typically consists primarily of former bus riders and only secondarily of former auto users. This would further diminish the ability of light rail to reduce congestion in the western Bakersfield metropolitan area. Express bus service offers travel time savings and convenience that match light rail more closely than local bus service. Building ridership on express bus service is often viewed as a step toward the development of light rail. GET currently has one express bus route. These ridership trends and patterns do not indicate that light rail would attract sufficient riders away from automobiles to meet the objective of reducing traffic congestion on the local transportation network.

2.4.4.2.2 Demographic Characteristics/Land Use

A direct relationship exists between population size and density and mass transit ridership. Within the planning horizon for the project (2030), the western Bakersfield metropolitan area would not have a demographic profile in terms of population size and density to support light rail.

Two of the most important factors in determining whether a light rail investment is justified are the size of the downtown area and residential densities. This is illustrated by the substantial downtown focus of nearly every light rail system in North America. Light rail is generally suitable where nonresidential concentrations of 35 to 50 million square feet are served and residential densities of nine or more dwelling units per acre exist in the line's service area. The Bakersfield metropolitan area falls short of these thresholds with only 26 million square feet of nonresidential uses in a 408 square mile area and

average residential density of 0.5 dwelling unit per acre. The demographic profile of the western Bakersfield metropolitan area indicates that light rail would be an inappropriate mode of mass transit for the area.

2.4.5 Transportation System Management Alternative

Table 2.4-4 lists the Transportation System Management (TSM) measures considered for this project, and includes some roadway widening. These measures would complement improvements to the local transportation network already planned by the City of Bakersfield and Kern County.

Improvements in the operation of the transportation network in the western Bakersfield metropolitan area were modeled with the implementation of TSM improvements by Kern COG. The results of that modeling indicated a reduction in traffic congestion relative to the No Action Alternative. However, most of the improvements occurred on the periphery of the metropolitan area (e.g., Seventh Standard Road at Allen Road) with negligible improvements to traffic flow on arterials in more central urbanized areas such as Rosedale Highway between Calloway Drive and SR99.

The TSM alternative was excluded from further consideration as a standalone alternative because it did not meet the purpose and need for the project. The alternative would not improve the connectivity of the existing transportation network and does little to accommodate future multimodal transportation facilities. While the TSM measures would provide some improvement in traffic circulation, they would provide essentially no improvement on those segments of the transportation network located in the urbanized portion of the western Bakersfield metropolitan area, where improvements are most needed.

Table 2.4-4. Transportation System Management Improvements

Item	Locations	Description	Estimated Capital Costs[1]
Roadway Physical Improvements			
1) Roadway widenings	a) Seventh Standard Road between SR43 and Allen Road b) Seventh Standard Road between Coffee Road and SR99 c) Rosedale Highway between I-5 and SR43 d) Allen Road between Seventh Standard Road and Brimhall Road	From 2 to 4 lanes From 4 to 6 lanes From 2 to 4 lanes From 2 to 4 lanes	$12,600,000
2) HOV lane additions	a) SR99 between Rosedale Highway and SR58 East	One lane each direction	$1,450,000
3) Turn lane additions at congested intersections	a) California Avenue/Mohawk Street	Add southbound right-turn pocket on Mohawk Street	$80,000
4) Add missing links (streets) to the roadway network	a) Allen Road (see also Item 5)	Connect northern and southern Allen Road to avoid jog at Hageman Road	Included in Item 5
5) Railroad/street grade separations	a) Rosedale Highway near Mohawk Street b) Hageman Road near Santa Fe Way (see also Item 4)		$4,650,000
Roadway Operational Improvements			
6) Signal optimization	a) Seventh Standard Road/Allen Road b) Rosedale Highway/Coffee Road c) Rosedale Highway/Mohawk Street d) Stockdale Highway/Coffee Road e) Truxtun Avenue/Coffee Road f) California Avenue/Mohawk Street	Improve 2030 intersection signal phasing beyond what is assumed in the No Action Alternative to improve LOS	$280,000
Transit Improvements			
7) 15% increase in bus service	a) Throughout study area	New local/express routes Increased frequency	$8,400,000
8) Bus turnouts	a) All roads operating at LOS E or worse - Seventh Standard Road - Rosedale Highway - Coffee Road - Allen Road south of Hageman Road - Olive Drive east of Mohawk Street - Truxtun Avenue east of Coffee Road - Stockdale Highway east of Calloway Drive	Bus turnouts to remove buses from the traffic lane during loading and unloading	$1,200,000
9) Park-and-Ride lots	a) Key locations throughout study area	Serving buses and carpools	$1,500,000
10) Lower transit fares or employer transit subsidies	a) All study area routes		$0
Traffic Demand Management (TDM) Improvements			
11) Increased parking costs	a) Central Business District b) Key locations throughout study area	Low parking surcharge Voluntary employer participation	$0
12) Carpool program	a) Region-wide	Assume active, voluntary program for all employers in Kern County	$0
13) Flextime program	a) Region-wide	Assume active, voluntary program for all employers in Kern County	$0

[1] Does not include right of way costs.

2.4.6 Other Alternatives

A variety of alternatives were considered, but withdrawn from detailed evaluation in this document. Several of these alternatives include suggestions received from the public during the Notice of Preparation (NOP) scoping period for this EA/DEIR (refer to Appendix B). As potential alternatives were identified, they were given a preliminary analysis using engineering and environmental information to determine whether they were reasonable alternatives that satisfied the purpose and need for the project. If it became clear that an alternative would have substantial impacts that could not be mitigated or that the alternative did not satisfy the purpose and need for the project, it was eliminated from further consideration. Descriptions of the alternatives that were considered, but eliminated from detailed evaluation are provided below along with the reasons for their withdrawal from further consideration.

2.4.6.1 Alternative Downtown Access

This alternative is the same as the Westside Parkway Alignments, but additionally includes improved roadway access from the Westside Parkway to downtown Bakersfield by constructing one or more of the following:

- A direct connection from the Westside Parkway to Rosedale Highway near SR99, between Landco Road and Gibson Street.
- Realignment of the Westside Parkway towards the northwest at Mohawk Street to merge with Fruitvale Avenue.
- A tunnel for the Westside Parkway under SR99 and Beach Park, returning to ground level at the southeast corner of 24th Street (SR178) and Oak Street.
- Construction of the Westside Parkway below ground level from Coffee Road to the west terminus of the project.

Access to downtown Bakersfield from the Westside Parkway is one of the principal goals of the project. The first three elements of the Alternative Downtown Access option would provide three connection routes to the downtown CBD. This is similar to the two build alternatives already under consideration. In both of the current build alternatives, access to downtown would be via three potential traffic routes including: 1) Mohawk Street interchange north to Rosedale Highway and then east to downtown, 2) Mohawk Street south to California Avenue and then east to downtown and 3) direct connection to Truxtun Avenue (Truxtun Option) or direct connection to Oak Street (Oak Option). The Project Development Team (PDT) determined that the suggested Alternative Downtown Access option was substantially similar to the alternatives already under consideration and that the direct connection to 24th Street would be substantially more expensive than the connections currently proposed.

Depressing the Westside Parkway from Coffee Road to the west project terminus was incorporated into both alternatives to the extent feasible. The project alternatives are planned to be constructed below grade in a depressed cut section from just west of Coffee Road to just east of Allen Road. The alignments must continue between Allen Road and Jenkins Road near the existing ground levels to minimize impacts to the RRBWSD spreading basins. From Jenkins Road to just east of the west terminus the alignment would again be depressed below grade. This depressed vertical alignment would have a positive effect on noise levels and would help to reduce visual impacts of the project.

2.4.6.2 Parking Lots

This alternative would construct a series of parking lots at various locations along the proposed Westside Parkway Alignments with connections to buses to replace the entire proposed Westside Parkway project. Utilization of public transportation is encouraged by the City of Bakersfield; however, the Metropolitan Bakersfield Major Transportation Investment Strategy (MTIS) prepared in 1997 for the metropolitan Bakersfield area concluded that due to land use distributions, residential densities and other factors, the affect of carpooling and bus usage would be minimal on existing and forecasted local circulation congestion. According to the MTIS study, most of the growth predicted to occur within the study area will be low-density residential and commercial through the year 2015, which would be difficult to serve with conventional bus routes. In addition, many of these walled communities are difficult to access with standard large buses. In order to provide more transit service to these low-density neighborhoods and still maintain good system predictability, Golden Empire Transit (GET) would need to test new bus service, such as demand-response shuttle, point or route deviation, or other nontraditional types of transit service. Although transit could remove some auto trips from congested streets, it appears that transit would be more successful in the downtown Bakersfield area where there are more activity centers, employment sites, and riders are attracted to high speed, crosstown bus routes. The Westside Parkway facility would allow for bus and carpool usage and the development of parking lots along the alignment would allow for those who chose not to drive their vehicles into town, to leave them at various locations in west Bakersfield and ride transit.

2.5 SELECTION OF THE PREFERRED ALTERNATIVE

The City of Bakersfield selected the Truxtun Option as the preferred alternative for the proposed Westside Parkway, and FHWA has concurred with that recommendation. This selection was based on consideration of the purpose and need for the project, environmental impacts, and relocation of the BNSF Bakersfield rail yard.

As discussed in Section 2.3.5, the No Action Alternative would not approach the purpose and need for the project. Of the 27 existing intersections along the five key east-west arterials in west Bakersfield, it was projected that four would operate at a LOS of E or F during the a.m. peak and seven intersections would operate at a LOS of E or F during the p.m. peak in 2030 under the No Action Alternative. The No Action Alternative would not improve connectivity of the existing transportation network in west Bakersfield. It would also not be consistent with the Land Use and Circulation Elements of the Metropolitan Bakersfield General Plan; therefore, it would not support Bakersfield's current and planned development west of SR99. Finally, the No Action Alternative would not facilitate connection of the planned transit system for the Bakersfield metropolitan area with the existing roadway network in west Bakersfield.

Both the Westside Parkway Truxtun and Oak options approach the purpose and need for the project, and both alternatives provide the same transportation improvements. Under both alternatives, only one intersection would operate at a LOS of E or F in the a.m. peak and two intersections would operate at a LOS of E or F in the p.m. peak in 2030. The Westside Parkway alternatives include an interchange at Mohawk Street and extension of that street to Truxtun Avenue. This would provide another north-south connection between the major east-west arterials in the western sector of the metropolitan area,

connecting Rosedale Highway to Truxtun and California avenues, providing another route for motorists to connect with Stockdale Highway. This would substantially increase the options for motorists to access the Central Business District (CBD) from west Bakersfield. The new north-south link would reduce traffic on SR99, Coffee Road, and to some extent Calloway Drive and reduce out-of-direction travel for motorists that would be accessing the Westside Parkway. Both the Truxtun and Oak options are consistent with the Land Use and Circulation Elements of the Metropolitan Bakersfield General Plan; therefore, they support Bakersfield's current and planned development west of SR99. Both alternatives provide sufficient right of way to construct dedicated busways that are consistent with Golden Empire Transit's (GET) long-range plans for public transit.

Environmental impacts projected for the Truxtun and Oak options of the Westside Parkway are very similar. Because of differences in the orientation of the Westside Parkway bridge across the Kern River with the two options, the Truxtun option would increase the 100-year flood elevation immediately upstream of the bridge by about 0.02 m (0.07 foot) more than the Oak option (0.23 foot [0.07 meter] versus 0.16 foot [0.05 meter]). Neither alternative would result in a substantial increase in flood risk to surrounding properties or the public. The Kern River bridge orientation for the Truxtun option would also result in the removal of 0.1 hectare (0.3 acre) more of Great Valley cottonwood riparian forest and 0.17 hectare (0.41 acre) more of non-wetland waters of the U.S. than the Oak option.

The Kern River bridge for the Truxtun option must cross both the Kern River and BNSF railroad tracks whereas the bridge for the Oak option would only need to cross the river. Because of this difference, the Kern River bridge for the Truxtun option would be as high as 13 meters (42 feet), making it much more visible that the bridge for the Oak option which would be as high as 8 meters (26 feet).

The Oak option could involve two more parcels potentially containing hazardous waste than the Truxtun option. The Oak option would also displace approximately 18 percent of the BNSF rail yard and relocate two more commercial businesses than the Truxtun option.

Although the Oak option would have less impact to waters of the U.S. and adjacent riparian forest than the Truxtun option, it was found not to be a practicable alternative because of the relocation of a part of the BNSF Bakersfield rail yard. BNSF agreed with the concept of exchanging a portion of its existing rail yard in Bakersfield for another yard located in the region to help facilitate the Westside Parkway Oak option. BNSF would retain two existing 6440 m (21,000 feet) tracks in the rail yard and deed the remainder of the yard to the City of Bakersfield in "as is, where is" condition. BNSF designed an alternative yard between roughly Burbank Street and 7th Standard Road in the vicinity of Shafter, approximately 13 miles northwest of its existing yard. This new yard would have functionality compatible with current rail service design requirements. The principal difference between the new yard and the existing yard is that the new yard would have long enough track lengths (e.g., up to 10,000 feet) to accommodate the unit trains of 110 cars that are now the industry standard where the existing yard is designed with shorter track lengths to facilitate more switching of shorter trains. BNSF would also need to double track the existing main line between the location of the existing yard and the new yard. In addition to the environmental impacts of constructing a new rail yard, the cost to the City of Bakersfield of moving BNSF to a new yard was estimated by the railroad to be approximately $220 million. This

estimate does not include the cost the City would incur in demolition of structures at the existing yard and remediating any contamination that may be present there.

The Truxtun option was selected as the preferred alternative for the Westside Parkway because the cost of relocating the BNSF Bakersfield rail yard makes the Oak option impracticable, and both the Truxtun and Oak options are similar in their ability to meet the project purpose and need and have similar environmental impacts.

2.6 RELATED PROJECTS

Other surface transportation projects that are currently under construction, or being contemplated by the City of Bakersfield in the vicinity of the project, include:

- **Jewetta Avenue Extension –** The Jewetta Avenue extension project extends Jewetta Avenue south, from Brimhall Road, across the proposed Westside Parkway alignment, and connects to Stockdale Highway. Project construction was completed in 2003.
- **Allen Road Extension –** Allen Road is planned for extension, from north of the CVC, to the south side of the Kern River. Project construction is expected to occur within the next five years.

The Metropolitan Bakersfield Transportation Systems Study was conducted to quantify the metropolitan area's traffic problems and issues, and then develop a system-wide approach to reducing traffic congestion. The goals of the study included improving inter-regional east-west mobility, improving local east-west circulation, improving access to the downtown area, and improving north-south circulation in west Bakersfield. One alternative was unanimously chosen as the preferred systems alternative. Named the Bakersfield Systems Plan, it includes five major elements, including the Westside Parkway project. The other four system elements are:

1. The Centennial Corridor, which would connect the Westside Parkway with SR178 in the northeast part of Bakersfield.
2. The widening of existing SR178 (24th Street) between Oak Street and the downtown area, including an interchange at the Oak Street/24th Street intersection and extending Oak Street northerly across the Kern River.
3. The extension of Hageman Road east over SR99 and connecting with Golden State Avenue, also called the "Hageman Flyover."
4. The realignment of SR58, which would extend from existing SR58 in the area of Washington Street north to the Union Pacific railroad tracks, and then parallel the railroad tracks northerly to SR99. North of Seventh Standard Road, SR58 would extend to the west to ultimately connect with I-5. The realignment of SR58 will be the subject of additional study in the future.

2.7 PERMITS AND APPROVALS

Table 2.7-1 lists the permits and approvals that would be required for the proposed project.

Table 2.7-1. Permits and Approvals Required for the Westside Parkway Project

Federal	
Clean Water Act, Section 402	National Pollutant Discharge Elimination System (NPDES) permit for construction and operational water discharges. Issued by Central Valley Regional Water Quality Control Board (CVRWQCB) with oversight from State Water Resources Control Board (SWRCB) and EPA
Clean Water Act, Section 404	Section 404 permit from U.S. Army Corps of Engineers for discharge of dredge or fill in waters of the U.S.
Endangered Species Act	Amended Biological Opinion from U.S. Fish and Wildlife Service
State	
Fish and Game Code, Section 1602	Streambed alteration agreement for crossing of Kern River
Clean Water Act, Section 402	Compliance with waste discharge requirements for storm water discharges under Order No. 5-01-130, NPDES No. CA00883399 administered by CVRWQCB
Clean Water Act, Section 402	Compliance with NPDES General Permit and Waste Discharge Requirements for Discharges of Storm Water Associated with Construction Activity, Order No. 99-08-DWQ issued by SWRCB and administered by CVRWQCB
Clean Water Act, Section 401	Section 401 Water Quality Certification from CVRWQCB
SJVAPCD Rule 9510	Air Impact Assessment for SJVAPCD

3.0 AFFECTED ENVIRONMENT

3.1 INTRODUCTION

This section describes the existing physical, natural, and socioeconomic environment of the project area. Its objective is to provide sufficient information about the existing environment for the reader to gain an understanding of the importance of the project impacts described in Section 4.0. The information presented here describes environmental conditions in the area surrounding the project to the extent necessary for the reader to place potential impacts within their proper context. Further information on existing environmental conditions may be obtained from technical reports prepared during project studies. Copies of these reports are available for review in the Beale Memorial Library, and City of Bakersfield, Kern County and Kern Council of Governments (COG) offices. Addresses for these locations are provided in Section 8.0. The reports include:

- Location Hydraulic Study
- Air Quality Study
- Hazardous Waste Study
- Natural Environment Study
- Community Impact Assessment
- Visual Impact Assessment
- Traffic Impact Analysis
- Noise Study Report
- Archaeological Survey Report
- Historic Resources Evaluation Report
- Historic Properties Survey Report

This section of the Environmental Assessment/Draft Environmental Impact Report (EA/DEIR) provides a description of the affected environment for the project.

3.2 PHYSICAL ENVIRONMENT

The proposed Westside Parkway is located on the southeastern flank of the San Joaquin Valley within the Great Valley geomorphic province of California. The Great Valley geomorphic province is an elongated north-south trending lowland situated between the Sierra Nevada Mountains to the east and the Coast Ranges to the west (Norris and Webb, 1990). The Great Valley is about 640 km (400 miles) long and averages 80 km (50 miles) in width. Elevations in the Great Valley range from slightly below sea level to over 120 meters (400 feet) towards its north and south ends. The Great Valley geomorphic province is unusual for a lowland because it is a basin that has undergone little deformation surrounded by highly deformed rock units.

The Great Valley and Sierra Nevada geomorphic provinces are characterized by a large structural block consisting primarily of Jurassic-age igneous intrusive rocks overlain locally by remnant meta-sedimentary

and meta-volcanic rocks, as well as deep alluvial sediments. Beginning in Cretaceous time, westward tilting of this large structural block has formed the sediment filled Great Valley to the west and the Sierra Nevada Mountains to the east. This ongoing uplift has resulted in continuing erosion of the Sierra Nevada and subsequent alluvial deposition within the San Joaquin Valley. Within the southern portion of the San Joaquin Valley, the ongoing westward tilting of the underlying structural block has resulted in a general westward tilting of the younger strata forming the valley floor.

3.2.1 Topography

In general, the proposed Westside Parkway crosses gently sloping terrain of a broad alluvial fan. Elevations in the proposed project vicinity vary from approximately 107 meters (351 feet) above mean sea level (MSL) at the west end of the alignment to 122 meters (400 feet) above MSL at the east end of the alignment. The alignment crosses the Kern River near SR99 and generally parallels the Kern River drainage course, located to the south of the Westside Parkway. Drainage along most of the alignment is towards the Kern River channel.

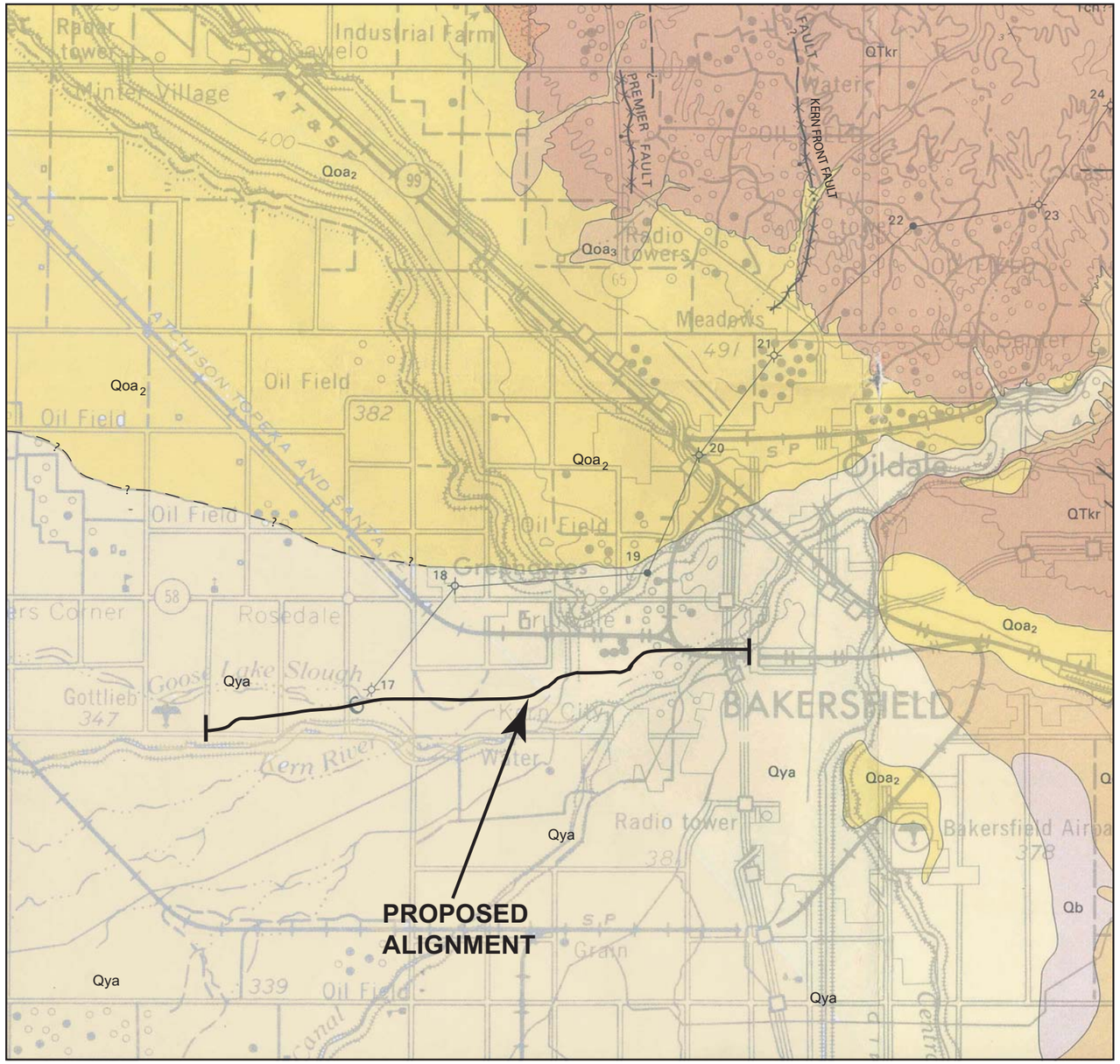
3.2.2 Geology and Seismicity

3.2.2.1 General Site Geology

The proposed Westside Parkway alignment is underlain by thick alluvial deposits derived from the Sierra Nevada Mountains. These alluvial deposits form the broad alluvial fan upon which the proposed Westside Parkway is situated. The nearby Kern River is the main source for transport and subsequent deposition of these alluvial deposits. Within this portion of the San Joaquin Valley, the alluvial deposits are primarily underlain by Late Pliocene-age sedimentary bedrock of the Kern River Formation.

The alluvium is made up of both younger and older deposits, as shown on the Alignment Geology Map (Figure 3.2-1). The younger alluvial deposits directly underlie the proposed alignment. The older alluvial deposits are mapped primarily to the north of the Westside Parkway and likely underlie the alignment at depth. The younger alluvium generally consists of fine to coarse sands with occasional interbedded silts and clays. A gravel and cobble layer underlies the eastern portion of the alignment at a depth of about 10 meters (32 feet) below the ground surface. This gravel zone is anticipated to deepen towards the west.

In addition to the surficial alluvial deposits, artificial fills (human-placed material) of various types are likely present along the proposed alignment and may consist of a variety of material types. Relatively thick accumulations of these fills may be present locally where the alignment traverses developed urban areas.



SCALE 1:125,000

0 2 4 6 8 10 MILES

DESCRIPTION OF MAP UNITS

Qal ALLUVIUM, UNDIVIDED (HOLOCENE AND PLEISTOCENE)—Sand, silt, and gravel[1]

Qya YOUNGER ALLUVIUM (HOLOCENE AND UPPER PLEISTOCENE)—Sand, gravel, silt, and clay in modern channels and underlying modern flood plains, abandoned channels, lowest terraces along streams, and undissected alluvial fans; includes boulder gravels near mouth of Kern River gorge

Qb BASIN DEPOSITS (HOLOCENE AND UPPER PLEISTOCENE)—Clay, silt, and fine sand deposited in the troughs between adjacent alluvial fans

Qac ALLUVIUM AND COLLUVIUM (HOLOCENE AND PLEISTOCENE)—Undivided alluvial and colluvial deposits, mostly in small isolated basins or filled valleys

Qt TALUS DEPOSITS (HOLOCENE AND PLEISTOCENE)—Granitic debris along Kern River gorge fault-line scarp

Qd DUNE DEPOSITS (HOLOCENE AND PLEISTOCENE)—Well-sorted sand and silt, transported and deposited by wind

OLDER ALLUVIUM (PLEISTOCENE)—Sand, gravel, silt, and clay underlying terraces along modern streams or in isolated higher terraces removed from modern streams, and in dissected alluvial fans. Relative age of alluvial units inferred from relative topographic position, degree of soil development, and degree of erosional modification

Qoa_3 Underlying low to medium-high terraces along modern streams and in undissected old alluvial fans

Qoa_2 Underlying higher terraces and in extensive older alluvial fans

Qoa_1 Underlying dissected remnants of oldest alluvial fans

QTkr KERN RIVER FORMATION (PLEISTOCENE?, PLIOCENE, AND UPPER MIOCENE)—Nonmarine, coarse-grained pebbly arkosic sandstone and conglomerate, containing thin interbeds of drab-colored siltstone and mudstone; thicker lenticular bodies of siltstone or claystone locally in lower part; coarsens upward and eastward. Generally crudely bedded and semiconsolidated; sandstone commonly crossbedded. Remnants of a lithified paleosol forms prominent ledges near base of unit from vicinity of Poso Creek northward. Contains continental vertebrate fossils of early Hemphillian age near base (Savage and others, 1954, p. 53)

CONTACT

ELECTRIC LOG MARKER OR LITHOLOGICAL SUBDIVISION—Cross sections only

UNCONFORMITY—Broken where approximately located or inferred. Cross sections only

FAULT—Dashed where approximately located or inferred; dotted where concealed; queried where doubtful. Ball and bar on downthrown side. Arrows show relative horizontal movement. Cross sections only: arrows show relative vertical movement; T, movement toward observer; A, movement away from observer

FAULT—Showing topographic expression but no demonstrable offset of strata at ground surface

FAULT—Showing creep (aseismic normal fault displacement)

SURFACE RUPTURE—Associated with 1952 Kern County earthquakes

FACIES BOUNDARY—Arbitrary contact between laterally gradational units

STRIKE AND DIP OF BEDDING

LANDSLIDE—Arrows show direction of movement

OIL WELLS—Numbers refer to accompanying list (only wells used on cross sections are shown on map)

Abandoned

Producing

TOTAL DEPTH—In meters. Cross sections only

N

FIGURE 3.2-1

ALIGNMENT GEOLOGY MAP

Westside Parkway
Bakersfield, California

Modified From: Bartow, A.J., 1984, "Geologic Map and Cross Sections of the Southeastern Margin of the San Joaquin Valley, California", USGS Miscellaneous Investigations Series, Map I-1496

L/westside pkwy/geo.ai

Bedrock of the Kern River Formation is anticipated to underlie the Westside Parkway at a depth ranging from 122 meters (400 feet) at the east end of the alignment to greater than 183 meters (600 feet) at the west end of the alignment (Bartow, 1984). The Kern River Formation consists of non-marine, coarse-grained pebbly arkosic sandstone and conglomerate containing thin interbeds of siltstone and mudstone (Bartow, 1984).

3.2.2.2 Faults and Seismicity

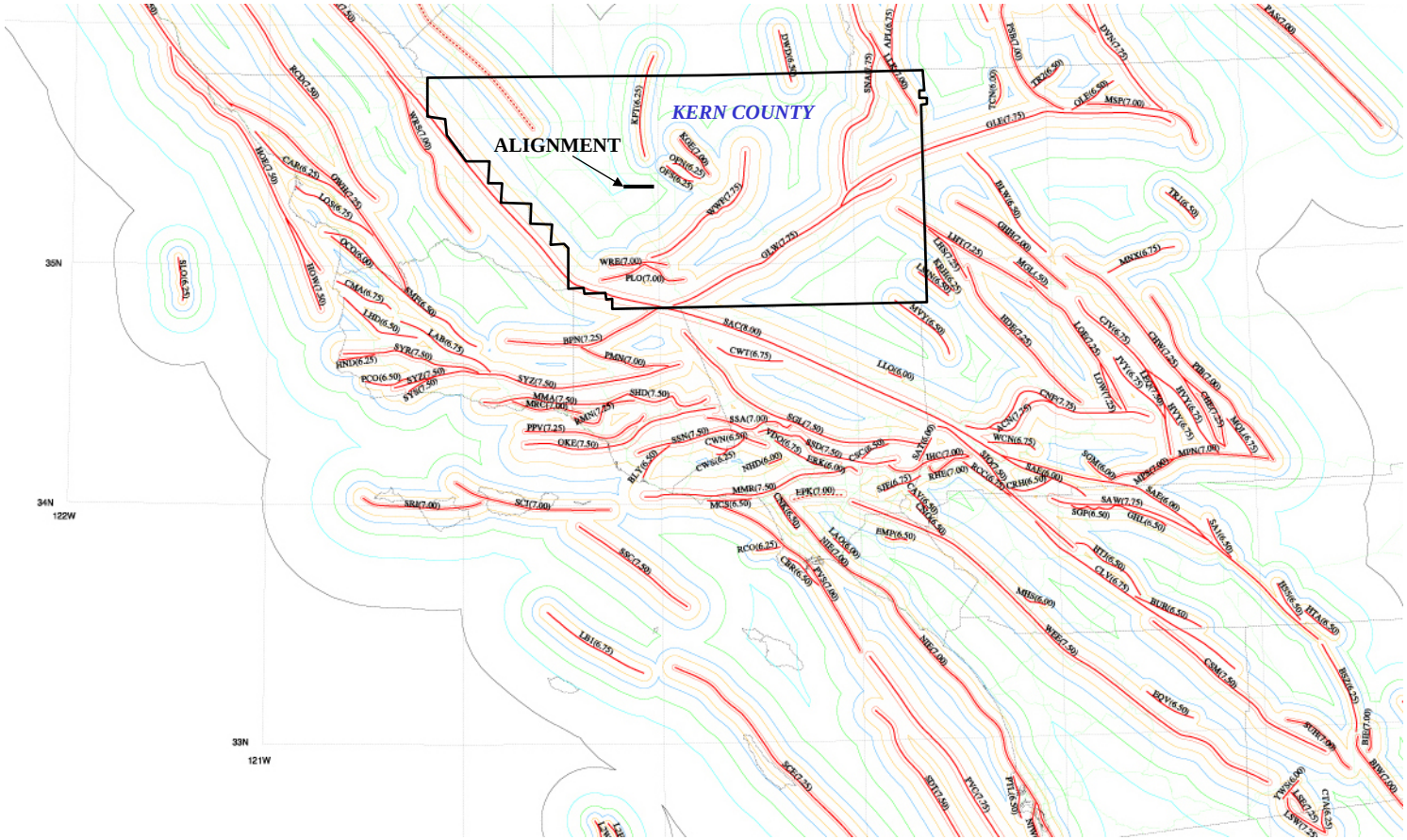
The Westside Parkway is located within a relatively active seismic area of California. The locations of known active and potentially active faults with respect to the Westside Parkway are shown on Figure 3.2-2. The geoseismic characteristics of some of the most significant seismic sources close to the site are listed in Table 3.2-1, including an estimate of the maximum earthquake magnitude that might be generated by each fault. Table 3.2-1 lists the faults considered capable of producing substantial seismic shaking along the alignment as well as parameters that are needed to assess the relative risk to the alignment, such as distance from the site, fault type, and estimated earthquake magnitude.

Table 3.2-1. Summary of Substantial Seismic Sources

Fault Name1	Maximum Credible Earthquake(1)	Estimated Distance from Site (km)(1)	Fault Type(1) (2)
Kern Front (KFT)	6.25(+/- 0.25)	14-18 (9–11 miles)	Normal
Oil Fields Fault Zone South (OFS)	6.25(+/- 0.25)	15-22 (9–14 miles)	Normal
Oil Fields Fault Zone North (OFN)	6.25(+/- 0.25)	18-25 (11-16 miles)	Normal
Kern Gorge (KGE)	7.00(+/- 0.25)	26 (16 miles)	Normal
White Wolf (WWF)	7.75 (+/- 0.25)	27-35 (17-22 miles)	Reverse-Oblique
Wheeler Ridge (WRE)	7.00(+/- 0.25)	34 (21 miles)	Reverse
Pleitore (PLO)	6.75 (+/- 0.25)	35-40 (22-25 miles)	Unknown
Garlock West (GRW)	7.75 (+/- 0.25)	43-60 (27-37 miles)	Strike-Slip
San Andrea's Creep (SAR)	7.50(+/- 0.25)	48-55 (30-34 miles)	Strike-Slip
San Andrea's Fault Central (SAC)	8.00 (+/- 0.25)	50 (31 miles)	Strike-Slip
Coast Ranges-Sierran Block (CSB)	7.00(+/- 0.25)	50-59 (31-37 miles)	Reverse

(1) Obtained from California Seismic Hazard Map (Mualchin, 1996a).
(2) Obtained from California Seismic Hazard Map (Mualchin, 1996b)

Several active faults have been mapped within the general vicinity of the Westside Parkway. The closest known active fault to the Westside Parkway is the Kern Front fault, with splays mapped to within 14 km (8.5 miles) north of the site. The Kern Front fault is a westward dipping normal fault that extends for a total length of about 9 km (5.5 miles). Although considered a historic fault (indicating displacement during the past 200 years) by the State of California (Jennings, 1994), historic movement has been attributed to fluid withdrawal associated with petroleum production (Bartow, 1984). The Kern Front fault has recorded slip or creep of about 11 millimeters (0.5 inch) per year since about 1968 (Norris and Webb, 1990).



LEGEND:

- 0.7g Peak Acceleration Contour
- 0.6g Peak Acceleration Contour
- 0.5g Peak Acceleration Contour
- 0.4g Peak Acceleration Contour
- 0.3g Peak Acceleration Contour
- 0.2g Peak Acceleration Contour
- 0.1g Peak Acceleration Contour
- Special Seismic Source (SSS)
- Faults with Fault Codes (MCE)
- State Highways
- County Boundary
- Latitude & Longitude

SCALE

0 50 100 150 200 250 Kilometers

FIGURE 3.2-2

REGIONAL FAULT MAP

WESTSIDE PARKWAY
BAKERSFIELD, CALIFORNIA

REFERENCE : California Seismic Hazard Map, Caltrans, 1996

The Maximum Credible Earthquake (MCE) on the Kern Front fault is estimated to have a moment magnitude (M_W) of 6.25 (Mualchin, 1996b).

The White Wolf fault, located approximately 27 km (17 miles) south of the site, is considered historically active (Jennings, 1994). The White Wolf fault is a left-lateral southeast dipping reverse fault that extends for a total length of about 60 km (37 miles) along the southern and southeastern margins of the San Joaquin Valley. To the north of the proposed Westside Parkway, the White Wolf fault is likely continuous with the Breckenridge and Kern Canyon faults. The MCE on the White Wolf fault is estimated to be MW7.75 (Mualchin, 1996b).

The most significant earthquake event to occur within the vicinity of the Westside Parkway in recent history was the July 27, 1952 (MW7.5) Kern County (Arvin-Tehachapi) earthquake that occurred on the White Wolf fault. The epicenter of the Kern County earthquake was located approximately 48 km (30 miles) south of the Westside Parkway, and resulted in substantial damage to the surrounding area. A MW5.8 aftershock of the Kern County earthquake occurred one month later, causing extensive damage in the Bakersfield area. Though only about the fifth strongest of the aftershocks, it was located only about 10 km (6 miles) east-southeast of town, and it occurred after at least 18 other aftershocks of magnitude 5.0 or greater had already shaken the area. The recurrence interval on the White Wolf fault is unknown.

Other faults in the vicinity of the Westside Parkway include the Premier, New Hope, Oil Fields North, Oil Fields South, and Kern Gorge faults, located to the north and east of Bakersfield. Mualchin, (1996b) appears to have combined the Premier and New Hope faults together with the Kern Front fault. These related faults are shown as the Kern Front fault on the California Seismic Hazard Map. Following the convention of Mualchin, the Kern Front, Premier and New Hope faults are treated as one seismic source (Kern Front) in Table 3.2-1. These faults represent late Quaternary normal faults that have experienced Holocene (past 11,000 years) and/or historic offset, in some cases caused by the withdrawal of water and other fluids from oil fields in the area (Bartow, 1984; Hart et al., 1984). Mualchin (1996b) estimates each of these faults has a MCE of MW6.25, except for the Kern Gorge fault, which is estimated to have an MCE of MW7.00.

The historically active San Andreas Fault is located approximately 50 km (31 miles) southwest of the site. The maximum credible earthquake on the San Andreas Fault is estimated to be MW8.00 (Mualchin, 1996b). The 1857 MW7.9 Fort Tejon earthquake was centered along the San Andreas Fault approximately 72 km (45 miles) west of the site, and generated substantial ground motions within the vicinity of the site. The Fort Tejon earthquake ruptured an approximately 360 to 400 km (224 to 248 miles) long segment of the San Andreas fault in south-central and southern California (Sieh, 1978; Jennings, 1994; Dolan et al., 1995). The ruptured portion included the Carrizo Plain segment of the fault, which is located approximately 50 km (31 miles) southwest of the proposed alignment.

3.2.2.3 Groundwater Conditions

Historic groundwater levels along the Westside Parkway indicate that depths to groundwater may be highly variable. The City of Bakersfield and the Kern County Water Agency operate an extensive groundwater recharge program in the metropolitan Bakersfield area (Kern County Water Agency, 2003).

In addition to the natural recharge occurring from the Kern River channel, these agencies also import water from the Sacramento Delta via the California Aqueduct and the Cross Valley Canal (CVC) to augment the river's natural flow and to maintain high groundwater levels. Recharge of the local groundwater within the vicinity of the Westside Parkway has a direct impact on the local groundwater table. The recharge rate and related groundwater levels are dependent on several factors including the amount of rainfall and snowmelt, the time of year, and the availability of imported surplus water sources for recharge.

Available groundwater records obtained from the California Department of Water Resources (2003) indicate that the groundwater levels within the vicinity of the alignment are as shallow as six meters (19.5 feet) below ground surface (bgs). Groundwater levels recorded during a recent subsurface investigation varied from a high of approximately 8.8 meters (29 feet) bgs on the eastern end of the Westside Parkway alignment to depths greater than 30.5 meters (100 feet) bgs towards the western end of the alignment.

3.2.3 Potential Geologic and Seismic Hazards

Geologic and seismic hazards are those hazards that could impact a site due to the surrounding geologic and seismic conditions. Potential geologic hazards include landsliding, erosion, subsidence, volcanic eruptions, and poor soil conditions. Potential seismic hazards include phenomena that occur during an earthquake such as ground shaking, ground rupture, and liquefaction. The geology and seismic hazards have been evaluated in terms of their impact on the proposed project. The following sections provide the results of the geologic hazards evaluation. Assessment of these hazards was based on guidelines established by the California Geologic Survey (CGS) and outlined in Note 42 and Special Publication 117 (California Division of Mines and Geology, 1986 and 1997a).

3.2.3.1 Geologic Hazards

Geologic hazards such as landsliding, erosion, expansive soils, poor soil conditions, subsidence, and volcanic eruptions have a low potential of impacting the Westside Parkway. The proposed project is situated on a relatively flat alluvial plain and no significant slopes are proposed along the alignment. The lack of significant slopes on the project site indicates that the hazard from slope instability, from both landslides and debris flows, is negligible. Most of the proposed alignment would be landscaped or covered with asphalt or concrete and would not be readily susceptible to erosion.

Expansive soils are fine-grained soils (clay) that can undergo a substantial increase in volume with an increase in water content and a substantial decrease in volume with a decrease in water content. The soil underlying the Westside Parkway consists primarily of sands. These soils exhibit low expansion potential and therefore the potential for expansive soils to impact the Westside Parkway is considered low. In addition, relatively dense soil conditions underlie much of the alignment, reducing the potential of damage due to poor soil conditions.

Although subsidence has been documented in portions of the southern San Joaquin Valley due to regional groundwater withdrawal, subsidence within the vicinity of Bakersfield itself has been relatively minor due to the rapid recharge of the underlying aquifer from the Kern River (San Joaquin Geologic Society, 2000). As such, the potential for subsidence of the underlying soils appears to be minimal.

No recent centers of potential volcanic activity occur within hundreds of miles of the proposed Westside Parkway. Volcanic hazards, such as lava flows and ash falls, are therefore not anticipated to present a hazard to the Westside Parkway.

3.2.3.2 Seismic Hazards

Seismic hazards are those hazards associated with earthquakes such as ground shaking, ground rupture, liquefaction, differential compaction or seismic settlement, and other phenomena. The proposed Westside Parkway, like most areas in southern California, is most susceptible to ground shaking generated during earthquakes on nearby faults. Potential seismic hazards and how they may affect the Westside Parkway are discussed in the following sections.

Surface Fault Rupture

Primary ground rupture is ground deformation that occurs along the surface trace of the causative fault during an earthquake. No known active or potentially active fault traces have been recognized as crossing, or being within close proximity of the proposed Westside Parkway, and the CGS does not delineate any part of the project area as being within an Alquist-Priolo Earthquake Fault Zone (California Division of Mines and Geology, 1997b and Hart, 1984); therefore, the potential for surface fault rupture is not considered a significant seismic hazard to the proposed Westside Parkway.

Strong Ground Motion

Strong ground motion occurs as energy is released during an earthquake. The intensity of ground motion is dependent upon the distance between areas along the alignment and the earthquake, the magnitude of the earthquake, and the geologic conditions underlying and surrounding the alignment. Earthquakes occurring on faults closest to the alignment would most likely generate the largest ground motions.

As is the case with most of southern California, the site is located within an area subject to potentially strong ground motion during an earthquake. The nearby White Wolf fault, which is estimated to have a maximum magnitude of 7.75, would govern seismic design at the site. Based on the California Seismic Hazard Map (Mualchin, 1996), the controlling earthquake (MW7.75) for the project would result in a peak horizontal bedrock acceleration (PA) of 0.3g (units of gravity). For seismic analysis per the Caltrans method, depth to “rock-like” material is taken as greater than 45 meters (148 feet).

Liquefaction

Liquefaction is defined as substantial and relatively sudden reduction in stiffness and shear strength of saturated sandy soils caused by a seismically induced increase in pore water pressures. The potential for seismically induced liquefaction exists whenever relatively loose, sandy soils exist with high groundwater level and/or long duration, high seismic shaking. When liquefaction occurs, the site can experience damage induced by permanent ground movements resulting in differential settlement and flotation of structures, tanks and pipelines.

The Westside Parkway is located within an area of relatively shallow groundwater and sandy soils, indicating the potential for liquefaction of the underlying soils during a seismic event. However, the potential for liquefaction of the sandy soils is considered low because of the relatively dense nature of the

sandy materials. Based on a site-specific liquefaction analysis, settlements ranging from 0.5 to 5.5 centimeters (0.2 to 2 inches) could occur due to liquefaction of the underlying soils along portions of the alignment. Other potential geologic hazards related to liquefaction, such as lateral spreading, are therefore also considered low.

Seismically-Induced Settlement and Differential Compaction

Seismically induced settlement and differential compaction occurs when relatively soft or loose soils experience a reduction in strength caused by strong ground motion. Soil conditions subject to these hazards include porous poorly cemented soils or areas where weak soils of variable thickness overlie firm soil or bedrock. The site is underlain by relatively dense alluvial soils that are not prone to settlement under earthquake loading conditions; therefore, seismically induced settlement or differential compaction are not considered adverse seismic hazards to the proposed Westside Parkway.

Earthquake-Induced Flooding

Earthquake-induced flooding can occur when nearby water retaining structures, such as dams or storage tanks, are breached or damaged during an earthquake, or by temporary damming of an active river channel due to landsliding and a subsequent sudden release of the impounded water. The Westside Parkway is located downstream of the Kern River Gorge, which may be susceptible to damming by an earthquake-induced landslide (County of Kern, 1974). The Westside Parkway is also located downstream of the dam at Lake Isabella, which retains a substantial volume of water. Based on this information, there appears to be the potential for inundation of the alignment as a result of a sudden release of water following landslide damming of the river or a breach of the Lake Isabella dam after an earthquake.

Other Seismic Hazards

Other potential seismic hazards include tsunamis, seiches, and earthquake-induced landslides. A tsunami is a great sea wave (commonly called a tidal wave) produced by a significant undersea disturbance such as tectonic displacement of the sea floor associated with large, shallow earthquakes. A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin (such as a reservoir, harbor, lake or storage tank) resulting from earthquakes or other large environmental disturbances. The potential for tsunamis and seiches impacting the alignment is not considered a risk due to the site's distance from the Pacific Ocean and the absence of lakes, or large bodies of water in the immediate area.

3.2.4 Mineral Resources

Oil is the primary mineral resource presently being extracted and found throughout the project study area. Kern County is one of the largest oil producers in the country. The project study area is located in a major oil-producing area within the Fruitvale and Bellevue Oil Fields. There are several parcels of land currently under oil production near and within the proposed Westside Parkway alignment. A list of the wells that are potentially within the right of way of the Westside Parkway alternatives and a list of the operators of record for these wells are contained in the letter from the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources provided in Appendix I.

Natural gas production in the vicinity of the project area consists of the Rio Vista Gas and the Elk Hills fields located outside of the project study area in Kern County. The Elk Hills oil field is the largest field

producing associated natural gas in California, and the Rio Vista Gas field remains as the largest non-associated natural gas field.

Sand and gravel areas are concentrated primarily along the floodplain and alluvial fan of the Kern River. These coarse deposits have been left by major floods over the past several thousand years. Sand and gravel are an important resource for construction, development, improvements and physical maintenance, from highways and bridges to pools and playgrounds (Bakersfield, 1990). Sand and gravel operations are mostly located in northern Bakersfield.

3.2.5 Agricultural Soils and Farmlands

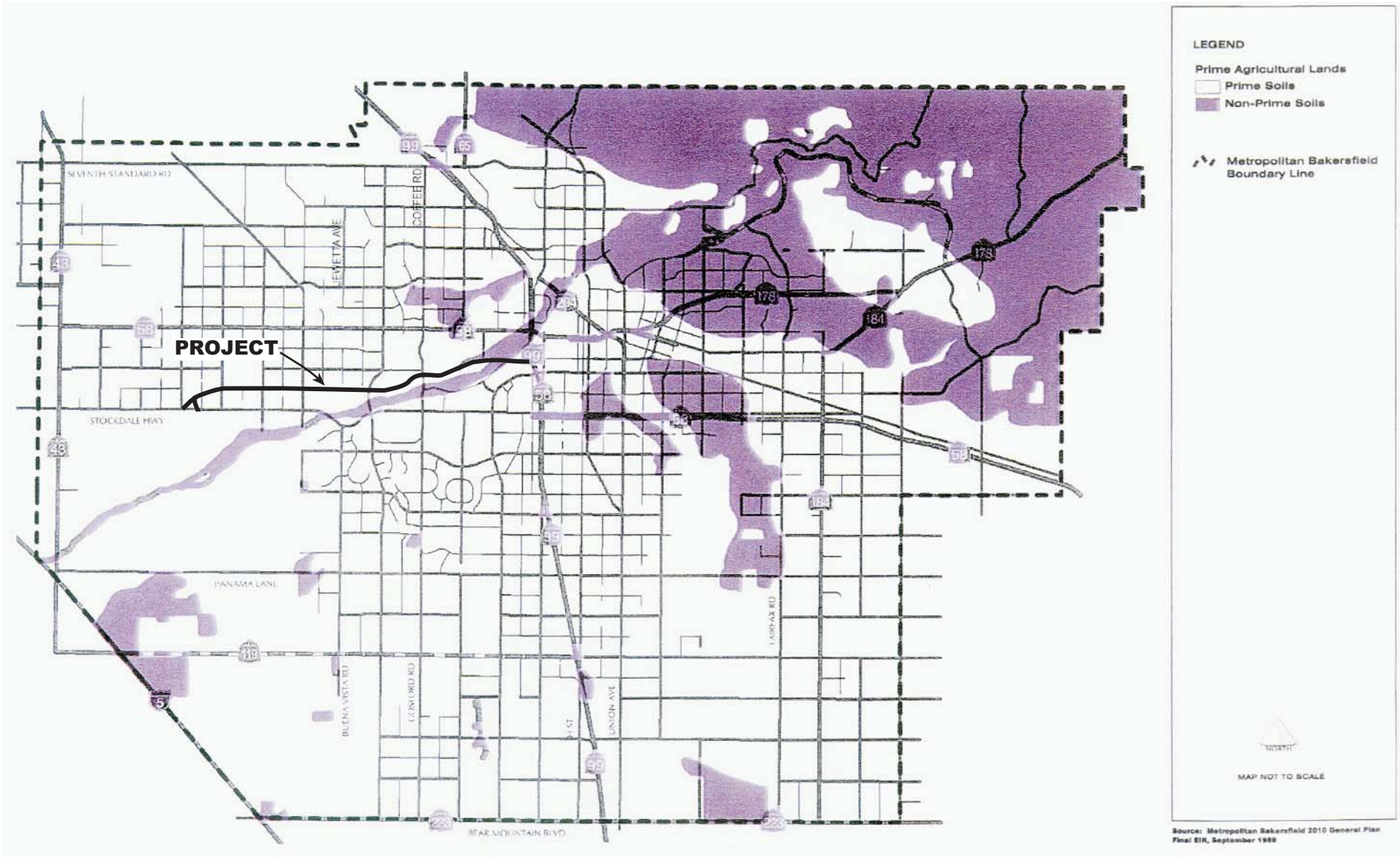
Most of the soils crossed by the alternative alignments are in the Cajon series, primarily Cajon sand and fine sandy loam. The alignment also crosses a small area of Chino loam.

The Cajon soils have developed in alluvial fan deposits of the Kern River. As is typical of young soils, the profile is poorly developed or nonexistent, and the soils contain very small amounts of organic matter. The Cajon soils crossed by the alignments are highly permeable.

Chino loam is derived mainly from granitic alluvial sediments of the Kern River laid down under poor drainage conditions. The soil is friable at the surface and generally grades to heavier textured loam and clay loam at depth. Chino loam is poorly drained, and various quantities of saline and alkali salt accumulations are present.

Portions of the project alignment traverse properties that are designated as Prime Farmland by the California Department of Conservation, Farmland Mapping and Monitoring Program. Figure 3.2-3 shows the current distribution of Prime Farmlands in the project area. No additional significant farmland categories (i.e., “Farmland of Statewide Importance”, “Unique Farmland” or “Farmland of Local Importance”) would be affected by the project. The areas of Prime Farmland along the project alignment are generally from the western project terminus at Heath Road to just west of Renfro Road, and from the Allen Road interchange to the Calloway Drive interchange. Active agriculture is not taking place in the area east of Allen Road. With future construction of proposed urban developments, the area planned for the Westside Parkway (i.e., a linear area) would no longer be feasible to be used as farmland. There are no important farmland categories located along the alternative alignments east of Calloway Drive because the area has been developed. Most land west of Calloway Drive to Heath Road is in the urbanized area of Bakersfield.

Lands under the California Land Conservation Act of 1965 (LCA) contract, also referred to as the Williamson Act, face land use restrictions intended to avoid the conversion of lands under agricultural production to other uses. The Williamson Act enables local governments to enter into contracts with private landowners for the purpose of restricting parcels of land to agricultural or open space use. In return, landowners receive property tax assessments, which are much lower than normal because they are based upon farming and open space uses as opposed to full market value (Bakersfield, 2002). As can be seen in Figure 3.2-4 there are no lands under Williamson Act contract within the project right of way.

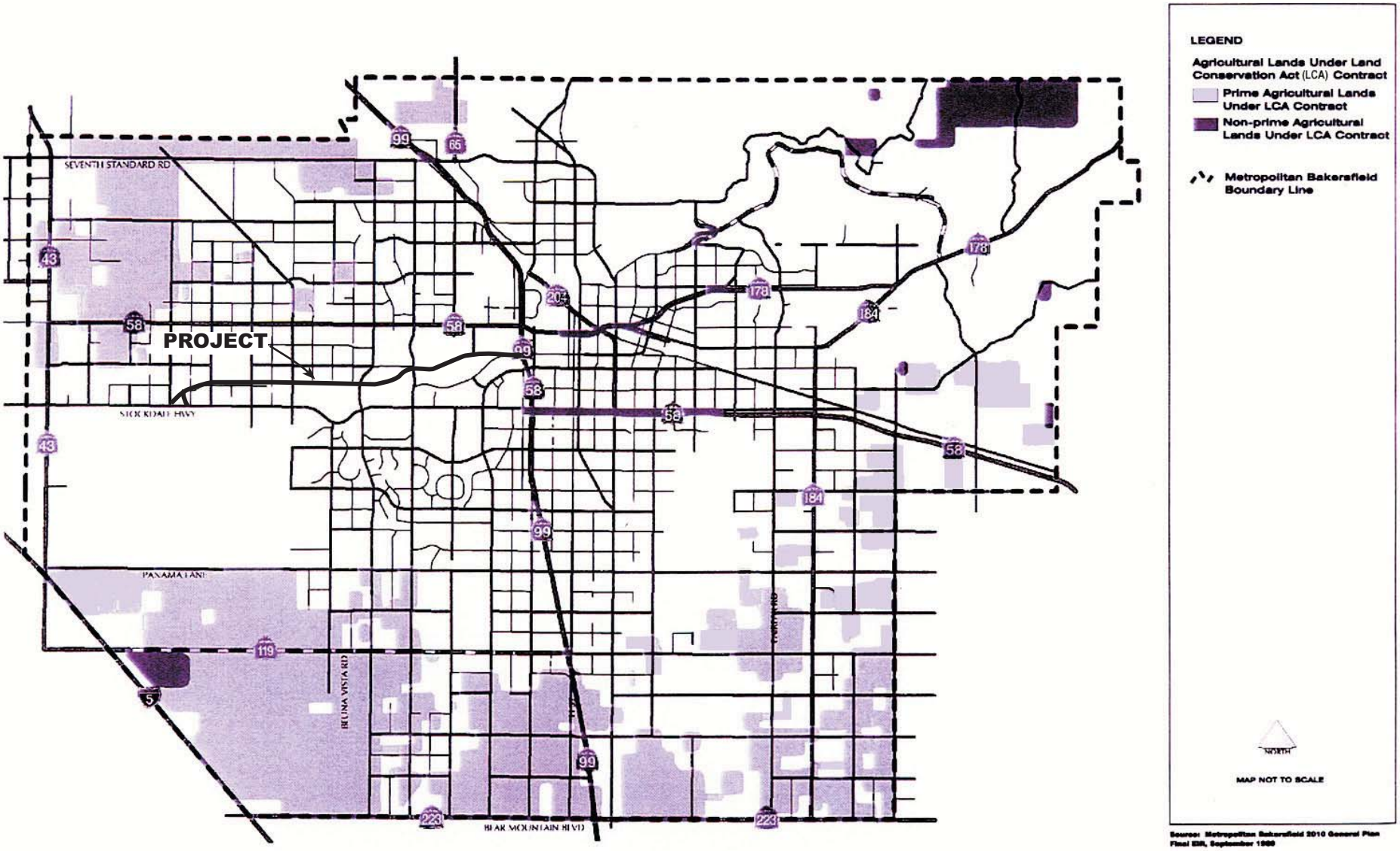


Source: City of Bakersfield, 2002

PRIME AGRICULTURAL LANDS

Project No.: 29866227	Date: JULY 2004	Project: WESTSIDE PARKWAY PROJECT	Figure 3.2-3

L:/westside pkwy/prime agriculture.fh10 7/03



Source: City of Bakersfield, 2002

AGRICULTURAL LANDS UNDER LAND CONSERVATION ACT CONTRACT

Project No.: 29866227	Date: SEPTEMBER 2004	Project: WESTSIDE PARKWAY PROJECT	Figure 3.2-4

L:/westside pkwy/agricultural.fh10 7/03

3.2.6 Water Resources

3.2.6.1 Regulatory Background

Sections 401 and 402 of the Federal Clean Water Act (CWA) establish requirements for protection of the quality of the waters of the U.S. Section 401 requires that every applicant for a Federal permit or license for any activity which may result in a discharge to a water body obtain Water Quality Certification. The Water Quality Certification affirms that the proposed activity will comply with state water quality standards. In the Bakersfield metropolitan area, this program is administered by the Central Valley Regional Water Quality Control Board (CVRWQCB).

Section 402 of the CWA prohibits the discharge of pollutants to waters of the U.S. from any point source unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. A NPDES permit is required for the discharge of storm water from municipal separate storm sewer systems (MS4s) serving urban areas with populations greater than 10,000, construction sites that disturb one acre or more and industrial facilities. The CVRWQCB administers these permits with oversight provided by the State Water Resources Control Board (SWRCB) and EPA Region IX.

The CVRWQCB has issued a joint MS4 NPDES permit with the County of Kern and the City of Bakersfield to prohibit non-storm water discharges and to reduce pollutants in storm water discharges to the "maximum extent practicable" with the purpose of maintaining and/or attaining the water quality objectives that are protective of the beneficial uses of receiving waters (Order No. 5 01 130, NPDES No. CA00883399). A provision of this permit requires new development, significant redevelopment, and public works projects, such as the Westside Parkway project, to address storm water runoff quality during the planning phase of proposed projects. The permit identifies Priority Development Project categories and requires the implementation of a Standard Urban Storm Water Mitigation Plan (SUSMP) that includes Best Management Practices (BMPs) for these projects. The SUSMP requires:

- Implementation of a combination of pollution prevention, source control, and structural treatment BMPs;
- Sizing of treatment control BMPs to meet specified minimum volume-based or flow-based design criteria;
- Identification of the pollutants of concern associated with a Priority Development Project;
- Restrictions on the use of infiltration structural treatment BMPs to ensure that such BMPs do not cause or contribute to an exceedance of groundwater quality objectives;
- Utilization of design criteria to ensure that discharges from new development, significant redevelopment, and public works projects (1) maintain or reduce pre-development downstream erosion and (2) protect stream habitat.

The Westside Parkway would be a Public Works Priority Development Project subject to the requirements of the SUSMP.

The SWRCB issued Order No. 99 08 DWQ, which is a NPDES General Permit and Waste Discharge Requirements for discharges of storm water associated with construction activity (Construction Storm

Water General Permit). Construction projects that disturb one or more acres are required to comply with this permit. The major provisions of the permit are the minimization or elimination of non-storm water discharges from the site, implementation of BMPs to control construction materials and wastes, erosion, and sediment, and monitoring to assure the maintenance and adequacy of the BMPs that are being implemented. Project construction activities must be conducted consistent with a Storm Water Pollution Prevention Plan (SWPPP) and the associated Monitoring and Reporting Plan (MRP) developed in accordance with the provisions of the permit. If the Westside Parkway project is approved, the construction contractor(s) would be required to comply with the Construction Storm Water General Permit, including the preparation and implementation of a SWPPP and MRP approved by the City of Bakersfield.

The City of Bakersfield requires new development to include retention basins designed to contain runoff produced by the 100 year, 24 hour storm event and capable of draining by percolation or evaporation within seven (7) days. In cases where retention basins cannot be used, the City of Bakersfield requires the use of detention basins.

3.2.6.2 Surface Waters

The Kern River is the principal surface water resource in the project area. The Kern River flows southwesterly from its origins near Mount Whitney to Buena Vista Lake on the floor of the San Joaquin Valley. The river drains about 6,234 square kilometers (2,407 square miles) with an average annual discharge of 9.1 x 1011 liters (740,000 acre-feet) (KCWA, 1998).

Between SR99 and Heath Road the project alignment crosses the Kern River as well as the Friant-Kern, Carrier, Cross Valley, and Rosedale-Rio Bravo Water Storage District (RRBWSD) intake canals that convey water for agricultural irrigation, municipal/industrial supply, and groundwater recharge.

Kern River

All of the diversion rights to Kern River water are held by public water districts. Entitlements to Kern River water are diverted into water district delivery facilities and subsequently to users within these districts. Within the project area, water districts that rely on Kern River water are the Kern County Water Agency (KCWA) Improvement District No. 4 in the Bakersfield metropolitan area and the RRBWSD west of Bakersfield.

Kern River water not used for municipal, industrial, or agricultural purposes is most often used for groundwater recharge. The Kern River provides a major source of groundwater recharge by a combination of percolation within the river channel, spreading in recharge basins near the river, and losses in unlined canals.

Friant-Kern Canal

The Friant-Kern Canal is a concrete-lined canal that delivers Federal Central Valley Project water to Kern County. This canal is operated by the Friant Water Users Authority. In the project area, the Friant-Kern Canal flows in a southerly direction from Seventh Standard Road west of Calloway Drive to the Kern River east of Coffee Road.

The Friant-Kern Canal has been listed on the National Register of Historic Places. The canal has achieved importance as a monumental engineering feat of artificial water transport, and its physical integrity has not been largely altered.

Carrier Canal

The Carrier Canal is an earthen canal that begins east of SR99, flowing in a southwesterly direction to its terminus at the Kern River Canal just north of Stockdale Highway. This canal is operated by the City of Bakersfield and is used to convey water from the Kern River to agricultural users.

Cross Valley Canal (CVC)

The CVC imports surface water to the Bakersfield area from the State Water Project's California Aqueduct. The canal lies on the north side of the Kern River and parallels the river across the entire study area, flowing in an easterly direction. It is operated by the KCWA. The canal is concrete-lined from the California Aqueduct to about Coffee Road, and unlined from about Coffee Road to SR99.

RRBWSD Intake Canal

The RRBWSD intake canal is an earthen canal that conveys water from diversion works on the Kern River channel in a northwesterly direction to the RRBWSD spreading basin facilities adjacent to Allen Road. The intake canal is in the process of being designed for relocation and it is anticipated that the entire canal east of Allen Road will be moved south of the project alignment. The new RRBWSD intake canal alignment will have an underground segment through the project alignment. Depending on the final relocation design, the entrance and exit ramps for Allen Road may cross the relocated canal.

3.2.6.3 Surface Water Quality

Under the Clean Water Act (CWA), the USEPA requires states to adopt water quality standards necessary to attain or continue to achieve the designated uses of surface waters. The California State Water Resources Control Board (SWRCB) develops guidance for complying with the CWA. This guidance is used by the nine Regional Water Quality Control Boards (RWQCBs or Regional Boards) to prepare Water Quality Control Plans (commonly referred to as Basin Plans), which designate the beneficial uses of regional receiving waters, set water quality objectives, and formulate regional water quality management programs for surface waters and groundwaters. The Central Valley RWQCB (CVRWQCB) issued a Water Quality Control Plan for the Tulare Lake Basin (CVRWQCB, 1995) that identified beneficial uses for the Kern River. The beneficial uses for the Kern River within the project area include:

- Agricultural supply
- Freshwater habitat
- Groundwater recharge
- Hydropower generation
- Industrial process supply
- Industrial service supply
- Municipal supply
- Rare, threatened or endangered species
- Recreation
- Wildlife habitat

No surface waters within the project area are listed as impaired on the 2002 303(d) List.

During the year, three sources of raw water are delivered to the Henry C. Garnett Water Purification Plant for treatment: Kern River water, State Water Project water and groundwater. The Improvement District No. 4 (ID4) Water Quality Laboratory tests for inorganics, organics, minerals, radioactive species, asbestos, metals, and microbiologicals in both the source and treated water. Testing is done continuously and includes daily, weekly, monthly, quarterly, and annual testing. The water quality data provided in the 2001 Annual Water Quality Report for source water (KCWA, 2002) suggests that with the following exceptions, surface water quality meets California's Maximum Contaminant Levels (MCLs)[3] even before it is treated:

- Chromium in Kern Water Bank and California Aqueduct water;
- Color for California Aqueduct and Kern River water; and
- Odor for California Aqueduct water.

Average surface water quality data for 2000 reported by the RRBWSD (Ruiz, 2003) suggests that; with the exceptions of color, odor and turbidity for the Friant-Kern Canal and the California Aqueduct; surface water quality meets California's MCLs.

3.2.6.4 Floodplains

A Location Hydraulic Study was completed for the proposed project in January 2006. This section summarizes information provided in that report.

The Kern River flows near residential developments, parks, a golf course, and the campus of California State University, Bakersfield. Most of these areas are outside of the 100-year floodplain. The Federal Emergency Management Agency (FEMA) conducted hydrologic and hydraulic analyses of the Kern River to determine the extent and severity of flooding for the City of Bakersfield. The results are presented in the FEMA's 1984 Flood Insurance Study (FIS) of the City of Bakersfield. The peak flow rates associated with the 10-, 50-, 100-, and 500-year return period events are listed below in Table 3.2-2.

Table 3.2-2. Kern River Flood Peak Discharges

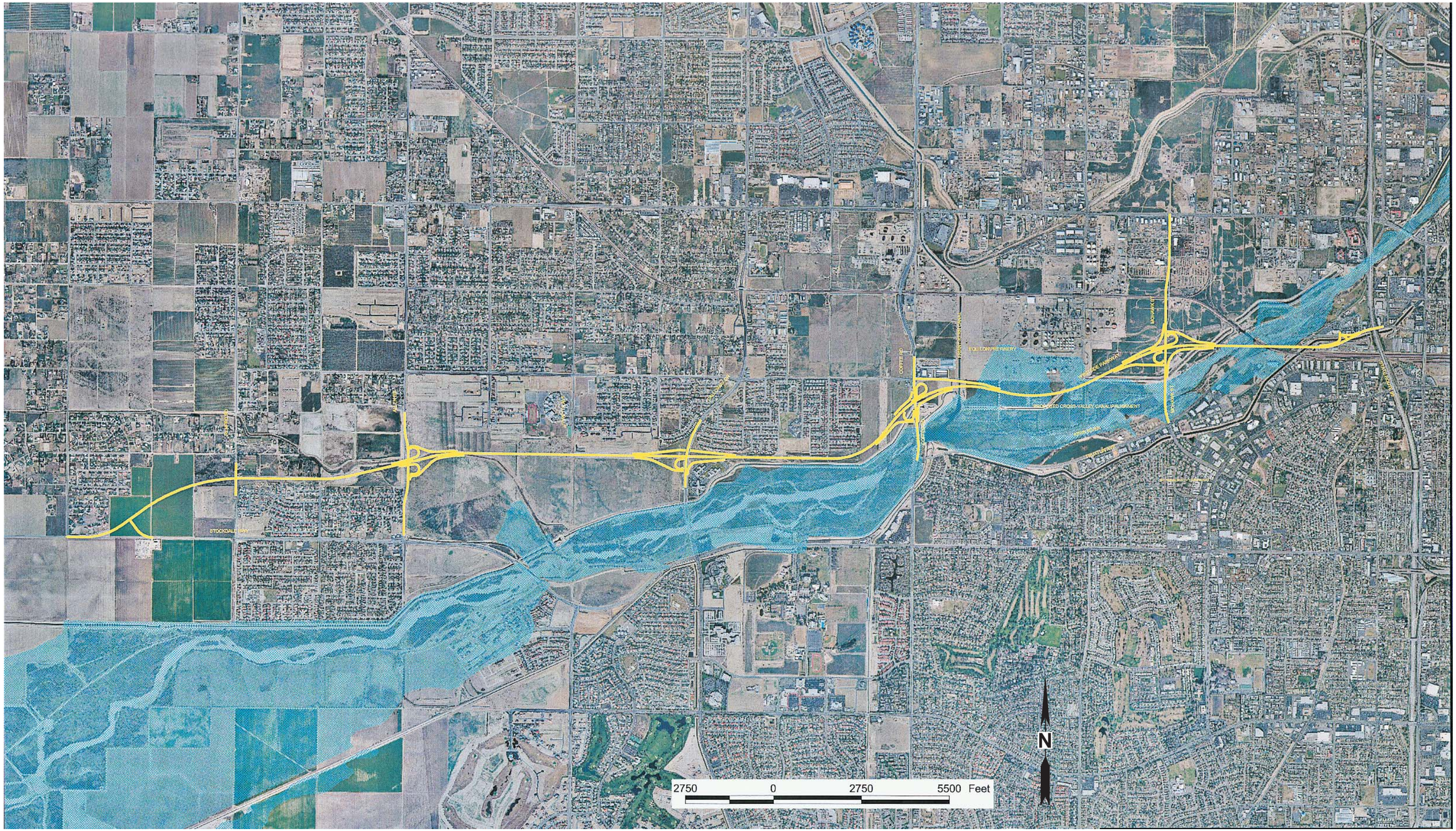
Return Period (years)	Annual Probability of Exceedance	Peak Discharge Rate (cubic meters per second/cubic feet per second)
10	0.10	79/2790
50	0.02	198/6992
100	0.01	289/10,206
500	0.002	812/35,048

[3] The Maximum Contaminant Level (MCL) is the maximum concentration of a chemical that is allowed in public drinking water systems. The MCL is established by the USEPA. EPA guidance states that "MCLs are enforceable standards and are to be set as close to the maximum contaminant level goals (Health Goals) as is feasible and are based upon treatment technologies, costs (affordability) and other feasibility factors, such as availability of analytical methods, treatment technology and costs for achieving various levels of removal."

The 100-year floodplain as developed by the FEMA study is shown on Figure 3.2-5, which was adopted on the current (dated 1985) FEMA Flood Insurance Rate Map (FIRM). The limits of a floodway also appear to be identified on the Flood Insurance Rate Maps (FIRM) (Panel No. 0600770026B). The floodway limits were developed by artificially encroaching upon the existing 100-year floodplain to cause a 0.3-meter (1.0-foot) increase of the water surface. Floodways were created in major rivers for the purpose of providing a regulatory guidance of floodplain development and maintaining a minimum flood corridor under natural conditions.

In Bakersfield, levees have been constructed on both sides of the Kern River to protect the surrounding area from flooding. The flood control levees extend for approximately 6.4 km (4.0 miles) along the southern bank and 4.0 km (2.5 miles) along the northern bank of the river. Additional levees are located along the CVC on the north bank of the Kern River. Levees have also been constructed to confine water in irrigation canals. However, these irrigation canal levees may not protect the community from flooding during intense storm events (FEMA 1984).

Flood control improvements have been made to the Kern River between the Friant-Kern Canal and BNSF railroad bridge. These improvements involved construction of the Coffee Road bridge, a diversion structure upstream of Coffee Road, and the Carrier Canal and adjacent levees. These improvements are expected to provide additional flood protection in the City of Bakersfield (FEMA 1984).



FEMA 100-YEAR FLOODPLAIN MAP OF KERN RIVER

Project:	WESTSIDE PARKWAY PROJECT
Project No.: 29866227	Figure 3.2-5
Date: SEPTEMBER 2003	

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3.2.6.5 Groundwater

The San Joaquin Valley consists of deep alluvial sediments. These sediments form an extensive groundwater aquifer system. The system consists of an unconfined[4] aquifer within the upper 122 meters (400 feet) and a confined[5] aquifer below 122 meters (400 feet) from the ground surface. These aquifers are separated by local clay sediments that retard the downward flow of groundwater. Both the unconfined and confined aquifers represent substantial water resources throughout the San Joaquin Valley including the project area.

Along the project alignment, the depth to the unconfined aquifer ranges from 46 meters (150 feet) near SR99 to 15 meters (50 feet) near Allen Road. The KCWA reports that groundwater levels decreased by approximately 4 meters (13 feet) in ID4 during 2000 (KCWA, 2002). The 1998 KCWA Water Supply Report indicates that no shallow groundwater presently exists in the project area (KCWA, 1998).

Due to limited surface water supplies, groundwater use in Kern County began in the 1880s to 1890s. By the 1920s, groundwater pumping for irrigation began exceeding natural recharge, resulting in a decline in groundwater levels. This ultimately led to land subsidence in some parts of Kern County. To meet the increasing demand for water and respond to declining groundwater levels, supplemental water delivery facilities were constructed beginning in the 1950s with the Federal Friant-Kern Canal (part of the Central Valley Project). By the 1970s, water from the State Water Project was also being delivered to the project region through the CVC. These new supplies helped reduce the rate of groundwater overdraft; however, through the 1980s and into the 1990s, water demand has continued to exceed supply resulting in continued overdraft of groundwater.

During the year 2000, groundwater levels decreased by approximately 4 meters (13 feet), which equates to a net decrease of 3.0×10^{10} liters (24,157 acre-feet) of groundwater storage. This compares to a net decrease of 7.5×10^{9} liters (6,071 acre-feet) during 1999. Real declines in water inflow occurred from 1999 to 2000. State Water Project inflows declined by about 5.3×10^{10} liters (43,000 acre-feet). Recharge of Kern River water through its channel and associated canals also declined by about 4.7×10^{10} liters (38,000 acre-feet). Total water inflows in 2000 are estimated at 1.8×10^{11} liters (149,479 acre-feet). Total outflows are estimated to be 2.1×10^{11} liters (173,636 acre-feet) in 2000 (KCWA, 2002).

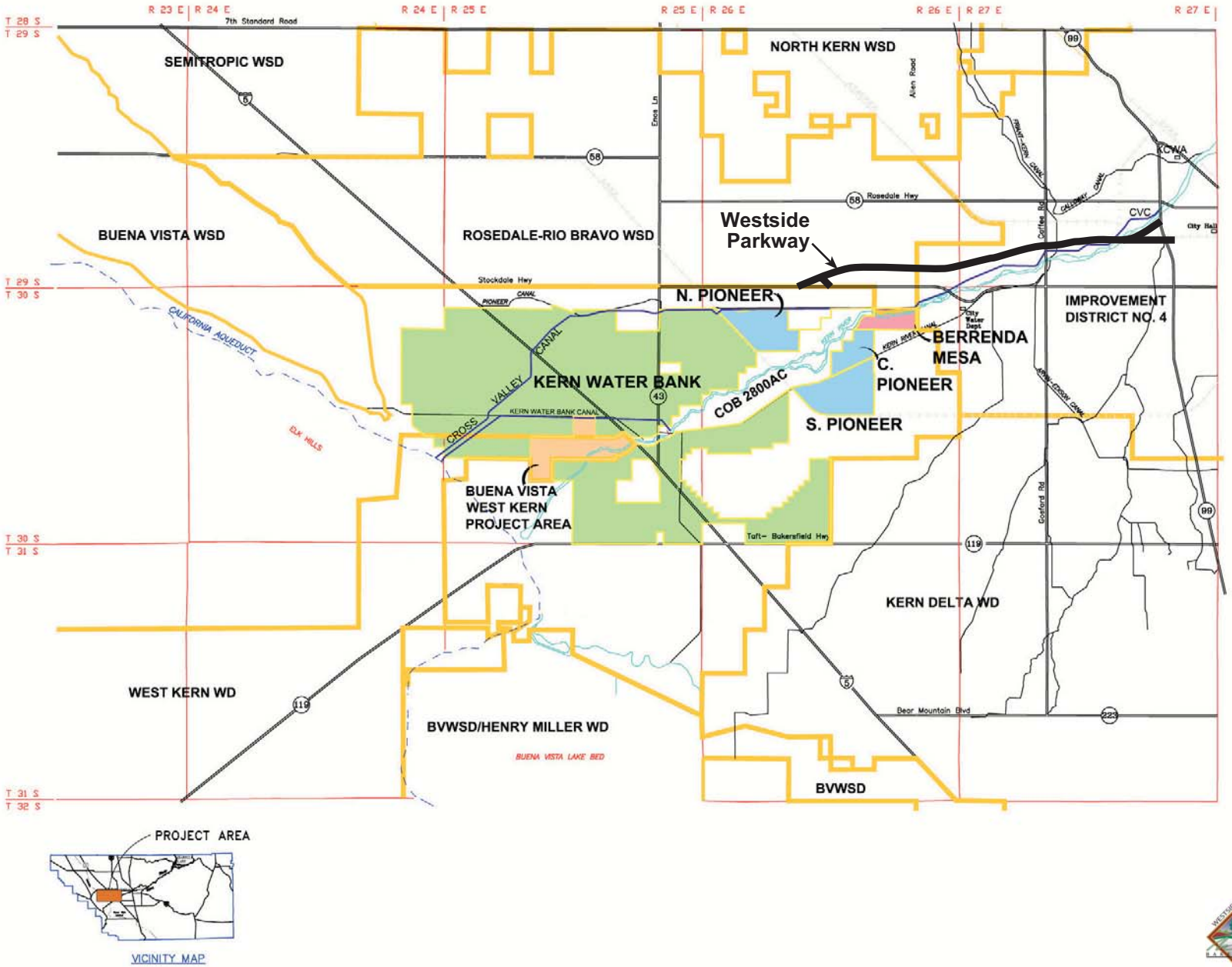
A substantial effort is being made throughout the project area to restore groundwater supplies for municipal, industrial, and agricultural uses through conjunctive use and groundwater banking. "Conjunctive use" refers to the joint use of surface water and groundwater supplies. The relative use of these two primary supplies depends on the amount of precipitation that falls in a given year, the water demand over the annual water cycle, and the availability of Central Valley Project and State Water Project water. Groundwater banking is a management tool where surface water is stored underground

[4] An unconfined aquifer is an aquifer where the water table (or water surface elevation) varies depending on recharge and discharge, pumpage from wells, and permeability of soils.

[5] A confined aquifer occurs where groundwater is confined under pressure by overlying relatively impermeable strata. Water elevations within a confined aquifer will not fluctuate, and if a well penetrates a confined aquifer the water level in the well will rise above the elevation of the aquifer. Confined aquifers are also referred to as artesian or pressure aquifers.

during times when the available supply exceeds demand, and then pumped out when demand exceeds supply.

South of the project area, excess surface water supplies are used to recharge the groundwater aquifer through percolation in the channel of the Kern River and spreading the water in recharge ponds. The Kern Water Bank Authority, the City of Bakersfield and KCWA are the principal agencies that operate groundwater recharge facilities. RRBWSD has historically conducted a conjunctive use program in which surface water is brought into the RRBWSD, used for groundwater recharge and is extracted by users as needed (Crossley, 2003). The RRBWSD does not currently operate groundwater banking areas. RRBWSD is planning groundwater banking operations in the near future and is currently in the CEQA process to do so; however, the proposed groundwater banking will be outside of the project area (Core, 2003). The RRBWSD also plans to purchase 40 to 80 hectares (100 to 200 acres) in the near future to bring capacity up from 1.4×10^4 liters/s to 1.7×10^4 liters/s (500 cubic feet per second [cfs] to 600 cfs), the capacity of the RRBWSD's system. The location of these new groundwater recharge areas is unknown at this time. The current locations of recharge areas used by the KCWA and the RRBWSD are shown in Figure 3.2-6 and Figure 3.2-7.



LOCATIONS OF KERN COUNTY WATER AGENCY RECHARGE AREAS

Project No.: 29866227	Date: DECEMBER 2004	Project: WESTSIDE PARKWAY PROJECT	Figure 3.2-6

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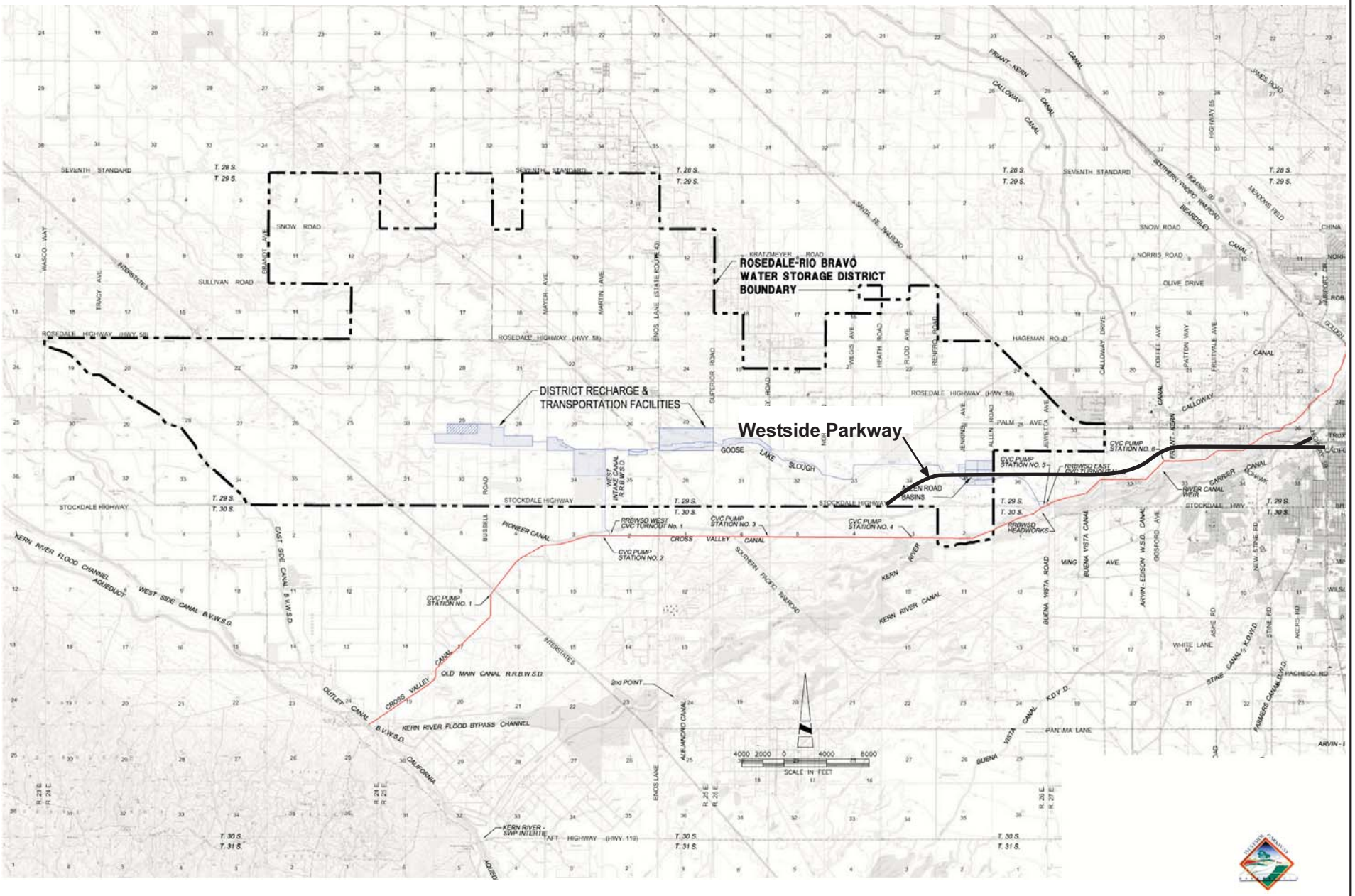

LOCATIONS OF ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT RECHARGE AREAS

Project No.: 29866227	Date: SEPTEMBER 2004	Project: WESTSIDE PARKWAY PROJECT	Figure 3.2-7

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The Kern Water Bank, shown in Figure 3.2-6, was initiated by the California Department of Water Resources in the late 1980s and ownership and operation was transferred to local districts, which formed the Kern Water Bank Authority late in 1995. The Kern Water Bank property was transferred to KCWA by the California Department of Water Resources, and then conveyed to the Kern Water Bank Authority in August 1996. According to the KCWA 1998 Water Supply Report, the Kern Water Bank Authority is planning for the construction of approximately 2,750 hectares (6,800 acres) of recharge ponds with a recharge rate of 1.5 x 109 liters (1,230 acre-feet) per day. It expects the Kern Water Bank to reach an ultimate storage capacity of nearly 1.2 x 1012 liters (1.0 x 106 acre-feet). In a personal communication with Florn Core, (Water Resources Manager) of the City of Bakersfield, these recharge ponds have already been constructed and are southwest of the project area (Core, 2003) In 1998, the Kern Water Bank recharged a total of 3.8 x 1011 liters (306,641 acre-feet).

In 1992, KCWA purchased 970 hectares (2,400 acres) of land to develop additional water recharge and banking facilities. The "Pioneer Project" comprises two parcels on either side of the Kern River southwest of Bakersfield (Figure 3.2-6). The Pioneer Property has an annual groundwater recharge capacity of about 1.8 x 1011 liters (146,000 acre-feet). During 1998, 7.6 x 1010 liters (61,667 acre-feet) were recharged on the Pioneer Project (KCWA, 1998).

The RRBWSD is located west of Bakersfield and contains 18,000 hectares (44,500 acres) of agricultural land. The RRBWSD's recharge facilities include recharge basins, natural channels, and unlined channels for in-channel percolation. The RRBWSD's recharge and transportation facilities cover approximately 490 hectares (1,200 acres). Of this total, approximately 400 hectares (1,000 acres) are "wetted" for recharging water (Crossby, 2003).

The KCWA ID4 encompasses approximately 26,500 hectares (65,400 acres) along the Kern River channel and is bounded by Allen Road on the west, Weedpatch Highway on the east, Panama Lane on the south, and Seventh Standard Road on the north. The groundwater basin underlying ID4 receives its recharge from the Kern River, which traverses it from east to west, a distance of about 19 km (12 miles), through a wide, flat, permeable bed.

Historically, flows in the river contribute further to groundwater recharge. A third source of recharge is seepage and percolation from a number of canals diverting water both northerly and southerly from the river. Rainfall is estimated to contribute 6.2 x 109 liters (2,000 to 5,000 acre-feet) per year of recharge, on average (KCWA, 2002).

ID4 has a 9.62 percent interest in the Kern Water Bank recharge and recovery facilities. During 2001, additional wells were constructed for the project for a total annual recovery capacity of approximately 2.8 x 1011 liters (230,000 acre-feet). Construction of the new 9.7 km (6 mile) canal extension along with a pipeline intertie between the Kern River canal and the terminus of the Kern Water Bank Canal were completed. The completion of these projects allows for additional recharge and recovery capacity by Kern Water Bank facilities.

ID4 has a 10 percent interest in the Pioneer Project recharge and recovery facilities (KCWA, 2002).

The City of Bakersfield also recharges the groundwater aquifer along the Kern River channel. The City of Bakersfield's 1,130-hectare (2,800-acre) Recharge Facility has been maintained as a banking and recovery facility for several years, and KCWA and other districts have deposited water. During 1998, a total of 4.8 x 1010 liters (38,649 acre-feet) were recharged in this facility (KCWA, 1998).

The groundwater basin in the project area is not defined as a Sole Source Aquifer by the USEPA (CVRWQCB, 1995). In addition, the area has no written wellhead protection plans; however, the KCWA, RRBWSD and the City keep wellhead areas locked, maintain security, keep weeds down and refrain from agricultural usage in the wellhead area. There is some agricultural usage near the Pioneer Project which is being phased out (Haslebacher, 2003).

All existing groundwater banking areas within the vicinity are at least 0.8 to 1.2 km (0.5 to 0.75 mile) away from the project area except for Truxtun Lakes, which are approximately 0.5 km (0.3 mile) to the south of the alignment. Truxtun Lakes are comprised of two small lakes of approximately 11 hectares (27 acres) total surface area located between Mohawk Street and Coffee Road and between Truxtun Avenue and the Kern River. The lakes are used for groundwater recharge, approximately 100 mm (4 inches) per day, as well as for the enjoyment of the community. The lakes receive water from two sources, not always at the same time. The primary source is the City's Carrier Canal using Kern River water. The second source is the CVC using State water. Stormwater from the north side of Truxtun Avenue also drains into the lakes along their common frontage (Core, 2003).

The proposed project would sever a portion of Shell Oil Products US (SOPUS) property in Section 33 along the Kern River. This severed portion of the property includes one of the refinery's groundwater production wells and associated piping, instrumentation, and electrical systems. There are no other known groundwater wells that would be affected by the proposed project.

3.2.6.6 Groundwater Quality

According to the 1995 Tulare Lake Basin Plan, the quality and beneficial uses of deep groundwaters remain the same as before man entered the valley. A few areas within the basin have groundwaters that are naturally unusable or of marginal quality for certain beneficial uses. [6]

The project area lies within the Kern County Basin hydrologic unit Detailed Analysis Unit (DAU) 254. The 1995 Tulare Lake Basin Plan identifies the following groundwater beneficial uses for the project area:

[6] Groundwater contained in the lower Transition Zone and Santa Margarita formation within 3,000 feet of the Kern Oil and Refining Company proposed injection wells in Section 25, T30S, R28E, MDB&M, is not suitable, or potentially suitable, for municipal or domestic supply (MUN). Groundwater contained in the basal Etchegoin formation, Chanac formation, and Santa Margarita formation within, and extending to one-quarter mile outside the administrative boundary of the Fruitvale Oil Field, as defined by the State of California, Department of Conservation, Division of Oil and Gas in *Application for Primacy in the Regulation of Class II Injection Wells Under Section 1425 of the Safe Drinking Water Act*, dated April 1981, is not suitable, or potentially suitable, for municipal or domestic supply (MUN). However, the upper groundwater zone (groundwater to a depth of 3,000 feet) retains the MUN beneficial use.

- Municipal & Domestic Supply
- Agricultural Supply
- Industrial Service Supply
- Industrial Process Supply
- Non-Contact Water Recreation
- Water-Contact Recreation
- Wildlife Habitat

Due to the closed nature of the Tulare Lake Basin, there is little subsurface outflow. Thus, salts accumulate within the Basin due to importation and evaporative use of the water. The paramount water quality problem in the Basin is the accumulation of salts. This problem is compounded by the overdraft of groundwater for municipal, agricultural, and industrial purposes and the use of water from deeper formations and outside the basin that further concentrates salts within remaining groundwater.

According to Tom Haslebacher; KCWA geologist; arsenic, nitrates, and organics can be problematic to some extent in sporadic areas within the project area. Arsenic found randomly in soils in the project area is naturally occurring and can occasionally be above MCL. Nitrates can be naturally occurring but are primarily from manmade sources. Two main sources of nitrates in the project area are septic systems and animal corals. Since human and animal populations in the area are continually increasing, it is expected that the occurrence of nitrates above MCL will also increase with time. Nitrates are also difficult to remove from groundwater. Organics such as EDB (ethylene dibromide) and DBCP (dibromochloropropane) were used in the project area as a fumigant to kill nematodes. These nematicides were banned in the 1970's; therefore, concentrations of EDB and DBCP are expected to decrease with time and are relatively easy to remove from groundwater (Haslebacher, 2003). Data on groundwater quality from various wells in the unconfined aquifer within the project area was obtained from February 1996 through October 1997. Results of the sampling show the median concentration of nitrate at 3 milligrams/liter (mg/L); total dissolved solids (TDS) at 180 mg/L; calcium at 28 mg/L; magnesium at 3 mg/L; sodium at 23 mg/L; chloride at 23 mg/L; sulfate at 20 mg/L, and the median pH level at 8.

3.2.7 Air Quality

An Air Quality Study was completed for the proposed project in October 2005. This section summarizes information provided in that report.

Regulatory Background

Pursuant to the Federal Clean Air Act (CAA) of 1970, the USEPA established National Ambient Air Quality Standards (NAAQS). The NAAQS were established for major pollutants, termed "criteria" pollutants. Criteria pollutants are defined as those pollutants for which Federal and State governments have established ambient air quality standards for outdoor concentrations in order to protect public health. The NAAQS are two tiered: primary, to protect public health; and secondary, to prevent degradation of the environment (e.g., impairment of visibility, damage to vegetation and property, etc.). The NAAQS are presented in Table 3.2-3.

Table 3.2-3. State Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	0.12 ppm (235 µg/m³)[8]	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	--		0.08 ppm (157 µg/m³) [8]		
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Geometric Mean	20 µg/m³		50 µg/m³		
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	No Separate State Standard		65 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	15 µg/m³		
Carbon Monoxide (CO)	8 Hour	9 ppm (10 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m³)	None	Non-dispersive Infrared Photometry (NDIR)
	1 Hour	20 ppm (23 mg/m³)		35 ppm (40 mg/m³)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		--	--	--
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	--	Gas Phase Chemilumine-scence	0.053 ppm (100 µg/m³)	Same as Primary Standard	Gas Phase Chemilumine-scence
	1 Hour	0.25 ppm (470 µg/m³)		--		
Lead[9] (Pb)	30 days average	1.5 µg/m³	Atomic Absorption	--	--	--
	Calendar Quarter	--		1.5 µg/m³	Same as Primary Standard	High Volume Sampler and Atomic Absorption
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	--	Ultraviolet Fluorescence	0.30 ppm (80 µg/m³)	--	Spectrophoto-metry (Pararosaniline Method)
	24 Hour	0.04 ppm (105 µg/m³)		0.14 ppm (365 µg/m³)	--	
	3 Hour	--		--	0.5 ppm (1300 µg/m³)	
	1 Hour	0.25 ppm (655 µg/m³)		--	--	

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer – visibility of 16 km (10 miles) or more (0.07-30 miles or more for Lake Tahoe) due to particles when the relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		NO FEDERAL STANDARDS		
Sulfates (SO_4)	24 Hour	25 µg/m^3	Ion Chroma-tography			
Vinyl Chloride[9] (C_2H_3Cl)	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chroma-tography			
Hydrogen Sulfide (H_2S)	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			

1. California standards for O_3, CO (except Lake Tahoe), SO_2 (1 and 24 hour), NO_2, PM_{10}, $PM_{2.5}$, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than O_3, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150µg/m^3 is equal to or less than one. For $PM_{2.5}$ the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the USEPA for further clarification and current Federal policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent procedure which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the USEPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the USEPA.
8. New Federal 8-hour ozone and fine particulate matter standards were promulgated by the USEPA on July 18, 1997. Contact the USEPA for further clarification and current Federal policies.
9. The CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Source: California Air Resources Board (7/9/03)

The criteria pollutants are ozone (O_3), carbon monoxide (CO), particulate matter equal to or less than 2.5 microns ($PM_{2.5}$), particulate matter larger than 2.5 microns and less than or equal to 10 microns (PM_{10}), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead (Pb). Health effects from exposure to these criteria pollutants are described later in this section. Ambient air data collected at permanent monitoring stations are used by the USEPA to classify regions as "attainment" or "non-attainment" depending on whether the regions meet the requirements stated in the primary NAAQS. Non-attainment areas are imposed with additional restrictions as required by the USEPA.

The Clean Air Act Amendments (CAAA) require states with non-attainment areas to achieve the NAAQS by developing a State Implementation Plan (SIP). The SIP has to be approved by the USEPA and serves

as the State's commitment to actions that will reduce or eliminate air quality problems. An important aspect of the SIP is to designate a planning organization that will promulgate rules and implement strategies to achieve the NAAQS. The USEPA has designated the Kern COG as the Metropolitan Planning Organization responsible for ensuring compliance with the requirements of the CAA in Kern County.

3.2.7.1 State Regulations/Standards

The State of California initiated its own air quality standards, California Ambient Air Quality Standards (CAAQS), in 1969 under the mandate of the Mulford-Carrell Act, and signed the California Clean Air Act (CCAA) into law in 1988. The CAAQS are generally more stringent than the NAAQS. In addition to the six criteria pollutants covered by the NAAQS, there are CAAQS for sulfates (SO_4), hydrogen sulfide (H_2S), vinyl chloride (C_2H_3Cl), and visibility-reducing particles. The CAAQS are provided in Table 3.2-3 along with the NAAQS. The CCAA provides the State with a comprehensive framework for air quality planning regulation.

Both State and Federal air pollution control programs in California are coordinated and overseen by the California Air Resources Board (CARB). The CARB oversees activities of local air quality management agencies, and is responsible for incorporating Air Quality Management Plans (AQMPs) or Air Quality Attainment Plans (AQAPs) from local air districts into a SIP for Federal USEPA approval. The CARB also regulates motor vehicles and fuels.

The CARB has divided the State into 15 air basins. Significant authority for air quality control has been given to local air pollution control districts (APCDs) or air quality management districts (AQMDs), which regulate stationary source emissions and develop local attainment plans. The CCAA provides the San Joaquin Valley APCD (SJVAPCD) with the authority to manage transportation activities at indirect sources and regulate stationary source emissions within the SJVAPCD Basin (the Basin). Indirect sources of pollution are generated when minor sources collectively emit a substantial amount of pollution (e.g., motor vehicles at an intersection, a mall, or highways).

The CCAA requires non-attainment areas in the State to prepare attainment plans. The attainment plans are required to achieve a minimum 5% annual reduction in the emissions of non-attainment pollutants unless all feasible measures have been implemented. The Basin is classified as "severe non-attainment" for the State and Federal O_3 standard and "serious non-attainment" for the Federal PM_{10} standard. Concentrations of SO_2, CO, NO_2, and Pb are classified as "attainment."

The following paragraphs briefly describe the adverse health effects of the criteria pollutants monitored in the Basin.

Ozone

O_3 is formed by photochemical reactions between NO_x and reactive organic gases, rather than being directly emitted. O_3 is a pungent, colorless gas, and elevated O_3 concentrations typically result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in

sensitive receptors such as the sick, elderly, and young children. O_3 levels peak during the summer and early fall months.

Carbon Monoxide

CO is formed by the incomplete combustion of fossil fuels, almost entirely from automobiles. It is a colorless, odorless gas that can cause dizziness, fatigue, and impairment to central nervous system functions. CO passes through the lungs into the bloodstream, where it interferes with the transfer of oxygen to body tissues.

Nitrogen Oxides

NO_x contributes to other pollution problems, including a high concentration of fine particulate matter, poor visibility, and acid deposition. NO_2 (a reddish-brown gas) and nitric oxide (a colorless, odorless gas) are formed from fuel combustion under high temperature or pressure. These compounds are referred to as nitrogen oxides, or NO_x. NO_x is a primary component of the photochemical smog reaction. NO_2 decreases lung function and may reduce resistance to infection.

Sulfur Dioxide

SO_2 is a colorless gas formed primarily from incomplete combustion of fuels containing sulfur. Industrial facilities also contribute to gaseous SO_2 levels in the Basin. SO_2 irritates the respiratory tract, can injure lung tissue when combined with fine particulate matter, and reduces visibility and the level of sunlight.

Reactive Organic Compounds

Reactive Organic Compounds (ROCs) are formed from combustion of fuels and evaporation of organic solvents. ROCs are a prime component of the photochemical smog reaction. Consequently, ROCs accumulate in the atmosphere more quickly during the winter when sunlight is limited and photochemical reactions are slower.

Particulate Matter

Particulate matter is the term used for a mixture of solid particles and liquid droplets found in the air. Coarse particles (larger than 2.5 microns and less than or equal to 10 microns, or PM_{10}) come from a variety of sources, including windblown dust and grinding operations. Fine particles (equal to or less than 2.5 microns, or $PM_{2.5}$) often come from fuel combustion, power plants, and diesel buses and trucks. Fine particles can also be formed in the atmosphere through chemical reactions.

PM_{10} can accumulate in the respiratory system and aggravate health problems such as asthma. The USEPA's scientific review concluded that $PM_{2.5}$ at concentrations that extend well below those allowed by the current PM_{10} standards, which penetrate deeply into the lungs, are more likely than coarse particles to contribute to the health effects listed in a number of recently published community epidemiological studies. These health effects include premature death, increased hospital admissions, and emergency room visits (primarily the elderly and individuals with cardiopulmonary disease); increased respiratory symptoms and disease (children and individuals with cardiopulmonary disease such as asthma); decreased lung functions (particularly in children and individuals with asthma); and alterations in lung tissue and structure and in respiratory tract defense mechanisms.

As a result of this research, USEPA established the $PM_{2.5}$ standards listed in Table 3.2-3 in 1997. Beginning in 2002, based on three years of monitoring data, USEPA began designating the attainment of areas for the federal $PM_{2.5}$ standard. In response to the Children's Environmental Protection Act (California Senate Bill 25, Escutia 1999), CARB revised the state's PM_{10} standards and developed a new $PM_{2.5}$ standard more restrictive than the federal standard (see Table 3.2-3).

The 1990 CAAA require an area's transportation plan to be consistent with the basis and timetable of the air pollution control strategy. The SIP includes a "budget" of emissions from transportation sources in the non-attainment area, and transportation projects must live within that budget. The 1990 CAAA give preference to transportation projects which help to reduce motor vehicle emissions. In statutory terminology, regional transportation plans and individual projects included in the plans must be found to be in "conformity" with USEPA-approved SIPs. The USEPA has designated the project area as a "severe non-attainment" area for ozone and a "serious non-attainment" area for PM_{10} and $PM_{2.5}$. The Bakersfield metropolitan area is also non-attainment for CO, though the CARB has requested a redesignation to attainment based on improvement in air quality in the mid-1990s.

3.2.7.2 Local Regulations/Standards

SJVAPCD is the local agency responsible for formulating and implementing attainment plans to achieve State and Federal air quality standards in order to comply with CCAA and Federal CAAA requirements within the Basin. To meet these requirements, the SJVAPCD has prepared and submitted numerous plans for attaining O_3 and PM_{10}. In an effort to demonstrate the Ozone Rate of Progress (ROP) for 2002 and 2005, the SJVAPCD prepared the 2002 and 2005 ROP Plan (May 16, 2002). This plan identifies a range of strategies, approaches, and techniques that will facilitate the reduction of O_3 precursors at a rate of 3% per year, averaged over a three-year period. These strategies focus on incentive programs and reasonably available control technologies (RACT) on newly defined major sources.

On March 25, 2003, SJVAPCD released the Draft 2003 PM_{10} Plan, which provides their strategy for achieving the NAAQS for PM_{10} at the earliest attainable date. The PM_{10} plan will be incorporated as part of the SIP for the Basin. The Draft 2003 PM_{10} Plan includes the most recent data on air quality, emissions, and modeling to assess PM_{10} attainment.

The SJVAPCD maintains ambient air quality monitoring stations throughout the Basin. The local air quality monitoring stations in Kern County are located at: Arvin, Golden State Avenue, California Avenue, Edison, Oildale, and Shafter. The air pollutants of greatest concern in the Bakersfield area are O_3 and PM_{10}. Motor vehicle emissions and evaporation of various organic compounds (i.e., solvents, fuels, etc.) are major contributors to regional O_3 problems. Pesticide use, industrial process operations, and non-highway mobile sources (i.e., off-road vehicle use and aircraft operations) are other contributors to regional O_3 problems. PM_{10} emissions come from a broad range of sources, but on-road mobile sources are usually a major contributor due to re-entrained dust, direct emissions, and secondary emission effects. If a proposed project has the potential for adverse air quality impacts to the local air quality and the potential to cause a delay to the Basin's attainment plan, then the associated emission sources causing the air quality impacts require an environmental analysis and subsequent mitigation.

The SJVAPCD uses the Governor's Office of Planning and Research document, *Thresholds of Significance: Criteria for Determining Environmental Significance*, as a basis to establish air quality thresholds of significance for the Basin. The Basin is categorized as severe non-attainment for O_3. Therefore, emissions related to an individual project within the Basin will most likely contribute to the existing violations of the O_3 standard. The entire Basin is also categorized as a serious non-attainment area for PM_{10}.

3.2.7.3 Topography and Climate

The project area is located in the northwesterly quadrant of Kern County. The terrain is essentially flat and ranges in elevation from about 88 meters (290 feet) above sea level near the I-5 freeway and existing SR58 to 137 meters (450 feet) above sea level near Seventh Standard Road and SR99. The land in the project area slopes generally downward to the southwest.

The Coast Ranges separate the study area from the ocean's influence. The climate in Bakersfield is typical of the southern San Joaquin Valley, with hot, dry summers. Hot, dry summers and cooler winters characterize the valley floor. Summer high temperatures often exceed 38°C (100°F), averaging in the low 30s in the northern valley and high 30s in the south. In the entire Basin, high daily temperature readings in summer average 35°C (95°F). Over the last 30 years, the Basin averaged 106 days per year 32°C (90° F) or hotter, and 40 days per year 38°C (100°F) or hotter. The daily summer temperature varies +1°C.

Winters in the Basin are mild and humid. Temperatures below freezing are common. Average high temperatures in the winter are in the 10s°C (50s°F), but highs below 4°C (39.2°F) can occur on days with persistent fog and low cloudiness. The average daily low temperature is 7°C (45°F).

Precipitation in the Basin is strongly influenced by the position of the semi-permanent subtropical high-pressure belt located off the Pacific Coast (Pacific High). In the winter, this high-pressure system moves southward, allowing Pacific storms to move through the Basin. Rainfall averages 157 millimeters (mm) (6.2 inches) per year. Normally, 90% of the rain falls between December 1 and April 1 with heavy ground fog conditions occurring during the winter.

The Basin, as well as the project area, experiences a persistent temperature inversion (increasing temperature with increasing altitude) as a result of the Pacific High. This inversion limits the vertical dispersion of air contaminants, holding them relatively near the ground. As the sun warms the ground and the lower air layer, the temperature of the lower air layer approaches the temperature of the base of the inversion (upper) layer until the inversion layer finally breaks, allowing vertical mixing with the lower layer. This phenomenon is observed in mid- to late- afternoon on hot summer days, when the smog appears to clear up suddenly. Winter inversions frequently break by mid-morning.

During the summer, wind usually originates at the north end of the Basin and flows in a south-southeasterly direction through the Basin, through Tehachapi pass, into the Southeast Desert Air Basin. During the winter, wind occasionally originates from the south end of the Basin and flows in a north-northwesterly direction. During the winter months, the Basin experiences light, variable winds, less than

16 km/h (10 mph). Low average wind speeds, together with a persistent temperature inversion in the winter, create a climate conducive to high CO and PM_{10} concentrations.

The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are lowest. In the winter, the greatest pollution problems are CO and PM_{10} because of extremely low inversions and air stagnation during the night and early morning hours. In the summer, if the inversion layer doesn't lift to allow the buildup of contaminants to be dispersed into the Southeast Desert, the O_3 levels will peak in the later afternoon. If the inversion layer breaks and the resultant afternoon winds occur, O_3 will peak in the early afternoon and decrease in the late afternoon as the contaminants are transported to the Southeast Desert.

3.2.7.4 Existing Air Quality

Urban emission sources generate the majority of O_3 air quality problems in the Basin. O_3 is from industrial exhaust stacks, vehicle exhausts, and transport from adjacent air basins. PM_{10} in the study area reflects a mix of rural and urban sources: agricultural burning, agricultural field operations, dust re-suspended by vehicle traffic, secondary aerosols formed by photochemical smog reactions, and industrial emissions. The air quality monitoring station nearest to the project site is located on California Avenue. This station monitors all of the criteria pollutants. Table 3.2-4 shows the criteria pollutants monitored at the California Avenue station from 1998 through 2002, which includes CO, O_3, PM_{10}, $PM_{2.5}$, and NO_2. SO_2 and Pb are not listed because there has not been an exceedance of the Federal or State standards in the past 10 years. Data from the California Avenue monitoring station reveal that the State and Federal O_3 and PM_{10} standards are exceeded each year.

The ambient air quality data in the table shows that CO and NO_2 levels are below the State and Federal standards in the project area. The one-hour O_3 level at the California Avenue station exceeded the State standard for the five years of record, ranging from 28 to 46 days a year, and also exceeded the Federal standard once in two out of the five years. The eight-hour O_3 level at the California Avenue station exceeded the Federal standard every year for the five years of record, ranging from 35 to 47 days a year. The PM_{10} level exceeded the State standards every year for the five years of record, ranging from 27 to 35 days a year. The PM_{10} level only exceeded the Federal standard on three days in one year of the five years of record. The $PM_{2.5}$ level at the California Avenue station exceeded the State and Federal standard every year for the four years of record. Exceedances of the Federal and State standards for O_3, PM_{10}, and $PM_{2.5}$ have also occurred at the California Avenue station from 2003 through 2005; however, concentrations of these three pollutants have been decreasing.

Table 3.2-4. Ambient Air Quality at California Avenue Air Monitoring Station[1]

	Carbon Monoxide (CO)				Ozone (O_3)				Respirable Particulate Matter (PM_{10})		Fine Particulate Matter ($PM_{2.5}$)		Nitrogen Dioxide (NO_2)	
	Max 1-hour Conc. (ppm)	Number of Days Exceeded	Max 8-hour Conc. (ppm)	Number of Days Exceeded	Max 1-hour Conc. (ppm)	Number of Days Exceeded	Max 8-hour Conc. (ppm)	Number of Days Exceeded	Max 24-hour Conc. (µg/m³)	Number of Days Exceeded	Max 24-hour Conc. (ppm)	Number of Days Exceeded	Max 1-hour Conc. (ppm)	Number of Days Exceeded
State Standards	> 20 ppm/ 1-hour		> = 9 ppm/ 8-hour		> 0.09 ppm/ 1-hour		NA		> 50 µg/m³/ 24-hour		NS		> 0.25 ppm/ 1-hour	
2002	4.4	0	2.5	0	0.119	28	0.105	NA	94	32	89.6	NS	0.107	0
2001	5.8	0	3.4	0	0.129	46	0.115	NA	190	28	154.7	NS	0.115	0
2000	6.9	0	4.9	0	0.125	41	0.106	NA	140	32	112.7	NS	0.089	0
1999	5.8	0	4.5	0	0.116	44	0.101	NA	143	35	134.1	NS	0.107	0
1998	5.7	0	3.9	0	0.124	29	0.110	NA	148	27	ND	NS	0.084	0
Maximum	6.9		4.9		0.129		0.115		190		154.7		0.115	
Federal Standards	> 35 ppm/ 1-hour		> = 9 ppm/ 8-hour		> 0.12 ppm/ 1-hour		> 0.08 ppm/8-hour		> 150 µg/m³/ 24-hour		> 65 µg/m³/ 24-hour		Annual Average > 0.053 ppm/ annual avg.	
2002	4.4	0	2.5	0	0.119	0	0.105	35	94	0	89.6	14	0.020	0
2001	5.8	0	3.4	0	0.129	1	0.115	47	190	3	154.7	19	0.022	0
2000	6.9	0	4.9	0	0.125	1	0.106	40	140	0	112.7	19	0.024	0
1999	5.8	0	4.5	0	0.116	0	0.101	47	143	0	134.1	28	0.025	0
1998	5.7	0	3.9	0	0.124	0	0.110	38	148	0	ND	ND	0.022	0
Maximum	6.9		4.9		0.129		0.115		190		154.7		0.025	

Note:
[1] U.S. Environmental Protection Agency webpage - http://www.epa.gov/air/data/monvals.html and California Air Resources Board webpage - http://www.arb.ca.gov/adam/welcome.
NA – Not Applicable because SJVAPCD is not in attainment for the one-hour O_3 standard, therefore, the eight-hour O_3 standard does not apply until SJVAPCD complies with the one-hour O_3 standard.
NS – Not Applicable because there is no 24-hour $PM_{2.5}$ standard.
ND – No Data available.
ppm – parts per million
µg/m³ – micrograms per cubic meter

3.2.8 Hazardous Waste

A Hazardous Waste Study was completed for the proposed project in December 2004. This section summarizes information provided in that report.

An Initial Site Assessment (ISA) was conducted for the proposed project area to assess whether potential sources or evidence of hazardous waste contamination were present in the alternative alignments. Initially, 642 assessor parcels were examined, which included all alternatives. This included all parcels from which new rights of way might be acquired and the immediately adjacent parcels located within approximately 400 meters (1,300 feet) of the proposed alignments. Preparation of the ISA included a review of the relevant parts of ISAs prepared from July 1987 through February 1992; field reconnaissance of the 642 assessor parcels; interviews with local residents or business occupants; review of the Polk Index of Bakersfield regarding specific street addresses; written reports from the Kern County Department of Environmental Health Services; and a review of the former petroleum coke operation on Assessor Parcel Number (APN) 502-010-12 and the Shell Bakersfield Refinery property (formerly Texaco) with the Department of Toxic Substances Control (DTSC) and with the CVRWQCB.

Parcels containing known or potential hazardous waste were identified by assessor parcel numbers. All parcels with the potential for hazardous waste contamination were assigned a hazardous waste ranking. Those rankings are as follows:

Rank 1. Parcels known to be contaminated with hazardous wastes.

Rank 2. Parcels suspected of being contaminated with hazardous wastes.

Rank 3. Parcels that have the potential to be contaminated with hazardous waste due to past activities that have taken place on the parcel, or that have the potential to impact the proposed right of way due to known or suspected hazardous waste located on the parcel.

For the purposes of the Westside Parkway EA/DEIR, four additional areas were reviewed by the ISA process in areas not previously assessed. A total of 59 assessor parcels were examined for the Westside Parkway Hazardous Waste Study technical report. These included parcels from which new rights of way might be acquired and the immediately adjacent parcels located within approximately 400 meters (1,300 feet) of the alignment. For the Westside Parkway Truxtun Option, this assessment identified 9 parcels that ranked 1, 6 parcels that ranked 2, and 19 parcels that ranked 3 (Table 3.2-5). For the Westside Parkway Oak Option, the assessment identified 6 parcels that ranked 1, 11 parcels that ranked 2, and 21 parcels that ranked 3. Other parcels that were evaluated and determined to not have the potential to be contaminated with hazardous waste were identified with "No Ranking" (NR), which included 16 parcels. The four new ISAs included a field reconnaissance, review of environmental databases, and review of DTSC and CVRWQCB files. These four new areas included:

ISA 1 – North Mohawk Street, Mohawk Street between Rosedale Highway and the proposed Westside Parkway;

ISA 2 - South Mohawk Street, Mohawk Street between the proposed Westside Parkway and Truxtun Avenue;

ISA 3 - **Allen Road Interchange**, realigned Allen Road east of the existing Allen Road alignment, and

ISA 4 - **Oak Street Option**, the Westside Parkway between Mohawk Street and Oak Street.

Table 3.2-5. Assessor Parcels with Hazardous Waste Potential

Parcel Owner Number	APN Number	Owner	Hazardous Ranking	
			Truxtun Option	Oak Option
1	502-010-09-009	Equilon Enterprises, LLC	1	1
1	502-010-10-001	Equilon Enterprises, LLC	1	1
1	368-040-26-009	Equilon Enterprises, LLC	1	1
1	332-280-28-004	Equilon Enterprises, LLC	1	1
1	332-260-04-008	Equilon Enterprises, LLC	1	1
2	502-010-12-007	Lion Oil Co.	1	1
3	332-255-20 (Previously known as 332-255-06-006)	City of Bakersfield	1	N/A
3	332-255-08-002	City of Bakersfield	1	N/A
3	332-255-15-002	City of Bakersfield	1	N/A
4	332-280-27-001	Wanamaker, Jeff et al	2	N/A
5	332-260-15-000	KBA Engineering, LLC	2	2
5	332-260-09-003	KBA Engineering, LLC	2	2
6	332-260-28-008	Chemex, Inc.	2	2
7	332-260-27-005	Grealish Revocable Living Trust	2	2
8	332-260-03-014	B H Investments, Inc.	2	2
9	332-256-20-009	BNSF Railroad	N/A	2
9	332-256-20-003	BNSF Railroad	N/A	2
9	332-256-21-006	BNSF Railroad	N/A	2
9	332-256-24-005	BNSF Railroad	N/A	2
9	332-256-26-001	BNSF Railroad	N/A	2
9	332-256-27-004	BNSF Railroad	N/A	2
	501-010-24-005	City of Bakersfield	3	3
	501-010-23-002	City of Bakersfield	3	3
	501-010-22-018	City of Bakersfield	3	3
	501-010-12-019	Froehlich Living Trust	3	3
	501-010-14-015	City of Bakersfield	3	3
	502-010-01-005	City of Bakersfield (Agri Ventures LLC)	3	3
	332-280-C0-000	Kern County Water Agency/Canal	3	3
	332-280-29-004	BNSF Railroad	3	3
	331-021-02-002	City of Bakersfield	3	3
	332-280-11-004	Wanamaker, Jeff et al	3	3
	332-260-22-000	Gribben, James E.	3	3
	332-270-05-004	Magnus Trust	3	3
	332-270-16-006	Daisa, George R. & Deborah E.	3	3

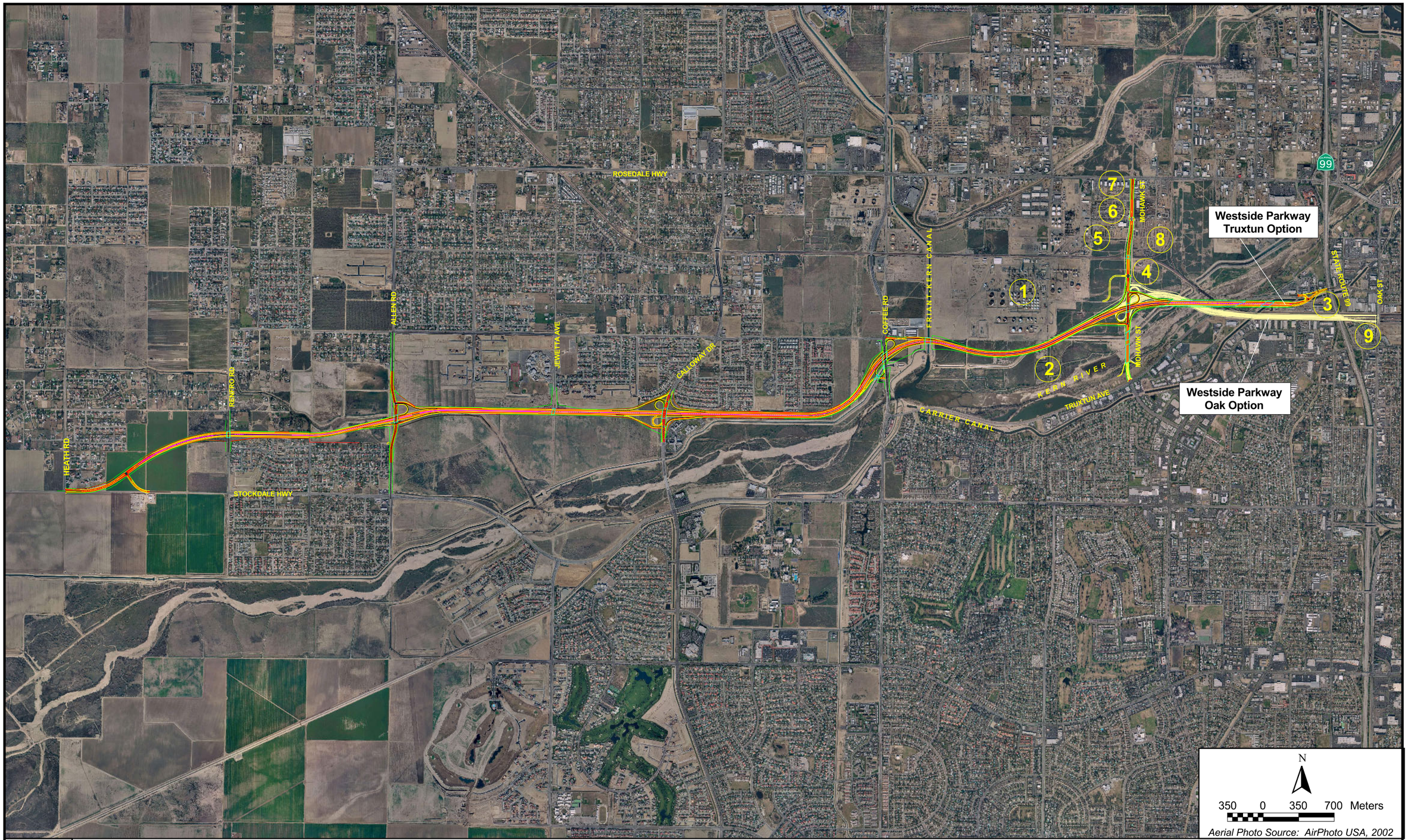
Parcel Owner Number	APN Number	Owner	Hazardous Ranking	
			Truxtun Option	Oak Option
	332-270-22-003	Janes, David B. & Ruth M. Trust	3	3
	332-270-21-007	A&A Land Co. LLC	3	3
	332-280-31-002	Wanamaker, Jeff et al	3	3
	332-280-32-005	Wanamaker, Jeff et al	3	3
	332-256-01-008	Commerce Drive Partners	3	3
	332-256-08-009	BNSF Railroad	N/A	3
	332-255-17-008	City of Bakersfield	3	N/A
	332-256-53	RN C MBA Inc.	N/A	3
	332-256-54	Wood, Barbara C et al.	N/A	3
	408-020-12-003	Ritter, Viola B.	NR	NR
	408-210-16-000	Delfino, LLC	NR	NR
	408-020-11-019	Oblinger, Carl G.	NR	NR
	408-020-20-006	City of Bakersfield	NR	NR
	409-010-01-005	Rosedale-Rio Bravo Water Storage District	NR	NR
	409-010-04-004	Rosedale-Rio Bravo Water Storage District	NR	NR
	500-150-01-002	Castle & Cooke California, Inc.	NR	NR
	501-010-13-012	Froehlich	NR	NR
	501-010-10-013	Froehlich (Old Rosedale LP)	NR	NR
	501-010-08-018	City of Bakersfield	NR	NR
	502-010-19-008	Kern County Water Agency	NR	NR
	502-010-04-004	City of Bakersfield (Caltree, Inc.)	NR	NR
	502-010-05-007	U S A	NR	NR
	502-010-06-000	Kern River Public Access	NR	NR
	332-280-34-001	BNSF Railroad	NR	NR
	332-255-07-009	City of Bakersfield	NR	N/A

N/A Parcels that are not applicable to the particular alternative.

NR No ranking.

Parcels Ranked 1

Nine parcels, partially located within or adjoining the proposed Westside Parkway, were ranked 1 because of the presence of known hazardous wastes presently being investigated or remediated under the direction of an appropriate lead agency. These parcels are discussed below and the various parcel owner numbers are shown on Figure 3.2-8.



PARCEL OWNER NUMBERS 1-9 IDENTIFIED AS RANK 1 AND RANK 2 PARCELS

Project No. 29866227	March 2005	Westside Parkway Project	Bakersfield, California	Figure 3.2-8

Shell Bakersfield Refinery (Parcel Owner No. 1) (Five Parcels) – Five of the nine parcels ranked 1 are a part of the approximately 186-hectare (460-acre) Shell Bakersfield Refinery facility currently owned by Equilon Enterprises, LLC d.b.a. Shell Oil Products US (Shell). The Shell Bakersfield Refinery facility (formerly known as the Texaco Oil Refinery) is located north of the proposed Westside Parkway, south of Rosedale Highway, and west of Mohawk Street. The refinery has been in operation since the mid-1930s.

The refinery operations have resulted in groundwater and soil contamination on the property. Several remediation programs have been implemented to address these problems. The CVRWQCB and the DTSC have worked proactively with Shell to remediate soil contamination and in a continuing good faith effort by Shell to remediate groundwater contamination. The CVRWQCB is the lead agency for the Shell Bakersfield Refinery. TriHydro Corporation (TriHydro), one of the environmental consultants for Shell, reported in their 2002 Fourth Quarter and 2002 Annual Groundwater Monitoring Report to the CVRWQCB, that these recent monitoring reports document full containment and a substantial decline in groundwater concentration for the reformate and methyl tertiary butyl ether (MTBE) plumes during the year 2002. The soil vapor extraction system, air sparge system, and groundwater recovery and treatment systems continue to provide effective soil and groundwater remediation of these plumes. A second area of concern to the CVRWQCB, was addressed by Shell in May 2002. The CVRWQCB reported to Shell that MTBE was detected in groundwater from Well PW-A (downgradient from Tank 67M05). Toxichem Management Consultants, Inc. is currently overseeing this additional investigation. It is expected that Shell will continue to retain responsibility for the cleanup. Right of way acquisition for the proposed Westside Parkway does not include parcels within the Shell Bakersfield Refinery that are actively undergoing remediation; however, it is possible that parcels to be acquired along the southern portion of the Shell Bakersfield Refinery may be impacted from historical operations or migrating contamination.

In November 2000, The Kleinfelder Group, Inc. (Kleinfelder) performed soil sampling and site characterization for the proposed Mohawk Sewer Alignment for the City of Bakersfield. The sampling activities were performed to identify chemicals of concern in order to assess potential health risks to workers during the excavation and installation of the proposed sewer line as a result of past site activities. Former Equilon Refinery activities include a former waste coke pile, harvest ponds, and an emergency pond within the southwest corner of the property. No analytes of concern were detected at concentrations at or above regulatory standards and/or published recommended USEPA Region 9 Preliminary Remediation Goals (PRGs) with the exception of arsenic concentrations and Total Recoverable Petroleum Hydrocarbons (TRPH) in one sample at 5.2 meters (17 feet) below ground surface (bgs). Arsenic is a naturally occurring element and the San Joaquin Valley has been assessed in natural background concentrations ranging between 0.8 to 20 parts per million (ppm). On-site concentrations ranged from 0.8 to 11 ppm. According to the USEPA, naturally occurring arsenic in soil is frequently higher than the risk-based PRG for residential soils (0.38 mg/kg). TRPH results indicated sampling site SL-21 at 5.2 meters (17 feet) bgs to be an area of elevated TRPH (58,000 ppm). This was the only sample that indicated a high result. The sample result was unexplained; however, since it was an isolated detection and associated elevated metals were not identified, Kleinfelder did not believe it to cause a health risk.

Right of way would be acquired from two parcels owned by Shell (formerly APNs 369-050-56 and -57) that were the former sites of waste disposal ponds. Those ponds were closed under a formal Closure Plan.

The remediation was accepted by the CVRWQCB and DTSC with a deed restriction that precludes the building of a day care center or facility with similar uses.

The CVRWQCB and DTSC have worked proactively with Equilon/Shell to oversee soil remediation, and in a continuing good faith effort by Equilon/Shell, to oversee groundwater remediation. It is expected that Equilon/Shell will continue to retain responsibility for cleanup.

Lion Oil Company, Petroleum Coke Storage Site (Parcel Owner No. 2) – The proposed Westside Parkway crosses APN 502-010-12-007 (formerly APN 369-050-59) located south of the Shell Bakersfield Refinery. In 1942, the U.S. Government constructed the [Tosco] refinery, west and south of the Shell Bakersfield Refinery, for the purpose of producing aviation gasoline during World War II. The refinery was later sold to the Signal Corporation, which in turn was sold to the Tosco Corporation in 1970. Texaco Refining and Marketing, Inc. purchased the property from Tosco in 1986, except for APN 502-010-12-007, which is now owned by Lion Oil Company, a subsidiary of Tosco Corporation.

The parcel previously contained a storage pile of approximately 200,000 cubic meters (7,062,000 cubic feet) of waste petroleum coke. The parcel also contained a drainage pit approximately 10 by 50 meters (33 by 164 feet) in size and 10 meters (33 feet) deep, and abandoned buildings from a former refined petroleum coke operation. The waste coke contained polynuclear aromatic compounds (PNAs) that may be carcinogenic and heavy metals. Remediation activities were initiated at the site in 1997 and are currently underway. The remediation is being conducted under the oversight of the DTSC with deed restrictions that preclude any construction for residential purposes.

The City of Bakersfield Department of Public Works Corporation Yard (Parcel Owner No. 3) (Three Parcels) – Three of the nine parcels ranked 1 are a part of the City of Bakersfield Department of Public Works, Department of Recreation and Parks Corporation Yard. The City of Bakersfield Corporation Yard is listed on the Environmental Data Resources, Inc. agency database as a hazardous waste site and is currently in remediation for leaking underground storage tank(s).

Parcels Ranked 2

Twelve parcels, partially located within or adjoining the proposed Westside Parkway, were ranked 2. Parcels ranked 2 are suspected of being contaminated with hazardous wastes. The various parcel owner numbers of these parcels are shown on Figure 3.2-8.

Jeff Wanamaker, et al (Parcel Owner No. 4) – An undeveloped parcel, owned by Jeff Wanamaker, et al, appears to have equipment, containers, and several operating oil wells on the property that may contain hazardous materials or hazardous waste. No information has been found concerning potential soil or groundwater contamination.

KBA Engineering (Parcel Owner No. 5) (Two Parcels) – KBA Engineering appears to have equipment, containers, and several operating oil wells on their property that may contain hazardous materials or hazardous waste. No information has been found concerning potential soil or groundwater contamination.

Chemex Inc. (Parcel Owner No. 6) – Chemex, Inc. appears to have equipment, containers, and several operating oil wells on their property that may contain hazardous materials or hazardous waste. No information has been found concerning potential soil or groundwater contamination.

Grealish Revocable Living Trust (Parcel Owner No. 7) – The Grealish Revocable Living Trust property appears to have equipment, containers, and several operating oil wells on their property that may contain hazardous materials or hazardous waste. No information has been found concerning potential soil or groundwater contamination.

B H Investments (Parcel Owner No. 8) – B H Investments appears to have equipment, containers, and several operating oil wells on their property that may contain hazardous materials or hazardous waste. No information has been found concerning potential soil or groundwater contamination.

Burlington Northern Santa Fe Railroad (BNSF) (Parcel Owner No. 9) (Six Parcels) – The BNSF railroad right of way and rail yard may contain hazardous materials or hazardous waste. No information has been found concerning potential soil or groundwater contamination.

Parcels Ranked 3

Twenty-two parcels, partially located within or adjoining the proposed Westside Parkway, were ranked 3. Parcels ranked 3 have the potential to be contaminated with hazardous waste due to past activities that have taken place on the parcel, or that have the potential to impact the proposed right of way due to known or suspected hazardous waste located on the parcel. These parcels are listed in Table 3.2-5.

All parcels with the potential for hazardous waste contamination were assigned a hazardous waste ranking. Sixteen other parcels were evaluated and determined to not have a substantial potential for hazardous waste. These parcels were identified as NR.

3.3 NATURAL ENVIRONMENT

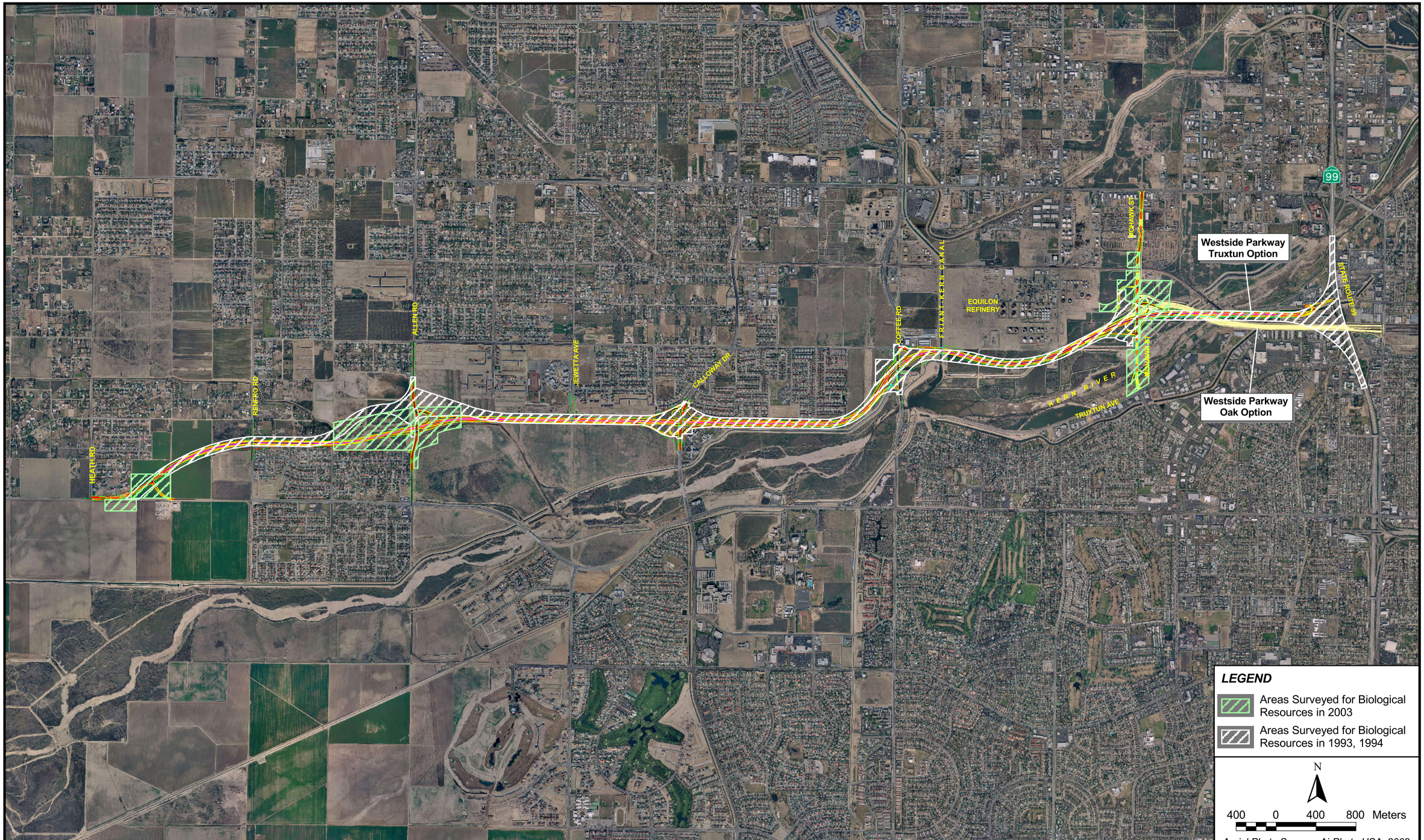
This section of the document discusses natural communities of concern. The section is a summary of the information provided in the Natural Environment Study Report prepared in 2005. The focus of this section is on biological communities, not individual plant or animal species. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are discussed below in Section 3.3.1, Terrestrial Vegetation Types. Special-status plant and animal species are discussed in Section 3.3.2, Special-status-Species. Wetlands and other waters are also discussed in Section 3.3.3, Waters of the U.S.

Biological studies covering most of the Westside Parkway alignment were done in 1993 and 1994 as part of the State Route 58 Route Adoption project. Minor adjustments took the Westside Parkway alignment outside of the Tier 1 alignment for SR58 at the following locations:

- Minor realignment of Stockdale Highway to connect with the Westside Parkway. This proposed intersection location is currently in a fallow agricultural field.
- The alignment has changed through the RRBWSD spreading basins, and the Allen Road interchange with the Westside Parkway has been modified to reduce the amount of RRBWSD land that would be taken by the freeway. This modification would reduce disturbance to an area dominated by annual grasses and forbs.
- The Mohawk Street extension south of Rosedale Highway to Truxtun Avenue would cross ruderal land, non-native grassland, Great Valley cottonwood riparian forest and developed land.

Biological surveys of these areas were conducted in 2003. Figure 3.3-1 shows the areas of the Westside Parkway alignment that were surveyed in 1993-1994 and 2003. Biological surveys were not done along Mohawk Street from Rosedale Highway south to a point about 200 meters (650 feet) north of the BNSF railroad tracks or along the alignment of the proposed Oak Street Option east of SR99 because these areas are completely developed and contain no biological resources.



BIOLOGICAL RESOURCES SURVEY AREAS

Project No. 29866227	March 2005	Westside Parkway Project	Bakersfield, California	Figure 3.3-1

3.3.1 Terrestrial Vegetation Types

Vegetation

Vegetative types in the study area of the Westside Parkway alignment include the following:

- Great Valley cottonwood riparian forest
- Non-native grassland
- Agricultural lands
- Urban developed lands, including ruderal lands adjacent to residential, commercial, and industrial uses

Most of the vegetation on undeveloped areas of the alignment has been subject to human-caused disturbance. The areas with the greatest amount of natural vegetation include the RRBWSD spreading basins and the Mohawk Street crossing of the Kern River. The former area was likely a combination of native vegetation types historically, while the latter has been substantially altered by diversion of surface water flows. The project area does not include valley sink scrub or valley saltbush scrub habitats, although scattered shrubs (common saltbush, *Atriplex polycarpa* and big saltbush, *Atriplex lentiformis*) are mixed in with non-native grasses in the RRBWSD spreading basins. The spreading basins also contain a few isolated Fremont cottonwood trees (*Populus fremontii*) and willow (*Salix* sp.) shrubs.

Great Valley Cottonwood Riparian Forest

This plant community is of poor quality within the project limits. It occurs at the edges of the Kern River at the proposed Westside Parkway and Mohawk Street extension crossings. In addition, there are elements (scattered cottonwood trees and willow shrubs) in the vicinity of the Westside Parkway within the RRBWSD spreading basins. At both locations, there are a few, widely separated Fremont cottonwoods, willows, and mule fat (*Baccharis salicifolia*). Plants in the understory included a number of non-native species, such as curly dock (*Rumex crispus*), tree tobacco (*Nicotiana glauca*), cocklebur (*Xanthium strumarium*), and castor bean (*Riccinus communis*).

Despite its disturbed and poorly developed state, riparian areas at the Kern River provides habitat value to wildlife. During the April 23, 2003 survey, red-tailed hawks (*Buteo jamaicensis*) and turkey vultures (*Cathartes aura*) were observed foraging overhead. Tracks and scat of San Joaquin kit fox (*Vulpes macrotis mutica*) were found in the river bottom at the proposed Mohawk Street crossing and on the banks on the north side. California ground squirrels (*Spermophilus beecheyi*) and small mammal burrows were also found in the river bank on the north side. Other wildlife species sighted during this and other surveys for the project included killdeer (*Charadrius vociferus*), northern mockingbird (*Mimus polyglottos*), Say's phoebe (*Sayornis saya*), desert cottontail (*Sylvilagus audubonii*), and black-tailed jackrabbit (*Lepus californicus*). Anna's hummingbirds (*Calypte anna*) were observed feeding on tree tobacco plants in-flower.

This reach of the Kern River has some less intensive land uses adjacent to it, including a city park on the south side and low-density oil fields on the north side. Those uses, combined with the linear nature of the river, make it valuable to some wildlife species, including the kit fox, as a travel and movement corridor.

Non-Native Grassland

Non-native grassland in the project area occurs in the RRBWSD spreading basins, along the Westside Parkway alignment east of Coffee Road, and in the low-density oil fields along Mohawk Street north of the Kern River crossing. These areas have been subject to previous human-caused disturbance. Some natural vegetation (mostly non-native species) has established in the spreading basins because of the periodic presence of surface water for relatively short periods of time during the year. Dominant species in this plant community are annual grasses, including rip-gut grass (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), and fescue (*Vulpia* sp.). Other species included fiddleneck (*Amsinckia* sp.), Russian-thistle (*Salsola tragus*), and telegraph weed (*Heterotheca grandiflora*).

The non-native grassland in the project area is of low to moderate habitat value. Wildlife species noted in these areas included side-blotched lizard (*Uta stansburiana*), California quail (*Callipepla californica*), killdeer, European starling (*Sturnus vulgaris*), mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), and brown-headed cowbird (*Molothrus ater*). Additional observations included desert cottontails and kangaroo rat burrows, likely those of Heermann's kangaroo rat (*Dipodomys heermanni*).

Non-native grassland has the potential to be utilized by special-status wildlife species including the blunt-nosed leopard lizard (*Gambelia sila*), western burrowing owl (*Athene cunicularia hypugea*), and San Joaquin kit fox for burrowing and travel. No special-status wildlife species were observed directly during the 1993, 1994, and 2003 surveys, but small mammal burrows and scat of kit fox were found.

Agricultural Lands

The project traverses agricultural land at the following locations:

- Stockdale Highway tie-in – currently fallow, but apparently planted previously in cotton
- Allen Road interchange – currently fallow, but formerly farmed cropland

These areas contain almost no natural or native vegetation and generally represent very low value wildlife habitat. At the proposed spreading basins east of Allen Road, colonizing plants were beginning to re-establish, primarily Russian-thistle, in 2003. Several new kangaroo rat burrows were noted, an indication that wildlife were also in the process of re-colonizing the area. The burrows could not be identified to species.

Urban Development including Ruderal Lands

Urban development along the alignment includes existing and nearly completed residential developments, industrial developments, and commercial areas. Ruderal lands are those lands located between existing roads and urban development, although some ruderal land is adjacent to croplands. Some of the extension of Mohawk Street, as well as the proposed Westside Parkway, would occur on ruderal lands.

Plant species that remain in these areas are mostly weedy non-native species, such as brome grasses (*Bromus* spp.), mustard (*Brassica* spp.), filaree (*Erodium* spp.), and cheeseweed (*Malva parviflora*). The value of these areas as habitat for wildlife is low. As with other open areas, some of the ruderal lands can be used as travel routes by species such as kit fox. Those most likely to be utilized in this manner are the ruderal lands adjacent to agriculture, rather than adjacent to urban developments. A number of generalist

wildlife species can adapt to urban settings, including residential developments. Those observed during the April 23, 2003 survey included Botta's pocket gopher (*Thomomys bottae),* common raven, house finch (*Carpodacus mexicanus*), European starling, and rock dove (*Columba livia*).

3.3.2 Special-status-Species

For purposes of this EA/DEIR, a species is considered "special-status" or "sensitive" if it is included in one of the following categories:

- Federal listing as threatened or endangered[7]
- State listing as rare, threatened, or endangered
- Proposed for Federal or State listing as threatened or endangered
- Candidates for Federal or State listing as threatened or endangered
- Federal species of concern
- Protected by the Migratory Bird Treaty Act
- Designated by the California Department of Fish and Game (CDFG) as a Species of Special Concern
- Included in the sixth edition of the California Natural Plant Society (CNPS) inventory of rare and endangered plants in California (CNPS, 2001)

Plant Species

Special-status plant species that have historically had geographical distributions that include the project areas are listed below.

Name	Scientific Name
Heartscale	*Atriplex cordulata*
Lesser saltscale	*Atriplex minuscula*
Bakersfield smallscale	*Atriplex tularensis*
Lost Hills saltbush	*Atriplex vallicola*
California jewelflower	*Caulanthus californicus*
Slough thistle	*Cirsium crassicaule*
Hispid bird's-beak	*Cordylanthus mollis* ssp. *hispidus*
Recurved larkspur	*Delphinium recurvatum*
Kern mallow	*Eremalche kernensis*
Hoover's eriastrum	*Eriastrum hooveri*

[7] The federal list of threatened and endangered species that could potential be in the project area was most recently updated on September 23, 2005 with the USFWS (USFWS Document Number 050923035255). That list is provided in Appendix D.

Name	Scientific Name
Striped adobe-lily	*Fritillaria striata*
San Joaquin woolly-threads	*Monolopia congdonii*
Bakersfield cactus	*Opuntia basilaris* var. *treleasei*
San Joaquin adobe sunburst	*Pseudobahia peirsonii*
Round woolly marbles	*Psilocarphus tenellus* var. *globiferus*
Oil neststraw	*Stylocline citroleum*
Mason neststraw	*Stylocline masonii*
San Joaquin bluecurls	*Trichostema ovatum*

Of these species, the following were specifically covered in the Biological Opinion issued by the USFWS for the State Route 58 Route Adoption project (USFWS, 1999):

- Hoover's eriastrum (also referred to as Hoover's woolly-star) – Federal-listed threatened species that is in the process of being delisted
- California jewelflower – Federal-listed endangered
- Kern mallow – Federal-listed endangered
- San Joaquin woolly-threads – Federal-listed endangered
- Bakersfield cactus – Federal-listed endangered

No special-status plant species were identified in the Westside Parkway right of way during any of the biological surveys conducted for the project. A discussion of the six species listed in the USFWS Biological Opinion is provided below.

Hoover's eriastrum (*Eriastrum hooveri*). This species is an annual member of the phlox family (Polemoniaceae). It was Federally-listed as threatened, but removed recently from the Federal list of endangered and threatened plants (USFWS, 2003). The discovery of many new populations in recent years, led to the re-evaluation of the status of the species. It has no State-listed status, but is included on the CNPS List 4 (CNPS, 2001). This is one of the plant species covered in the *Recovery Plan for Upland Species of the San Joaquin Valley, California* (USFWS, 1998).

Upon its delisting, Hoover's eriastrum was designated as a U.S. Bureau of Land Management (BLM) "sensitive species." This species will be monitored for at least five years post-delisting (until at least 2008) in accordance with Section 4 of the Federal Endangered Species Act. The post-delisting monitoring will be facilitated by BLM's implementation of its Caliente Resource Management Plan (1998). The BLM will monitor the species, as well as residual threats to Hoover's eriastrum at representative sites (USFWS, 2003).

Hoover's eriastrum responds well to favorable climatic conditions, particularly rainfall. Consequently, during years of average and above-average rainfall, the distribution of this species is one of the most widespread of listed plants. In addition to Kern County, extant occurrences are also known in Fresno, Kings, Santa Barbara, San Benito, San Luis Obispo, and Tulare Counties. Most extant occurrences are in

four locations, each defined as a metapopulation: (1) the Kettleman Hills in Fresno and Kings Counties; (2) Carrizo Plain-Elkhorn Plain-Temblor Range-Caliente Mountains-Cuyama Valley-Sierra Madre Mountains of San Luis Obispo and Santa Barbara Counties, as well as the extreme western portion of Kern County; (3) Lokern-Elk Hills-Buena Vista Hills-Coles Levee-Maricopa-Taft area of Kern County; and (4) Antelope Plain-Lost Hills-Semitropic area of Kern County (USFWS 1998, 2003).

In Kern County, extant occurrences have been reported from the Coles Levee Ecosystem Preserve, Buena Vista Lake bed, Elk Hills, Semitropic area, the Antelope Plain, and near Lost Hills. Hoover's eriastrum also occurs in limited numbers on the east side of the County, having been reported near Lamont. Munz and Keck (1968) described the habitat of this species as rolling plains below 150 meters (500 feet) in the Valley Grassland community. The original collection site of the species was 11 km (7 miles) south of Shafter. Twisselmann (1967) notes that Hoover's eriastrum is rare in the valley, growing only in wet years. Records from the California Natural Diversity Database (CNDDB) indicate sites in the vicinity of the study area.

Hoover's eriastrum often grows in colonies where competition for habitat is minimized. Within the valley saltbush and valley sink scrub habitat, it occurs in small undulating upland areas, or hillocks, and is often associated with lichen-covered soils. These soils usually show fewer numbers of annual grasses than the surrounding soils. This habitat feature of Hoover's eriastrum populations was also noted by Taylor and Davilla (1986). The species is found in valley saltbush scrub and valley sink scrub in the vicinity of the study area. The Westside Parkway alignment does not include either habitat. The occurrence of this species in non-native grassland along the alignment is possible, but unlikely. No populations were found during surveys in 1993, 1994, and 2003.

California jewelflower (*Caulanthus californicus*). This species is a rare, erect-growing annual of the mustard family (Brassicaceae). It is a Federal- and State-listed endangered species. This plant inhabits dry plains and hillsides of the Lower Sonoran Zone in the southern San Joaquin Valley and eastern San Luis Obispo County. It blooms from March through April (Munz and Keck, 1968).

Some historical records of the California jewelflower are associated with California juniper (*Juniperus californica*). Most historical collection sites are situated on relatively nonsaline, sandy-type soils. Information from the CNDDB did not indicate historical populations of California jewelflower in the study area. Taylor (1996) indicated that the historical range of this species would likely have included the study area, but the precise extent of the former range cannot be determined. Until recently, California jewelflower was known from only two extant populations, one natural and one introduced, while 38 historical occurrences were once known (Taylor and Davilla, 1988). The introduced population did not survive. Recent field surveys have documented additional natural populations. Past surveys for this species, and those conducted for this project, have not located any populations or preferred habitat within the study area; therefore, it is unlikely that the species is present in the alignment.

Kern mallow (*Eremalche kernensis*). This species is an erect annual of the mallow family (Malvaceae). This herbaceous plant is a Federally-listed endangered species and is a CNPS List 1B species (CNPS, 2001), but does not have listed status with the State of California. It is addressed in the *Recovery Plan for Upland Species of the San Joaquin Valley, California* (USFWS, 1998).

The taxonomic status of Kern mallow is uncertain; it is unclear what taxonomic characteristics should be used to separate Kern mallow from Parry's mallow (*Eremalche parryi*) (Bates, 1993). Kern mallow distribution is restricted to saltbush scrub and grassland habitats. The distribution of this species falls within an approximately 100 square kilometer (40 square mile) area in the Lokern region (USFWS, 1998). During analysis in 1995 by an ad hoc Botanical Work Group for the Kern County Valley Floor HCP, a number of locations of Kern mallow were reported outside of the Lokern region, primarily to the south and southeast. However, subsequent analysis of the outlying populations conducted for the Recovery Plan indicated that those plants are either *E. parryi* or desert mallow (*E. exilis*).

Information from the CNDDB did not indicate historical populations of Kern mallow in the study area. Dr. Dean Taylor, Principal Botanist for Biosystems Analysis, Inc., has indicated that the historical range of the species would likely have included the study area, but the precise extent of the former range cannot be determined (personal communication, 1996). Limited habitat for Kern mallow is present in the study area and the species was not found during the surveys conducted in 1993, 1994, and 2003. Therefore, the species is not expected to occur along the Westside Parkway alignment.

San Joaquin woolly-threads (*Monolopia congdonii*). This species is a small annual of the sunflower family (Asteraceae). It is a Federal-listed endangered species with no State-listed status. The San Joaquin woolly-threads is also a CNPS List 1B species (CNPS, 2001) and is included in the *Recovery Plan for Upland Species of the San Joaquin Valley, California* (USFWS, 1998). It is found primarily in saltbush scrub and grassland in Kern, Fresno, Santa Barbara, San Benito, and San Luis Obispo Counties. The largest metapopulation occurs on the Carrizo Plain in San Luis Obispo County (USFWS, 1998). Reported populations in Kern County represent about one-third of all extant populations. Most of the Kern County populations are in the vicinity of Semitropic, Lost Hills, and Blackwell's Corner. Isolated occurrences have been reported from the vicinity of Bakersfield (USFWS, 1998). This species also occurs on Kern Water Bank lands and on BLM-managed lands in Fresno, Kings, and San Benito counties. It is usually in sparse valley saltbush scrub and is essentially restricted to sandy soils (Taylor and Buck, 1992).

According to CNDDB records, the last recorded observation of this species in the vicinity of the study area was in 1954. The CNDDB lists the sites as possibly extirpated. The closest populations of San Joaquin woolly-threads occur approximately 1.6 to 3.2 km (1 to 2 miles) south of Stockdale Highway and approximately 1.6 to 3.2 km (1 to 2 miles) east of State Route 43 (City of Bakersfield and Kern County, 1993). No populations of San Joaquin woolly-threads were located during surveys of the study area and the species is not expected to be present along the alignment.

Bakersfield cactus (*Opuntia basilaris* var. *treleasei*). This species is in the cactus family (Cactaceae). Bakersfield cactus is a Federal- and State-listed endangered species and is on CNPS List 1B (CNPS, 2001). It is addressed in the *Recovery Plan for Upland Species of the San Joaquin Valley, California* (USFWS, 1998). It occurs only in Kern County, in the same general areas as Vasek's clarkia, striped adobe-lily, San Joaquin adobe sunburst, and Comanche Point layia. Locations with the greatest number of clumps of this plant still occurring include Comanche Point, Kern Bluff, north of Wheeler Ridge, and Sand Ridge (USFWS, 1998). While some potential habitat for Bakersfield cactus occurs in the study area,

the species has never been observed there and was not found during surveys of the area. It is not expected to occur along the alignment.

Animal Species

The following special-status wildlife species have an historic geographical distribution that includes the project area:

Name	Scientific Name
Kern shoulderband	*Helminthoglypta callistoderma*
Conservancy fairy shrimp	*Branchinecta conservation*
Longhorn fairy shrimp	*Branchinecta longiantenna*
Vernal pool fairy shrimp	*Branchinecta lynchi*
Vernal pool tadpole shrimp	*Lepidurus packardi*
Foothill yellow-legged frog	*Rana boylii*
Blunt-nosed leopard lizard	*Gambelia sila*
Southwestern pond turtle	*Clemmys marmorata pallida*
San Joaquin kit fox	*Vulpes macrotis mutica*
Tipton kangaroo rat	*Dipodomys nitratoides nitratoides*
Giant kangaroo rat	*Dipodomys ingens*
San Joaquin pocket mouse	*Perognathus inornatus*
San Joaquin antelope squirrel	*Ammospermophilus nelsoni*
Buena Vista Lake shrew	*Sorex ornatus relictus*
Western burrowing owl	*Athene cunicularia hypugea*
Swainson's hawk	*Buteo swainsoni*
LeConte's thrasher	*Toxostoma lecontei*
Golden eagle	*Aquila chrysaetos*
Least Bell's vireo	*Vireo bellii pusillus*
Prairie falcon	*Falco mexicanus*
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*
Western snowy plover	*Charadrius alexandrinus nivosus*
Tricolored blackbird	*Agelaius tricolor*
California condor	*Gymnogyps californianus*
Loggerhead shrike	*Lanius ludovicianus*

Of these species, the following were specifically covered in the Biological Opinion issued by the USFWS for the State Route 58 Route Adoption project (USFWS, 1999):

- San Joaquin kit fox – Federal-listed endangered and State-listed threatened
- Tipton kangaroo rat – Federal- and State-listed endangered
- California condor – Federal- and State-listed endangered
- Least Bell's vireo – Federal- and State-listed endangered
- Blunt-nosed leopard lizard – Federal- and State-listed endangered

In addition to these four species, other special-status species that are known to be present in the project area are the loggerhead shrike (State species of concern), Swainson's hawk (State-listed threatened) and western burrowing owl (State species of concern). Since preparation of the Biological Opinion, the Buena Vista Lake shrew has become a Federal-listed endangered species, and is therefore discussed here in more detail.

San Joaquin kit fox (*Vulpes macrotis mutica*). This is a Federal-listed endangered and State-listed threatened species. It is also addressed by the *Recovery Plan for Upland Species of the San Joaquin Valley, California* (USFWS, 1998).

The historic range of this subspecies was the San Joaquin Valley, western Sacramento Valley and portions of the Inner Coast Range, such as the Carrizo Plain, Salinas Valley, Temblor Range, Cholame Hills, and Elkhorn Plain. This fox has declined throughout its range due to loss of habitat, as well as other possible factors, such as predator control and pest control programs and interspecific competition, primarily with coyotes (B. Cypher et al., 2000). The present day occurrence is comprised of fragmented populations that utilize remaining natural lands, mostly from Merced County southward to southern Kern County. The largest remaining populations occur in western Kern County in and near the Elk Hills and the Buena Vista Valley, as well as in the Carrizo Plain in San Luis Obispo County (USFWS, 1998).

Habitats used by kit fox are mostly grassland and saltbush scrub. However, it is quite tolerant of human-caused disturbances and will, to an extent, utilize oil fields and cultivated agriculture lands. Kit fox are known to utilize oil fields, even those with intensive disturbance, for all life-history activities (foraging, cover, reproduction, traveling, etc.), although in lower densities relative to undisturbed areas (California Energy Commission, 1996). Cypher et al., (2000) found no strong evidence of kit fox being adversely affected by oil field activities.

In Kern County, kit fox are concentrated on the west side of the valley from the Lokern Natural Area to Maricopa. Other locations of occurrence include: (1) areas south and east of the Kern National Wildlife Refuge; (2) areas north and west of the City of Bakersfield; and (3) along the Kern River floodplain. Kit fox appear to be affected by precipitation-related prey availability. Present-day kit fox abundance in Kern County is highly dynamic, which has led to recommendations of habitat preservation in large blocks (Cypher et al., 2000).

Sign of kit fox (potential dens and scat) were found along the Westside Parkway alignment during the 1993, 1994, and 2003 biological surveys. This species is likely to use the Kern River in the study area as a travel corridor. In addition, this species could also forage in areas of non-native grassland and agriculture along the alignment.

Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*). This subspecies is a Federal- and State-listed endangered species. The Tipton kangaroo rat is also a species included in the *Recovery Plan for Upland Species of the San Joaquin Valley, California* (USFWS, 1998). It is one of three subspecies of the San Joaquin kangaroo rat (*D. nitratoides*). Historically, it ranged throughout much of the southern San Joaquin Valley from Kings County to central Kern County. Current distribution includes habitats with a high water table. In Kern County, scattered populations are restricted primarily to valley sink scrub east of

the California Aqueduct. Specific locations include areas east and south of the Kern National Wildlife Refuge, east of Maricopa, the western border of the Buena Vista Lake bed, Coles Levee Ecosystem Preserve, and in an area near Lamont southeast of Bakersfield (USFWS, 1998). The study area does not traverse valley sink scrub habitat. As such, this species is not expected to occur along the alignment.

Buena Vista Lake shrew (*Sorex ornatus relictus*). This subspecies is a Federal-listed endangered species (USFWS, 2002) and is a State species of concern. The Buena Vista Lake shrew is also addressed in the *Recovery Plan for Upland Species of the San Joaquin Valley, California* (USFWS, 1998).

It is a subspecies of the ornate shrew (*S. ornatus*). The Buena Vista Lake shrew historically occurred in a variety of mesic habitats, such as lakes, meadows, riparian zones, marshes, and valley sink scrub. Historic records for this species include the north and east sides of Buena Vista Lake and a location near Buttonwillow. Areas that still contain suitable habitat for this species include the following (from Williams and Harpster, 2001; Kelly, pers. comm., 2004):

- Buena Vista Aquatic Recreation Area
- Coles Levee Ecosystem Preserve
- Goose Lake
- Former The Nature Conservancy (TNC) Kern Lake Preserve (Gator Pond area)
- Sand Ridge Flood Control Basin
- Kern Fan Element, near the terminus of the Kern River channel
- Kern National Wildlife Refuge
- Lake Woollomes, an equalizing reservoir on the Friant-Kern Canal
- Kern Fan Recharge Area (part of the Pixley National Wildlife Refuge)
- Creighton Ranch

The last two are in Tulare County. The other eight sites are in Kern County. Williams and Harpster (2001) conducted live-trapping surveys in 1999 and 2000 at Buena Vista Aquatic Recreation Area, Coles Levee Ecosystem Preserve, Kern and Pixley National Wildlife Refuges, Lake Woollomes, and the Kern Fan Recharge Area. Access was not granted to the other four sites. Prior to the surveys by Williams and Harpster (2001), recent occurrence records had been limited to captures during live-trapping at the former TNC Kern Lake Preserve and one dead individual at the Kern National Wildlife Refuge (Maldonado, 1992, 1994; Collins, pers. comm. 1996). The latter is managed primarily for waterfowl hunting, not for sensitive, threatened, and endangered species. Williams and Harpster (2001) captured individuals of this subspecies at the Kern National Wildlife Refuge (support information for the previous report of a dead individual there), Coles Levee Ecosystem Preserve, and the Kern Fan Recharge Area. This species has also been trapped at Goose Lake (Kelly, pers. comm., 2004). Those recently trapped are being considered as *Sorex inornatus relictus*, although taxonomic verification has not been completed.

The USFWS (2004) identified the following critical habitat areas covering 4,649 acres for this species:

- Units 1a, 1b, and 1c – Kern National Wildlife Refuge. East and west of Goose Lake Canal.
- Unit 2 – Goose Lake East of Interstate 5. South of State Route 46.

- Unit 3 – Kern Fan Recharge Area. East of Interstate 5 and State Route 43. North of Panama Lane.
- Unit 4 – Coles Levee. North and south of State Route 119.
- Unit 5 – Kern Lake. East of Interstate 5 and north of New Rim Ditch (north of Copus Road)

The USFWS formally designated Unit 5, known as the Kern Lake Preserve, as critical habitat on January 24, 2005 (USFWS, 2005). The preserve covers a total of 84 acres. The other four proposed units were excluded in the final rule because landowners of these units have made commitments to provide substantial protections for the shrew.

The Kern River, where the Westside Parkway Truxtun Option and the Westside Parkway Oak Option and the Mohawk Street extension would cross, is a dry sandy wash for much of the year. Vegetative cover in the river channel is sparse and characterized by non-native species that readily re-establish after the scouring effects of surface flow. The habitats crossed by the proposed project do not have the mats of wetland plants or build-up of detritus that are components of Buena Vista Lake shrew habitat. The Kern River channel and floodplain in the location of project crossings do not represent habitat for the shrew.

California condor (*Gymnogyps californianus*). This is a Federal- and State-listed endangered species. It is a permanent resident of semi-arid, rugged mountain ranges surrounding the southern San Joaquin Valley, including the Coast Ranges from Santa Clara County south to Los Angeles County, the Transverse Ranges, Tehachapi Mountains, and southern Sierra Nevada. Based on historic patterns and the small amount of habitat to be disturbed, it is very unlikely that the project would impact the California condor.

Loggerhead shrike (*Lanius ludovicianus*). The loggerhead shrike is a State species of concern. It preys on insects and small reptiles and birds. Known as the "butcher bird," it often impales prey on sharp objects, such as barbed wire and thorns. Loggerhead shrikes occur in a variety of habitats, such as grasslands, saltbush scrub, and riparian scrub and woodland. Tolerant of human presence, this bird is often observed in oil fields and in suburban areas. Nesting takes place in trees and large shrubs. One loggerhead shrike was observed during the 2003 survey in the Rosedale-Rio Bravo Water Storage District spreading basins.

Western burrowing owl (*Athene cunicularia hypugea*). This is a State species of concern. During 2003, CDFG received a petition to list the burrowing owl as a State threatened or endangered species. Following a review of this species' status, the CDFG staff recommended to the California Fish and Game Commission that the burrowing owl not be listed. On December 4, 2003, the Commission concurred with the staff recommendation and declined to list the burrowing owl as a State-threatened or endangered species.

The burrowing owl feeds mostly on invertebrates and small mammals. It uses burrows and dens made by California ground squirrels, kit fox, and other burrowing mammals. Conversion of suitable habitat, such as non-native grassland, to cultivated agriculture has contributed to the decline of this species. Another factor has been the control of ground squirrels upon which this species depends for shelter and nest sites.

Burrowing owls are known from the study area. During the 1993 and 1994 surveys, this species was observed near, but not along, the alignment.

Swainson's hawk (*Buteo swainsoni*). This is a State-listed threatened species. Preferred habitats include oak woodlands and riparian woodlands adjacent to grassland or agricultural land, where much of their foraging occurs. Conversion of grassland to cultivated agriculture is thought to be a major reason for the decline of this species. Swainson's hawks likely nested more frequently in the vicinity of the study area, but conversion of natural habitats to intensive agriculture and residential use have reduced the available foraging habitat. A few pairs have continued to nest along the Kern River near the study area. Consequently, agricultural land and non-native grassland within the study area may continue to be used for limited foraging by Swainson's hawks.

Least Bell's vireo (*Vireo bellii pusillus*). This is a State- and Federal-listed endangered species. Nesting habitat is primarily riparian scrub and riparian woodland with a dense understory up to 9 to 10 feet and occasional taller trees used as song posts. The least Bell's vireo has declined due to loss of riparian habitat. Brood parasitism by brown-headed cowbirds has also contributed to the decline. Alteration of the Kern River channel and surrounding riparian areas have removed most potential breeding habitat for this species near the study area. No least Bell's vireos were observed during field surveys for this project. This species could utilize riparian habitat in the Kern River occasionally during migration.

Blunt-nosed leopard lizard (*Gambelia sila*). This is a Federal- and State-listed endangered species. It is one of 15 wildlife species covered in the *Recovery Plan for Upland Species of the San Joaquin Valley, California* (USFWS, 1998). The blunt-nosed leopard lizard is also classified by the State of California as a Fully Protected species.

The historic range of this species stretches from the southern edge of the Sacramento-San Joaquin Delta southward to Kern, Santa Barbara, and San Luis Obispo counties. The current range is substantially smaller due primarily to habitat conversion to other uses. Blunt-nosed leopard lizard habitat is generally characterized by vegetative ground cover of 50 percent or less, dominated by a relatively short grass component. Vegetation types utilized include grassland, saltbush scrub, and valley sink scrub. There are no current population estimates for the blunt-nosed leopard lizard (USFWS, 1998).

In Kern County, blunt-nosed leopard lizard populations are concentrated in the Elk Hills, Lokern area, Buena Vista Valley, near Poso Creek north of Bakersfield, on the Antelope Plain, from McKittrick south to Maricopa, and at the base of the Tehachapi Mountains (USFWS, 1998). Blunt-nosed leopard lizards have been reported from the vicinity of the project area in valley saltbush scrub. Two 1974 CNDDB reports from near the alignment were from areas since converted to agriculture. The most suitable habitat near the study area is in valley saltbush scrub and valley sink scrub, two vegetation types not found along the alignment. Blunt-nosed leopard lizards could potentially occur in non-native grassland along the alignment, but the likelihood is low. None were observed during field surveys conducted in 1993, 1994, and 2003.

3.3.3 Waters of the U.S.

The U.S. Army Corps of Engineers has jurisdiction over all waters of the U.S. and wetland habitats that meet the criteria outlined in the *Wetlands Delineation Manual* (1987). The U.S. Army Corps of Engineers regulates discharge of dredge or fill material into all waters of the U.S. defined in Section 404 of the Clean Water Act. Waters of the U.S. are also defined in 33 CFR to include intermittent streams as well as navigable rivers.

The CDFG also has jurisdiction over wetlands as outlined in the California Fish and Game Code Section 1602. Any project that could affect the bank or bed of a stream with wildlife or fish habitat values must give advance notification to CDFG. Upon notification, the CDFG has the opportunity to execute a Streambed Alteration Agreement. Although the CDFG does not have a formal definition of watercourses under its jurisdiction, its practice has been to include any "blue line" stream and canal shown on a U.S. Geological Survey (USGS) topographic map with a definable bed and bank.

Surveys for jurisdictional wetlands and waters of the U.S. were performed according to the Routine On-Site Determination Methods described in the 1987 U.S. Army Corps of Engineers *Wetland Delineation Manual*. Wetland delineation surveys were conducted for the SR58 Route Adoption project during the spring of 1993 and 1994. No wetlands were identified within the Westside Parkway and Mohawk Street extension alignments. The U.S. Army Corps of Engineers concurred with the Tier 1 findings in 1995 (see Appendix D). Consultation with the Army Corps of Engineers is continuing on the Tier 2 project.

The Westside Parkway would cross the Kern River at one of two potential locations depending on the option selected. The Mohawk Street extension would also cross the Kern River. The Kern River channel at the project crossings is a jurisdictional water of the U.S. The total area to be impacted by the river crossings is 0.24 hectare (0.59 acre) for the Westside Parkway Truxtun Option, 0.07 hectare (0.18 acre) for the Westside Parkway Oak Option, and 0.01 hectare (0.02 acre) for the Mohawk Street extension. It is anticipated that the crossing would be permitted by the U.S. Army Corps of Engineers through use of Clean Water Act Section 404 Nationwide Permits 14 (linear transportation corridors) and 33 (temporary construction access and dewatering).

The Westside Parkway alignment crosses the RRBWSD spreading basins west of Allen Road. The spreading basins have been excavated largely out of upland soils adjacent to Goose Lake Slough. These basins, and the slough within them, typically dry out each year and are managed by periodic removal of silt and vegetation, and by mowing, brush raking of tumbleweeds, and herbicide application. The recharge basins do not qualify as jurisdictional waters because portions of the basins were excavated from upland soils, the hydrology of the basins is artificially maintained by water pumped in by canal, and the basins are maintained (periodically cleared of vegetation).

Functions and Values of Waters of the U.S.

The Kern River is the only significant stream in the Bakersfield area with a watershed that covers more than 623,400 hectares (2,400 square miles) of Kern and Tulare counties. Most of the water from the Kern River watershed is fully diverted and used in an average year. However, the river does reach the valley floor during wet years.

The Kern River channel is approximately 120 meters (390 feet) wide at the location where the alignment would span the river. The channel at that point is relatively flat with a sandy bottom and confined on both the north and south banks by flood control levees. The banks of the levees are reinforced with rip-rap and debris.

The flood control levees confine the river to the low-flow channel and the vegetation that border the toe of the levees. The former floodplain outboard of the levees is extensively developed and does not currently function as a floodplain. This is due in part to the construction of Isabella Dam in 1953 which significantly reduced the flood potential along the lower Kern River. The remaining river channel offers very little capacity to maintain adequate flood flow. However, maintenance of the channel would have a negative effect on its capacity for stabilization of sediment and removal of toxicants.

The coarse textured sediments that compose the channel bottom make the Kern River and adjacent basins excellent for groundwater recharge. This characteristic is exploited by the local water resource agencies that have constructed groundwater recharge basins to replenish groundwater resources. The Kern River channel has a low capacity of effectiveness for groundwater discharge due to the low regional water table.

The Kern River channel and adjacent floodplain have moderate wildlife habitat values. Revegetation efforts have established riparian trees and shrubs on the banks of the levees and floodplain terraces. Common tree species include Fremont cottonwood, Goodding's black willow (*Salix gooddingii*), and western sycamore (*Platanus racemosa*). A narrow band of vegetation occurs along the margins of the Kern River channel that is dominated by an invasive non-native species, water hyacinth (*Eichhornia crassipes*), but includes native species such as cattails (*Typha latifolia*), water primrose (*Ludwigia peploides*), nutsedge (*Cyperus esculentus*), water smartweed (*Polygonum lapathifolium*), and seep monkeyflower (*Mimulus guttatus*). The zone varies from 1 to 4 meters (3 to 12 feet) wide but may be more restricted during dry years when the natural flow of the Kern River is entirely diverted.

The Kern River channel and adjacent non-native grassland and Great Valley cottonwood riparian forest offer foraging and breeding habitats for the San Joaquin kit fox. Other special-status wildlife species have also been documented from the Kern River corridor in Bakersfield or are suspected to occur in the vicinity. Other mammals that inhabit and forage in the remaining riparian vegetation communities include black-tailed jackrabbit, desert cottontail, and coyote. Birds found in this community include Bullock's oriole and red-winged blackbird.

No special-status plant species occur in or adjacent to the Kern River channel in Bakersfield (City of Bakersfield, 1988). Therefore, the Kern River possesses a moderate capacity for wildlife production and export, a moderate diversity and abundance of terrestrial and aquatic species, and moderate value for its uniqueness and heritage. The moderate value of this site for uniqueness and heritage is enhanced by the Kern River channel's function as habitat for special-status species but reduced by habitat fragmentation and channel maintenance disturbance.

Functions and Values of RRBWSD Spreading Basins

The hydrology of the RRBWSD intake canal in the project area is managed by RRBWSD for conveyance of water used for irrigation and groundwater recharge. Water is transferred by canal to various basins

where it is allowed to percolate through the coarse-grained alluvial soils to replace water removed from wells. The recharge basins are periodically scraped to prevent the finer silts and clays from clogging the interstitial pore spaces and reducing the rate of infiltration. However, vegetation along the banks of the basins, the intake canal, and the canal network is allowed to remain to stabilize the bank.

The spreading basins support small areas of poorly developed Great Valley cottonwood riparian and valley freshwater marsh vegetation comprised of Fremont cottonwood, Gooddings' willows, cattails, bulrushes, and rush (*Juncus* spp.) along the banks. Associated wildlife includes bird species, such as red-winged blackbird, black-necked stilt, American avocet, and waterfowl. During the 2003 surveys, a loggerhead shrike was observed on the site. Some of these species use the spreading basins for foraging, resting, and limited nesting. The spreading basins support populations of common amphibians, such as Pacific treefrog (*Pseudoacris regilla*) and western toad (*Bufo boreas*). Mammals use these areas mostly for movement and foraging. Fluctuating water levels and routine silt and vegetation control activities create unsuitable and unstable habitat for many species.

3.4 SOCIAL AND ECONOMIC ENVIRONMENT

3.4.1 Land Use

Existing Land Use Patterns

The City of Bakersfield has experienced rapid and sustained population growth since 1970, increasing from 69,096 in 1970 to 247,057 in 2000 (Bakersfield, 2002). The population grew 41.3 percent from 1990 to 2000. This rapid growth has spurred residential development throughout the community, with single-family home construction increasing by 47.8 percent from 1990 to 2000 and multi-family housing construction increasing by 11.4 percent over the same decade. A total of 20,735 new housing units were constructed in the City over the last 12 years. Almost 90 percent of the new homes were typical single-family units. An average of 1,728 new housing units are constructed each year in Bakersfield (Bakersfield, 2002). Much of this growth occurred in west Bakersfield. Single-family homes remain relatively affordable in Bakersfield, with a median sales price of $99,000 for a three bedroom house in 2002 (Bakersfield, 2002). As a result, people working in the greater Los Angeles area are beginning to locate in Bakersfield. Because of the population growth of the community, availability of developable land and the relatively low cost of homes; residential development, as well as supporting commercial infrastructure, are expected to continue at a rapid pace throughout much of the City, including the western half of the metropolitan area.

Land uses along the western portion of the Westside Parkway alignment are comprised primarily of residential and water storage uses. East of Renfro Road there are homes and subdivisions that were established in the 1980s and 1990s. The property west of Allen Road is utilized by the RRBWSD. East of Calloway Drive there is a residential subdivision established in the 1980s and 1990's. In the area where the Westside Parkway alignment crosses the Kern River, it traverses some open space (i.e., within and adjacent to the Kern River), industrial, and commercial areas. On the eastern portion of the alignment, the Kern River is the dominant feature. Land uses along this portion of the Kern River are established by the Kern River Parkway Master Plan and include active recreation areas such as parks, pedestrian and bike paths, and equestrian staging areas. There are also natural and restored open space areas, riparian

areas and land set aside as an education studies area. Additionally, near the proposed Mohawk Street interchange, is property that is owned and operated by Shell Oil Products U.S. (SOPUS).

Right of Way That Has Been Acquired

The City of Bakersfield initiated acquisition of the right of way for the Westside Parkway on January 1, 2001. At present, a total of about $15.8 million has been spent to acquire 152.23 acres of right of way. The most recent right of way acquisition took place on June 1, 2005. All of the land that has been acquired was vacant; therefore, there were no relocations. The acquisitions are pending certification per the Uniform Relocation Assistance and Real Property Acquisition Policies Act (42 U.S.C. 4601, *et seq.*). Appendix H contains a table indicating the date, size, and parcel number of each right of way acquisition. Those acquisitions are also shown on a figure of the right of way for the Westside Parkway provided in Appendix H.

Existing Zoning

Zoning designations adjacent to the proposed Westside Parkway alignment include rural residential, suburban residential, urban estate residential, open space, general commercial, service industrial, and heavy industrial.

Adopted Land Use Plans

The Metropolitan Bakersfield General Plan guides development within the project area. The Metropolitan Bakersfield General Plan was adopted by the City of Bakersfield in December 2002 and became effective on February 23, 2003. Figure 3.4-0 illustrates the land use in the vicinity of the project limits.

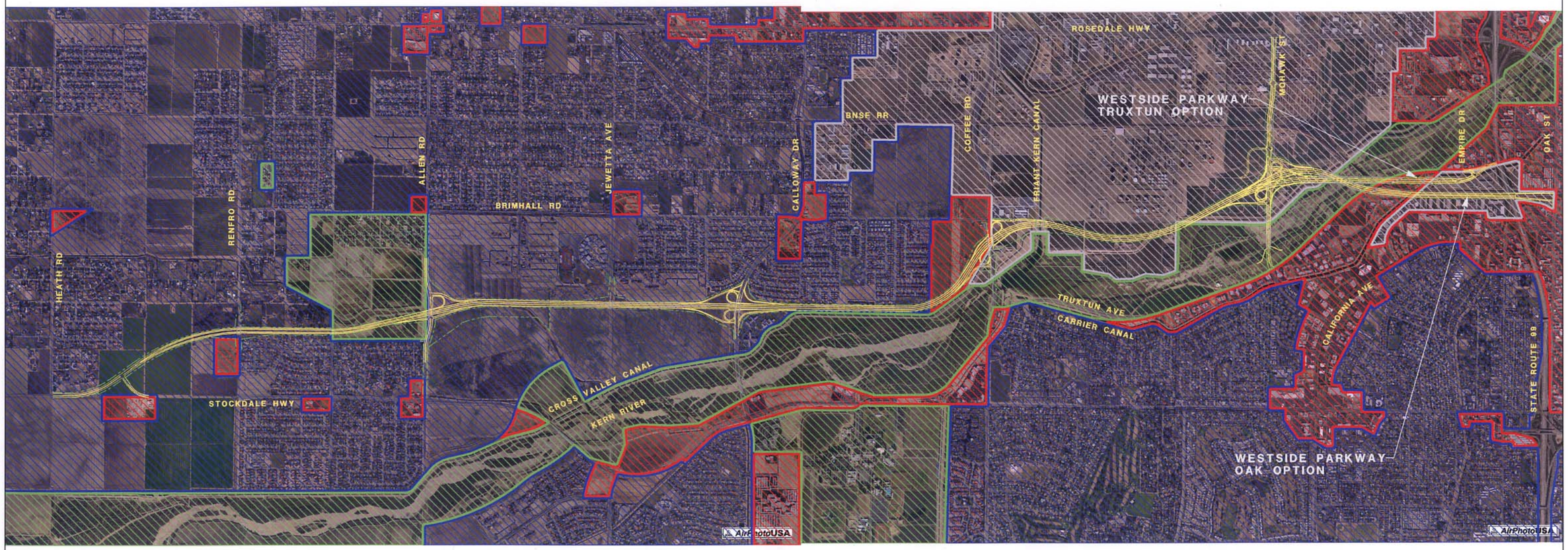
The Westside Parkway has been identified as a future freeway corridor within the City's General Plan and the proposed project is consistent with the City's General Plan Circulation Element. As indicated in the Metropolitan Bakersfield General Plan, the Westside Parkway would assist in providing the necessary capacity for east-west travel and relieve congestion on Rosedale Highway, California Avenue, and other east-west routes. Additionally, the proposed project is necessary to support the land use element.

Current and planned residential land uses adjacent to the Westside Parkway project occur north and south of the project alignment between Heath Road and Coffee Road. These existing and future residential uses are outside the area of direct potential impact.

3.4.2 Socioeconomics and Environmental Justice

A Community Impact Assessment was completed for the proposed project in March 2005. This section summarizes information provided in that report.

All projects involving a federal action (funding, permit, or land) must comply with Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,* signed by President Clinton on February 11, 1994. This Executive Order directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low income is defined based on the Department



LEGEND

- RESIDENTIAL
- COMMERCIAL
- OPEN/RESOURCE/PARK
- INDUSTRIAL

NOT TO SCALE

LAND USE MAP

Project No.: 29866227	Date: March 2005	Project: WESTSIDE PARKWAY	FIGURE 3.4-0

of Health and Human Services poverty guidelines. For 2005, this is $16,090 for a family of three, which is close to the average household size in Bakersfield.

All considerations under Title VI of the Civil Rights Act of 1964 and related statutes have also been included in this project. Caltrans' commitment to upholding the mandates of Title VI is evidenced by its Title VI Policy Statement, signed by the Director, which can be found in Appendix G of this document.

Population/Demographics

According to the U.S. Bureau of the Census (U.S. Census) data for the year 2000, the total population for the County was 661,645. In terms of age approximately 31.9% of the population is age 19 or under and 9.4% of the population is 65 years of age or older. A summary of racial characteristics indicates that approximately 61.6% are white, 6.0% are African American, 3.4% are Asian, and 29.0% belong to other categories. In the 2000 census, respondents were able to identify themselves by race and point of origin. Without regard to race, 38.4% of respondents identified themselves as being of Hispanic origin. The average household size[8] is 2.86 persons per housing unit. The median family income in the County is $35,446.

Bakersfield's population is ranked as the eighth fastest growing within the State of California. According to the 2000 U.S. Census data, the total population of the City is 247,057. In terms of age, 27.0% of the population is 19 or under, and 9.6% of the population is 65 years of age or older. A summary of the racial characteristics indicates that approximately 62.0% are white, 9.2% are African American, 4.3% are Asian, and 24.5% belong to other categories. Without regard to race 37.3% of respondents identified themselves as being of Hispanic origin. The average household size is 2.92 persons per housing unit. The median family income in the City is $39,982.

The project area spans five separate Census Tracts. From east to west the project area extends across Census Tracts 5.07, 18.02, 38.12, 38.13, and 38.09. Total population of the five tracts is 18,264. Collectively, in terms of age, 6.5% are under the age of 5; 32.8% percent are age 19 or under; and 8.6% are 65 years of age or older. Averaging racial characteristics for all five tracts indicates that approximately 83.6% are white, 5.5% are African American, and 3.4% are Asian. Without regard to race, 12.8% of respondents identified themselves as being of Hispanic origin. The average persons per household is 2.66, very similar to the County and the City of Bakersfield. The median family incomes for the five census tracts are presented in Table 3.4-1.

Table 3.4-1. Project Area Median Family Income

Census Tract	Median Family Income
5.07	$56,685
18.02	$47,272
38.12	$51,069
38.13	$75,947
38.09	$73,666

Source: U.S. Census Bureau, May 2003

[8] Based upon the number of occupied housing units in relation to the population.

Table 3.4-2 below outlines the demographics for the project area, City of Bakersfield, and Kern County.

Table 3.4-2. County, City, and Project Area Demographics

	County	City	Project Area					
			Tract 5.07	Tract 18.02	Tract 38.12	Tract 38.13	Tract 38.09	Average for all Tracts
2000 Population	661,645	247,057	1,540	5,405	3,701	2,316	5,302	3,653
Age under 5	8.4%	8.8%	3.7%	5.6%	9.9%	7.6%	5.5%	6.5%
Age 19 or under	31.9%	27.0%	20.1%	26.1%	32.1%	32.4%	44%	32.8%
Age 65 or older	9.4%	9.6%	17.7%	9.3%	8.6%	7.9%	5.6%	8.6%
Race: White	61.6%	62.0%	91.4%	80.2%	79.4%	79.8%	89.4%	83.6%
Race: African American	6.0%	9.2%	0.1%	5.4%	3.0%	4.7%	0.9%	5.5%
Race: Asian	3.4%	4.3%	2.3%	3.7%	4.9%	5.6%	1.5%	3.4%
Race: Other	29.0%	24.5%	6.2%	10.7%	12.7%	9.9%	8.2%	9.9%
Hispanic (without regard to race)	38.4%	37.3%	8.0%	14.6%	14.3%	13.3%	11.0%	12.8%
Housing Units	231,564	88,262	610	2,244	1,452	761	1,805	1,374
Persons per Household	2.86	2.92	2.54	2.49	2.74	3.11	3.29	2.66
Median Household Income	$35,446	$39,982	$56,685	$47,272	$51,069	$75,947	$73,666	$59,000

Source: U.S. Census Bureau, 2000

Economic Base

Kern County is the leading oil producing County in the continental U.S. and the fourth most productive agricultural County in the nation. The five primary crops cultivated in Kern County are grapes, citrus, cotton, market milk, and almonds. The ten largest employers within Kern County are listed in Table 3.4-3.

Table 3.4-3. Largest Employers in Kern County[1]

Employer	Employees
1. Edwards Air Force Base	11,500
2. County of Kern	7,475
3. China Lake Naval Weapons Center	5,000
4. Giumarra Farms	4,200
5. Grimmway Farms	2,500
6. Bakersfield Memorial Hospital	1,400
7. City of Bakersfield	1,300
8. Bear Creek Productions	1,250
9. Mercy Hospital	1,200
10. ARB, Inc.	1,200

Source: Greater Bakersfield Chamber of Commerce, May 2003
[1] Data as of December 2002

Data compiled by the U.S. Bureau of the Census indicates that within Bakersfield educational, health and social services, retail trade, and professional scientific, management, administrative, and waste management businesses are the largest employers. Within the project area, educational, health and social services, agriculture, and retail trade businesses are the largest employers. As indicated in Table 3.4-4, as of the last U.S. Census the unemployment rate within the project area is less than both the County of Kern and the City of Bakersfield; however, more recent data indicates that the unemployment rate within Kern County is 12.2% and that the unemployment rate within the City of Bakersfield is 9% as of November 2003[9].

Table 3.4-4. Labor Force Data

Region	Civilian Labor Force	Unemployment Rate
Kern County	267,603	6.7%
Bakersfield	111,588	5.4%
Project Area	9,074	3.7%

Source: U.S. Census Bureau, 2000

As of February 2001, job growth within the City of Bakersfield was 1.8% and projected job growth is estimated to 2010 to be 19.0%, above the national averages of 1.3% and 15.1% respectively.

3.4.3 Visual Resources

A Visual Impact Assessment was completed for the proposed project in March 2005. This section summarizes information provided in that report.

Two factors play a key role in characterizing the visual environment of an area: visual quality and viewer sensitivity. Visual quality is a measure of the excellence of a view and pertains to the physical features of

[9] California Employment Development Department, November 2003 data (www.calmis.ca.gov/FILE/FLMONTH/KERNSUB.TXT)

a landscape, including both natural features (such as landform, vegetation, soils, and streams) and the human modifications that have been made to the landscape (roads, buildings, utility lines, etc.). Visual quality for the Westside Parkway project was assessed in regard to vividness, intactness, and unity. The visual quality of a landscape is determined by the value of each of these criteria. A high value for any single criteria does not indicate a high quality view, rather all three must be high to indicate high quality.

Viewer sensitivity or response was estimated for the Westside Parkway project based on the "use" of the viewshed. Sensitive receptors in the vicinity of the project included residential properties to the north and south of the alignment between Heath Road and Allen Road; to the north of the highway between Jewetta Avenue and Coffee Road; and east of the Oak Street intersection at the easterly terminus. Additional sensitive receptors include the Kern River Parkway, a linear park on the south side of the Kern River; Columbia Elementary School located to the north of the Westside Parkway; and Liberty High School located to the north of Westside Parkway. The topography of the region is flat. There are no long-range views of the project from sensitive receptors.

Land uses adjacent to the Westside Parkway Truxtun Option that are not considered sensitive receptors are commercial between SR99 and Oak Street, business parks located to the north and south of the proposed Westside Parkway between SR99 and Truxtun Plaza West, industrial between Coffee Road and Mohawk Street, and agriculture between Heath Road and Renfro Road. Spreading basins are located between Jewetta Avenue and Jenkins Road.

The Westside Parkway Oak Option connects the Westside Parkway's easterly terminus to Oak Street, east of SR99. Land uses would be the same as the Westside Parkway Truxtun Option until the alignment reaches Mohawk Street. Land uses near the Westside Parkway Oak Option that are not considered sensitive receptors include a canal, railroad tracks, rail yard, miniature golf course, and some nearby commercial and industrial properties. At Oak Street, adjacent land uses consist of heavy rail, office buildings, commercial and hotel uses.

The project area is both urban and rural. Property lines within the urban areas are often defined by solid barriers and perimeter vegetation.

The Metropolitan Bakersfield Freeway Beautification, Master Plan Design Guidelines (MBFB-MPDG) dated March 2003 were developed to improve the aesthetics of the local freeway system. The MBFB-MPDG address some elements of the Westside Parkway aesthetics relative to existing freeways in the City of Bakersfield.

Regional Landscape Setting

The Westside Parkway would be located within the limits of the City of Bakersfield and Kern County in a flat alluvial plain, west of the Greenhorn Mountains and the Sequoia National Forest, north of the Tehachapi Mountains, and east of the Caliente Range and the San Andreas Fault. The Kern River crosses the proposed alignment at the eastern end of the project west of the BNSF railroad bridge. Other watercourses that are crossed by the alignment include the: Friant-Kern Canal and CVC. The proposed alignment would provide access to several local and regional recreation facilities.

At present, the density of development generally declines from the east to the west along the alignment. Commercial and industrial land uses predominate at the eastern end. A transition zone occurs near Coffee Road where land uses are commercial and heavy industrial. To the west of this transition zone is new housing. Agricultural and housing land uses predominate at the western end of the alignment.

The proposed alignment would be close to existing elevations with the following exceptions. A bridge would be constructed at the Kern River southwest of the BNSF railroad, another would be constructed at the Friant-Kern Canal and Coffee Road.

Viewshed

To provide a framework for analyzing the visual environment along the alignment, the viewshed was divided into two landscape units. Each landscape unit exhibits similar general patterns of land use, and provides views with similar characteristics.

Landscape Unit 1: SR99 to Coffee Road

This landscape unit is dominated by urban development. Where the Westside Parkway Truxtun Option alignment joins Truxtun Avenue, there are one- to three-story office buildings surrounded by refined landscapes. Architectural styles are simple and vary from contemporary and high-tech to conservative. SR99 is elevated over Truxtun Avenue. At the Oak Street extension, where the study area is part of the Westside Parkway Oak Option, adjacent land uses consist of heavy rail, office buildings, and commercial and hotel land uses. To the west where the alignment crosses the Kern River, business parks with simple and contemporary architectural styles are concentrated on the south side of Truxtun Avenue. On the north side of Truxtun Avenue is the Kern River Parkway with grass and trees, a bike trail, picnic areas, volleyball court, and an occasional oil pump within a large rectangular area of asphalt surrounded by chain link fencing. Utility poles and lines are seen throughout this location and steel towers and high voltage lines are seen to the north. North of the Kern River, an electrical substation and an oil refinery with views of pipes, storage tanks, and towers dominate the visual landscape. The BNSF railroad bridge crosses the Kern River east of Mohawk Street.

Landscape Unit 2: Coffee Road to Heath Road

The character of land uses within the alignment changes at Coffee Road. The oil refinery land uses that are visible on the north side of the Kern River transition to single-family housing between Coffee Road and Allen Road. Within this same zone, views to the south of the alignment are currently of the Kern River; however, planned residential developments south of the alignment will soon dominate views to the south. Between Renfro Road and Heath Road, views to the south are of agricultural land and the Kern River open space beyond. This area is currently under conversion from agricultural to residential land uses. To the north in this same zone, views are agricultural in the near view and single-family homes form the backdrop to the view. Where the alignment joins Heath Road, views to the north are single-family residential and agricultural to the south.

Key Views

Eight key views were selected that are representative of sensitive receptors where the proposed Westside Parkway might create visual impacts (see Figures 3-1 through 3-8 of the Visual Impact Report). Each

view was ranked low, medium, or high in quality for the three evaluation criteria. Table 3.4-5 provides a summary of the rankings for the eight views:

Table 3.4-5. Summary of Visual Quality Evaluation

View	Vividness	Intactness	Unity
View 1	Low	Low	Low
View 2	Low	Low	Low
View 3	High	High	High
View 4	Low	Low	Low
View 5	Moderate	Moderate	Moderate
View 6	Low	Low	Moderate
View 7	High	Low	High
View 8	Moderate	Low	High

Note: Where value judgments were made between two levels, e.g., moderate to high, the lower value was used for purposes of consistency in this table.

View #1:

The view looks northeast toward the proposed Kern River bridge for the Westside Parkway. The view is from the Kern River southern levee and bike trail, east of the landscaped portion of the linear park. The area is dominated by oil pumping machinery, fenced enclosures, construction debris, high voltage towers and lines, and no introduced landscaping. The BNSF railroad bridge is in the distant view. Views of the Kern River are seen to the north between the sparse vegetation growing along its banks. Natural-occurring grasses and weeds are to the north and south. The character in general is fairly open, unplanned, and utilitarian. Man-built forms dominate the view.

View #2:

The view looks north from the Extended Stay America Hotel on California Avenue toward the Westside Parkway east of SR99. The view is of railroad lines and cars. Boomers Miniature Golf Course facilities are to the east, utility lines and towers in the distance and fences in the foreground. The character in general is diverse and utilitarian. Man-built forms dominate the view.

View #3:

The view looks west from the Kern River Parkway bike trail toward the proposed Mohawk Street extension. The view is of the natural-occurring vegetation of the Kern River floodplain. The setting is a landscaped Kern River Parkway to the south of the view. To the south of Truxtun Avenue is a business park with one- to three-story contemporary structures. The frontages are landscaped with grass and trees. The character of the view in general is green open space. There is a split of refined and natural characteristics with the refined character seen to the south and a natural character to the north. Natural forms of vegetation dominate the view.

View #4:

The view looks north on Coffee Road toward Brimhall Road. The view is of the CVC bridge in the foreground, a landscaped median with trees and grass to the west, storage, theater and commercial

buildings to the east, and high voltage towers and lines in the distance. The general character of the view is open, affording long-range views in all directions. Man-built forms dominate the view.

View #5:

The view looks north on Calloway Drive toward the proposed Westside Parkway/Calloway Drive interchange. The existing view to the west is undeveloped open space with natural-occurring grasses. A similar view is seen to the east behind a chain link fence with slats. Contemporary one- and two-story single-family homes are seen to the north and west behind a gray masonry screen wall. In the foreground, a landscaped median with terra cotta colored stamped concrete paving is to the west. The landscaped frontage of Glenwood Gardens, a cluster of three-story multi-family housing units, is to the east. Cobra-head streetlights are seen at the back of sidewalk on both sides of the arterial and a street sign. The general character of the view is linear undeveloped open space bordered by architectural structures. Man-built forms dominate the view. The view to the southwest, that is currently undeveloped open space, will be a residential community in a year or two.

View #6:

The view looks north from Rosarita Avenue west of Allen Road toward the proposed Westside Parkway/Allen Road interchange. The view is through two metal fences and across undeveloped land within property owned by the RRBWSD. Seasonal grasses and sagebrush predominate. Distant views to the northwest are of trees. Single-family residential homes are seen to the east behind a masonry screen wall. In general the view is open and interrupted by foreground fencing. Natural forms are predominant in the view beyond the fencing in the foreground.

View #7:

The view looks south on Renfro Road toward the proposed Westside Parkway project. The view is within a multi-acre ranchette single-family residential community. Groves of approximately 9 to 11 meter (30 to 35 foot) tall mature trees are on the east and west sides of the road. Frontage landscaping of a residence is to the west. Through the street corridor, undeveloped open space is seen to the west beyond the trees. This area will be developed with residential housing. The structures in the view to the east are horse trailers. Power poles and lines are seen in the foreground on the east side of the road and a utility line crossing to the west. Utility poles and street signs are in distant views to the west. The general character of the view is dominated by natural forms and secondarily by man-built forms.

View #8:

The view looks west on Stockdale Highway toward Heath Road. Undeveloped open space is seen to the north with sagebrush and grasses in the foreground. In the background, there are two-story contemporary single-family residences behind a gray masonry screen wall. To the south is a fenced agricultural building and storage yard with perimeter landscaping. Large expanses of agricultural land are to the east, west, and south. Utility poles and power lines are seen at the north edge of Stockdale Highway, and lines and poles connecting to the agricultural building. The general character of the view is open with long-range views. To the north the long-range views are shorter in distance and there is a background of residential structures.

Additional Sensitive Receptors: Schools

Liberty High School and Columbia Elementary School are located to the north of the project. The buildings are clustered at the north end of the school properties with grassy play areas to the south. Both schools have chain link fences along the southern property lines. The fences at both schools have slats in the fences that obscure views to the south.

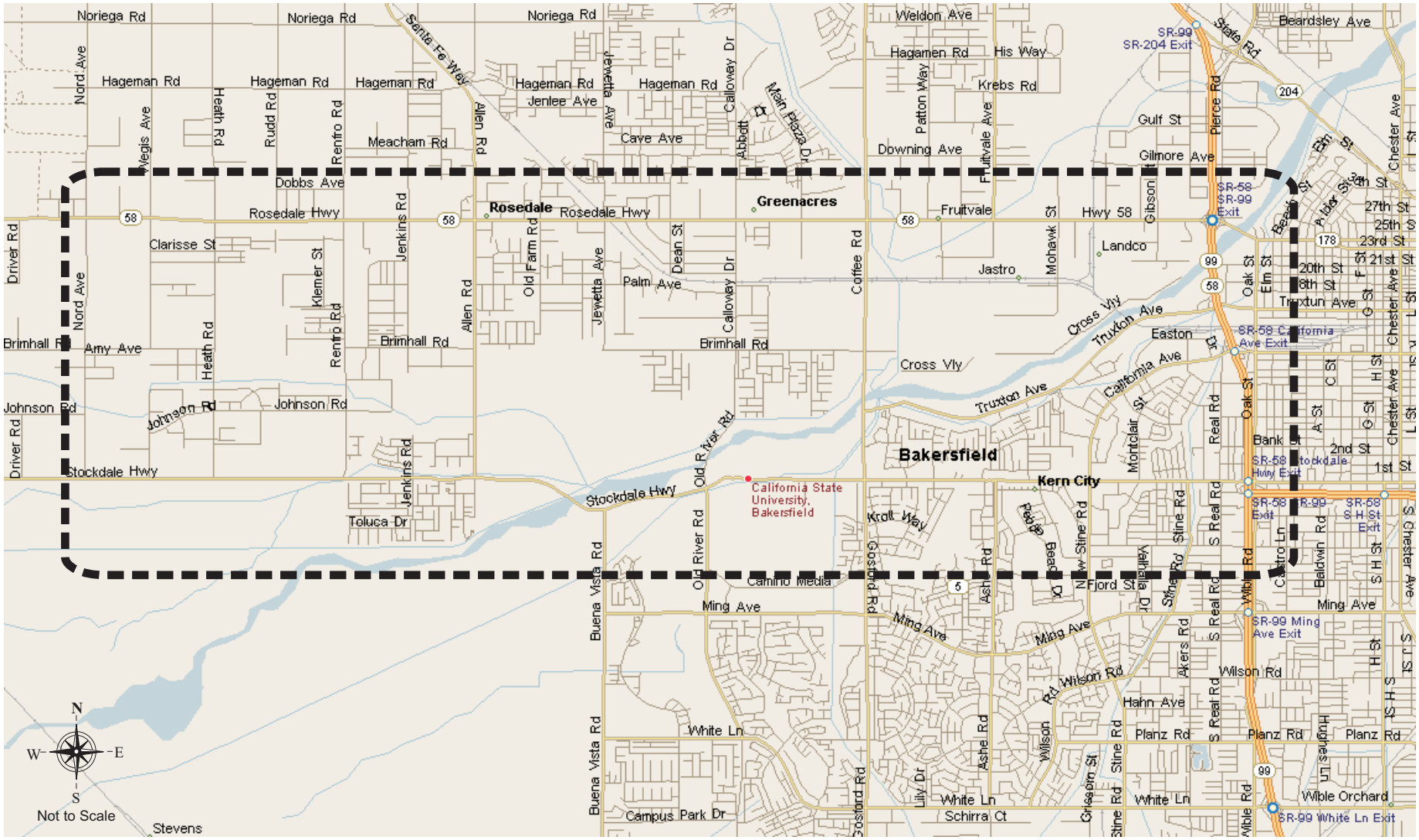
3.4.4 Traffic and Transportation

This section describes key roadway segments and intersections, reports existing daily roadway and peak hour intersection traffic volume information, and summarizes existing LOS analysis results. Information in this section is based on the Traffic Impact Analysis (TIA) prepared for the proposed project in March 2005.

3.4.4.1 Study Area and Project Background

The metropolitan Bakersfield roadway system is laid out in a typical north-south and east-west grid pattern with certain major roadways crossing the Kern River and the BNSF railroad tracks, which both run generally east-west. The project study area is primarily bounded by Rosedale Highway to the north, Oak Street to the east, Stockdale Highway to the south, and Nord Avenue to the west.

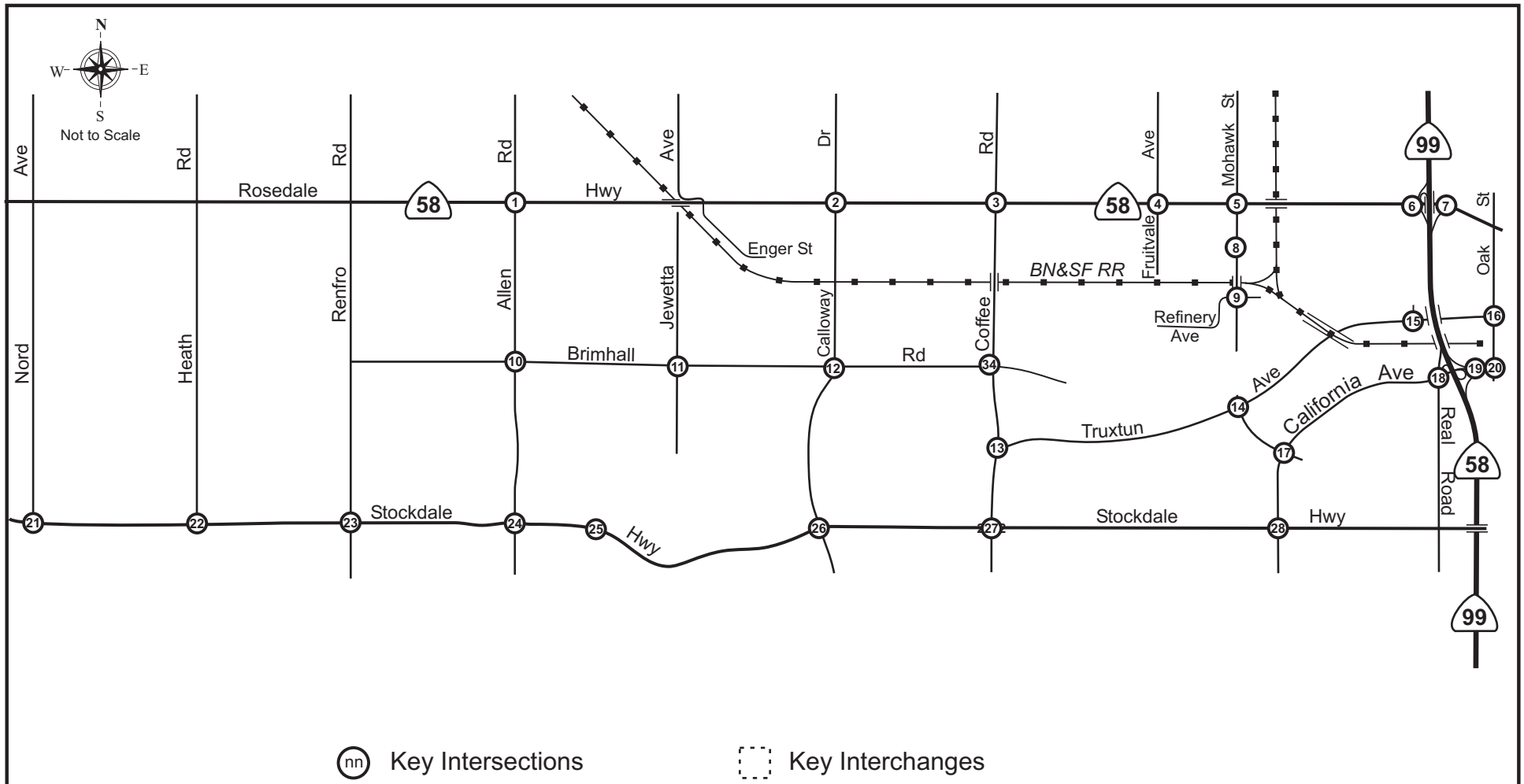
The Westside Parkway alignment is located to the west of the downtown commercial district of the City of Bakersfield. Figure 3.4-1 displays the regional location and Figure 3.4-2 illustrates the project study area.



REGIONAL TRAFFIC STUDY AREA

Project No.: 29866227	Date: SEPTEMBER 2004	Project: WESTSIDE PARKWAY PROJECT	Figure: 3.4-1

L/westside pkwy/reg loc map.cdr 8/03



(nn) Key Intersections

Key Interchanges

TRAFFIC STUDY AREA

Project No.: 29866227	Date: DECEMBER 2004	Project: WESTSIDE PARKWAY PROJECT	Figure: 3.4-2

L/westside pkwy/proj study area.cdr 8/03

3.4.4.2 Existing Roadway Network

Each of the key roadways, as well as associated study intersections within the project area, are discussed below.

Rosedale Highway – Rosedale Highway is an east-west arterial that is currently designated as SR58. The roadway currently has two lanes in each direction with left-turn bays provided at major intersections.

Brimhall Road – Brimhall Road is classified as an east-west arterial from the western metropolitan Bakersfield City limits to Calloway Drive. The segment between Calloway Drive and Coffee Road is classified as a collector in the Metropolitan Bakersfield General Plan. It provides for at least one lane in each direction and two lanes in some areas.

Truxtun Avenue – Truxtun Avenue is an east-west collector that connects Coffee Road from the west to downtown Bakersfield to the east. The roadway currently has two lanes in each direction with left-turn bays provided at major intersections.

California Avenue – California Avenue is an east-west arterial and provides six lanes between Stockdale Highway and Oak Street.

Stockdale Highway – Stockdale Highway is an east-west arterial to the south of the proposed Westside Parkway alignment. Within the project study area, it provides for two travel lanes in each direction. This roadway will be striped for three lanes in each direction in the spring of 2005.

Heath Road – Heath Road is a north-south arterial and provides for one travel lane in each direction.

Allen Road – Allen Road is a north-south arterial and provides for one travel lane in each direction.

Calloway Drive – Calloway Drive is a north-south arterial and generally provides for two travel lanes in each direction.

Coffee Road – Coffee Road is a north-south arterial that parallels SR99. The roadway currently has three lanes in each direction.

Mohawk Street – Mohawk Street is a north-south collector that is currently discontinuous to the north and south of Rosedale Highway. The roadway currently has one lane in each direction on the segment south of Rosedale Highway and two lanes in each direction between Truxtun Avenue and California Avenue.

Oak Street – Oak Street is a north-south arterial with two lanes in each direction and a two-way left-turn median between Truxtun Avenue and 24th Street and between California Avenue and Brundage Lane. The overhead bridge crossing the BNSF railroad tracks between California Avenue and Truxtun Avenue provides for six divided travel lanes.

SR99 – SR99 is a north-south freeway near the east end of the proposed Westside Parkway project. SR99 has four travel lanes in each direction near the study area. The current annual average daily traffic volume ranges from 126,000 to the south to 91,000 to the north of SR178.

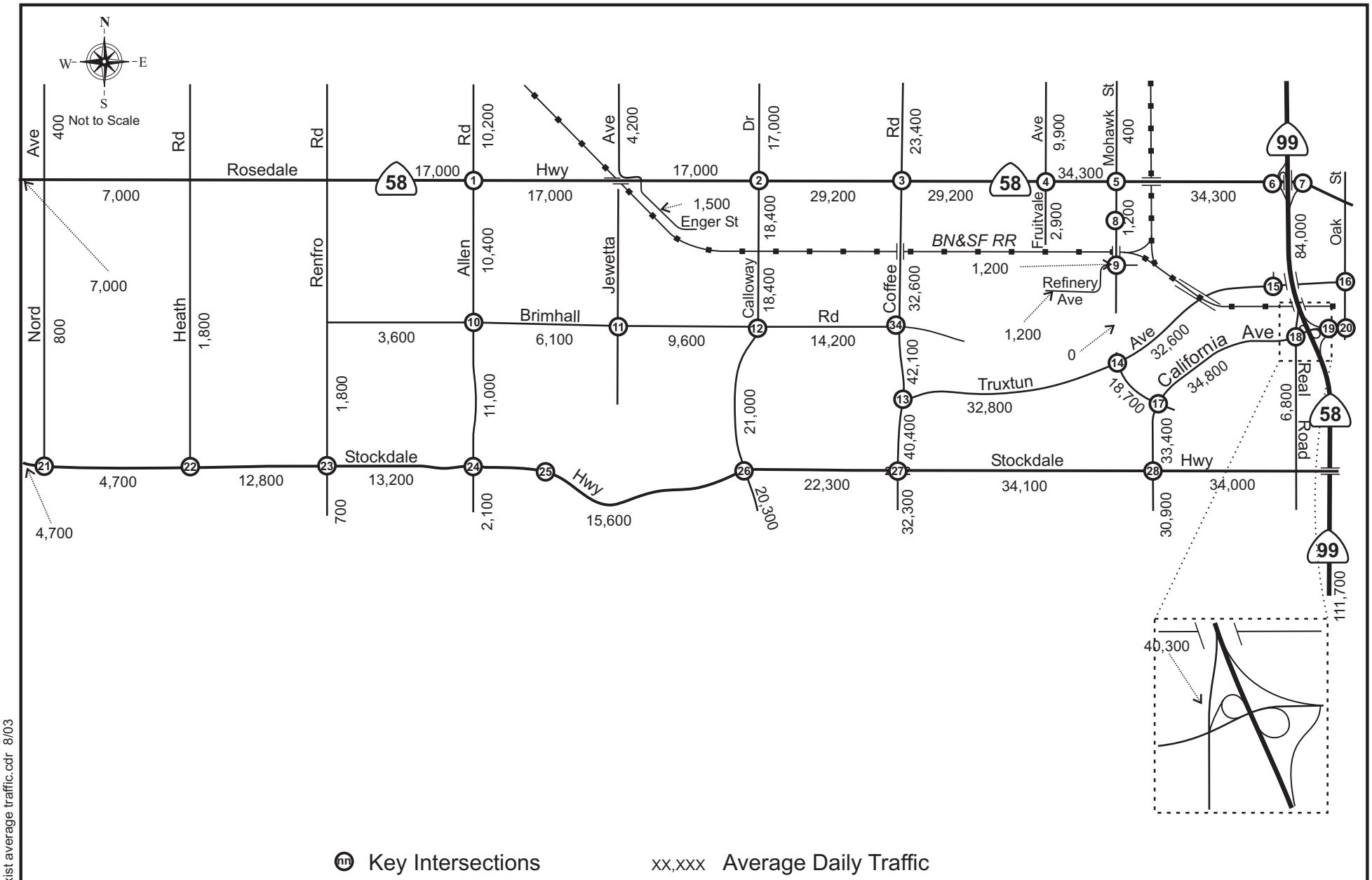
3.4.4.3 Existing Roadway and Intersection Volumes

Figure 3.4-3 displays the existing ADT volume within the project study area; Figure 3.4-4 and Figure 3.4-5 display the existing AM peak hour; and Figure 3.4-6 and Figure 3.4-7 display the existing PM peak hour traffic volumes for key study area intersections. Traffic volume data were collected from the City of Bakersfield Traffic Count Database, Caltrans Traffic and Vehicle Data Systems Unit, recently conducted traffic studies within the project study area and from new traffic counts taken for use in the TIA for the proposed project.

Table 3.4-6 displays intersection LOS and average vehicle delay results for key study area intersections under existing conditions. The intersection analysis was conducted using 2000 Highway Capacity Manual Operations Methodology.

3.4.4.4 Existing Bicycle Pathways

There is currently a Class 1 Bike Path running through the Kern River Parkway from roughly Mt. Vernon Avenue and Panorama Drive in northeastern Bakersfield to Stockdale Highway and Enos Lane in southwestern Bakersfield. Class II Bike Lanes are located or planned on many of the major north-south and east-west arterials in the City. In the project area, Class II Bike Lanes are located on Olive Drive, Hageman Road, Brimhall Road, Stockdale Highway, Oak Street, Coffee Road, Calloway Drive, Allen Road, and Renfro Drive. Class II Bike Lanes are proposed for Mohawk Street.



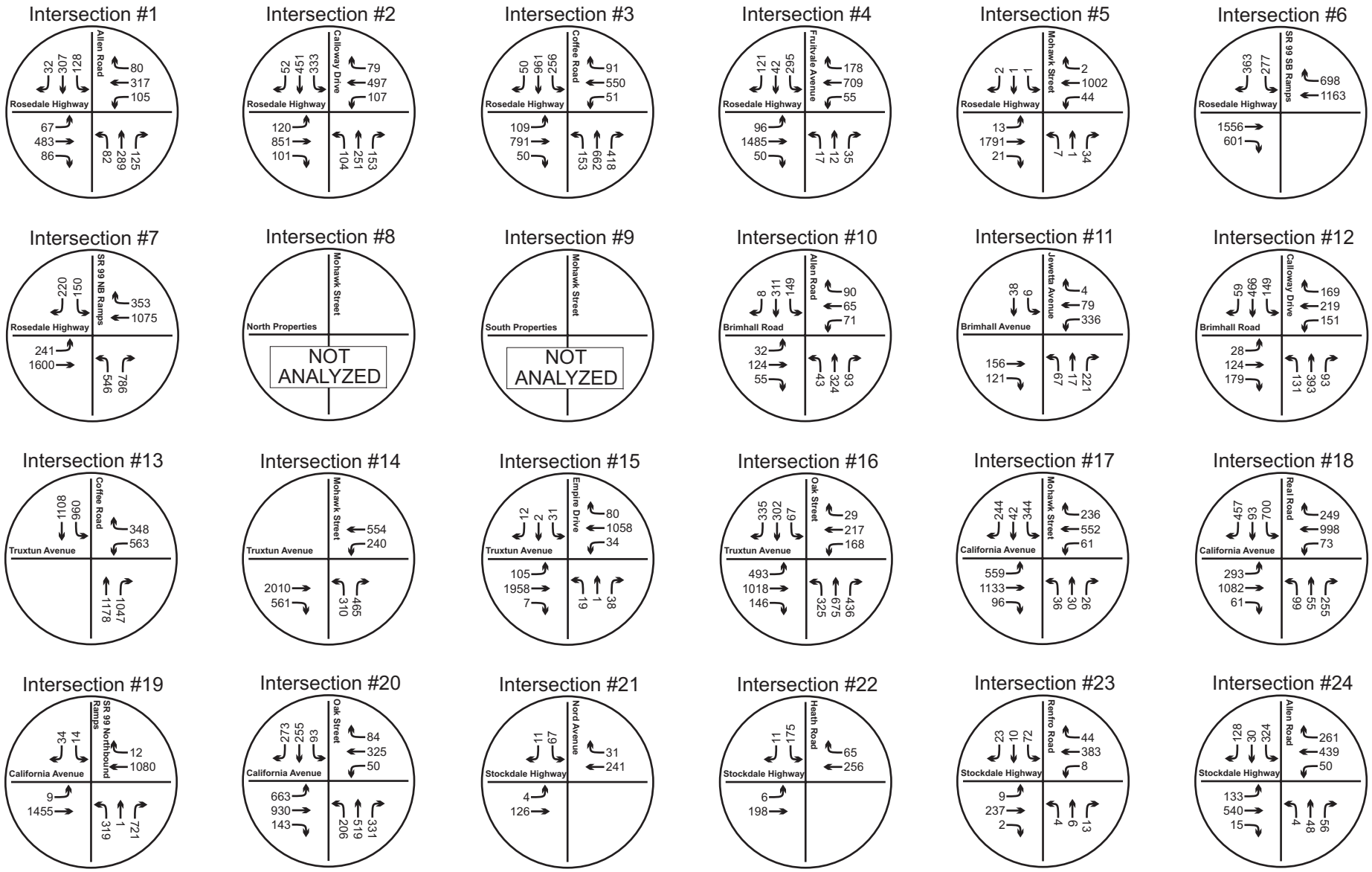
Key Intersections

xx,xxx Average Daily Traffic

EXISTING AVERAGE DAILY TRAFFIC

Project No.: 29866227	Date: MARCH 2005	Project: WESTSIDE PARKWAY PROJECT	Figure: 3.4-3

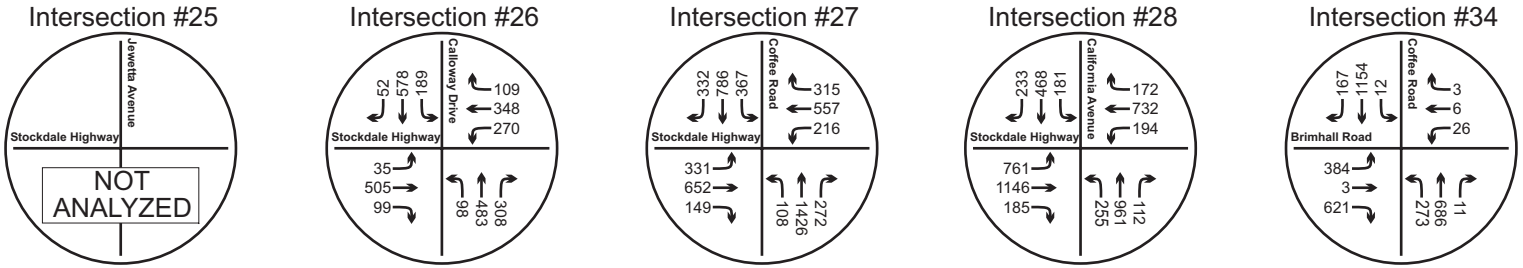
L/westside pkwy/exist average traffic.cdr 8/03



EXISTING INTERSECTION AM PEAK HOUR TRAFFIC

Project No.: 29866227	Date: SEPTEMBER 2004	Project: WESTSIDE PARKWAY PROJECT	Figure: 3.4-4

L/westside pkwy/exist AM peak.cdr 8/03

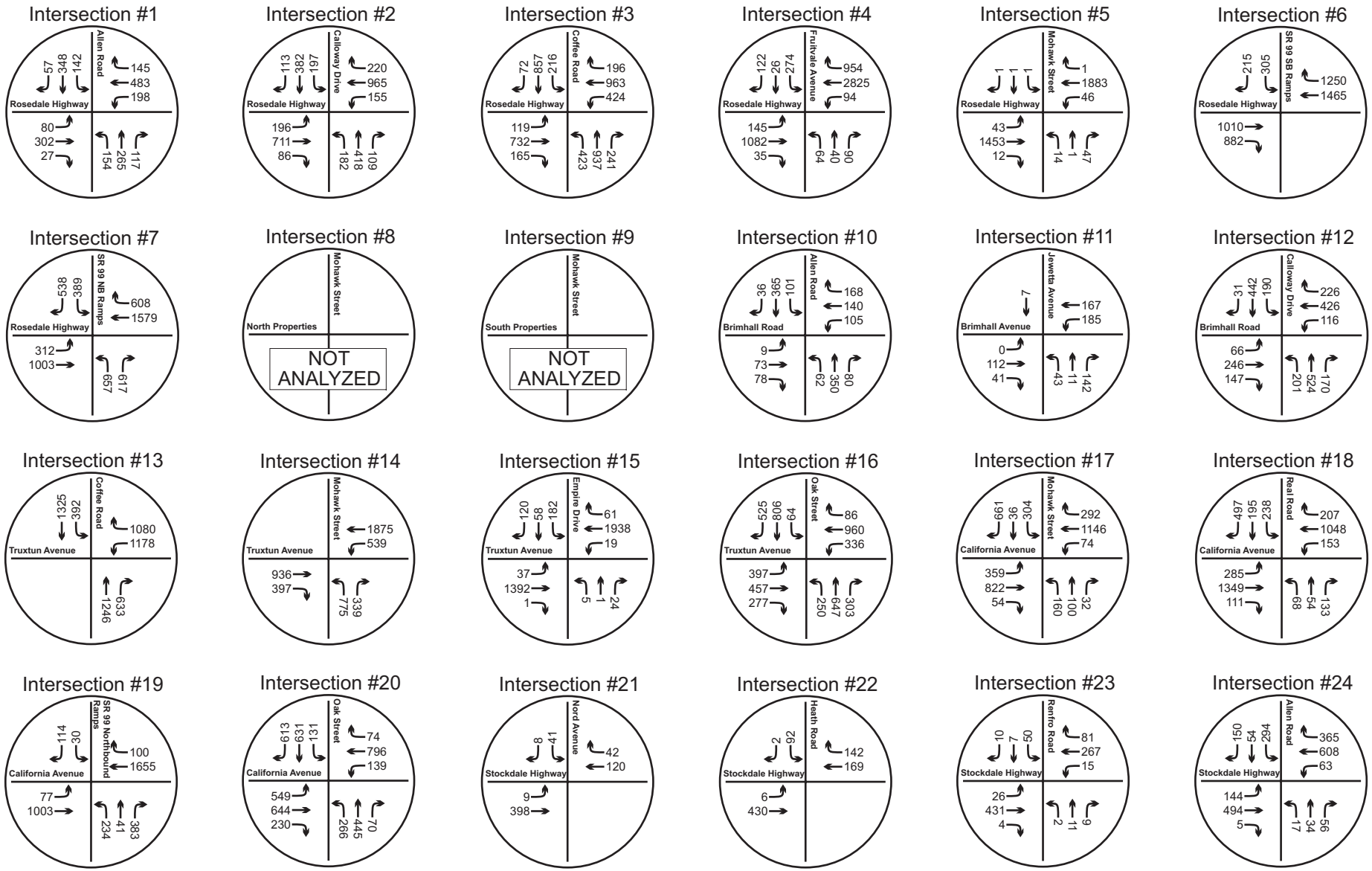


XXX ⟶ Turning Movement

EXISTING INTERSECTION AM PEAK HOUR TRAFFIC (continued)

Project No.: 29866227	Date: SEPTEMBER 2004	Project: WESTSIDE PARKWAY PROJECT	Figure: 3.4-5

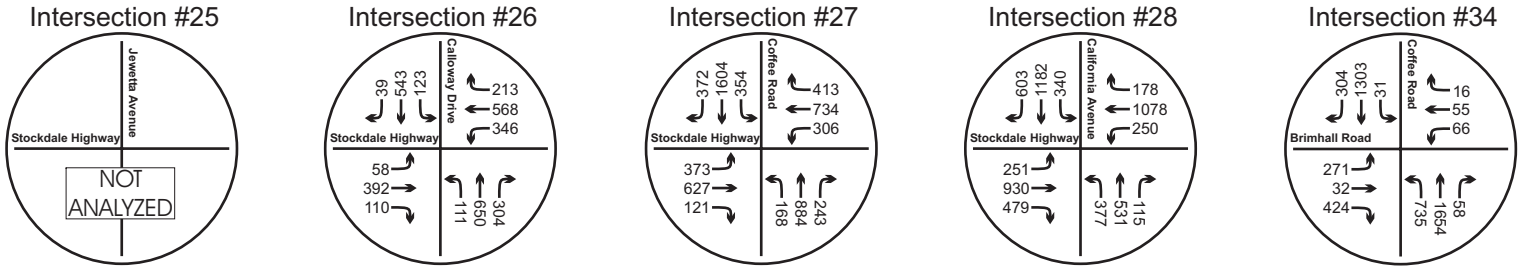
L/westside pkwy/exist AM peak cont.cdr 8/03



EXISTING INTERSECTION PM PEAK HOUR TRAFFIC

Project No.: 29866227	Date: SEPTEMBER 2004	Project: WESTSIDE PARKWAY PROJECT	Figure: 3.4-6

L/westside pkwy/exist PM peak.cdr 8/03



XXX ⟶ Turning Movement

EXISTING INTERSECTION PM PEAK HOUR TRAFFIC (continued)

Project No.: 29866227	Date: MARCH 2005	Project: WESTSIDE PARKWAY PROJECT	Figure: 3.4-7

L/westside pkwy/exist PM peak cont new.cdr 3/05

Table 3.4-6. Existing Conditions Peak Hour Intersection Level Of Service Results

Intersection	AM Peak Hour		PM Peak Hour	
	Del/Veh	LOS	Del/Veh	LOS
Allen Road / Rosedale Highway	26.9	C	29.2	C
Calloway Drive / Rosedale Highway	27.3	C	29.3	C
Coffee Road / Rosedale Highway	23.9	C	29.0	C
Fruitvale Avenue / Rosedale Highway	17.2	B	21.8	C
Mohawk Street / Rosedale Highway[1]	141.9	F	667.3	F
SR99 SB Ramps / Rosedale Highway	13.8	B	10.8	B
SR99 NB Ramps / Rosedale Highway	26.6	C	41.0	D
Allen Road / Brimhall Road	23.4	C	22.3	C
Jewetta Avenue / Brimhall Road	13.1	B	12.1	B
Calloway Drive / Brimhall Road	25.8	C	27.1	C
Coffee Road / Truxtun Avenue	24.9	C	26.1	C
Mohawk Street / Truxtun Avenue	17.8	B	21.2	C
Empire Drive / Truxtun Avenue	4.9	A	10.1	B
Oak Street / Truxtun Avenue	27.4	C	31.7	C
Mohawk Street / California Avenue	22.6	C	29.9	C
SR99 SB Ramps / California Avenue	37.7	D	31.0	C
SR99 NB Ramps / California Avenue	24.9	C	21.8	C
Oak Street / California Avenue	25.0	C	30.5	C
Nord Avenue / Stockdale Highway [1]	11.1	B	12.1	B
Heath Road / Stockdale Highway [1]	14.4	B	14.7	B
Renfro Road / Stockdale Highway [1]	17.0	C	19.1	C
Allen Road / Stockdale Highway	20.2	C	19.3	B
Calloway Drive / Stockdale Highway	25.0	C	24.4	C
Coffee Road / Stockdale Highway	29.2	C	30.3	C
California Avenue / Stockdale Highway	29.1	C	33.0	C
Coffee Road / Brimhall Road	21.4	C	22.5	C

[1] Unsignalized
Del/Veh = Average delay per vehicle in seconds.
SB = Southbound
NB = Northbound

As shown in Table 3.4-6, all key study intersections currently operate at acceptable levels of service (LOS C or better) during both AM and PM peak hours with the exception of the following intersections shaded grey in the table:

- Mohawk Street/Rosedale Highway (AM/PM);
- SR99 NB Ramps/Rosedale Highway (PM); and
- SR99 SB Ramps/California Avenue (AM).

3.4.5 Noise

A Noise Study Report was completed for the proposed project in October 2005. This section summarizes information provided in that report.

A number of factors affect sound as it is perceived by the human ear: the actual level of sound (or noise), the frequencies involved, the period of exposure to the noise, and the changes or fluctuations in the noise levels during exposure. Levels of noise are measured in units called decibels. Because the human ear cannot perceive all pitches or frequencies equally well, measured sound levels are adjusted or weighted to correspond to human hearing. This adjusted unit is known as the "A-weighted" decibel (dBA). All references to noise in this report refer to dBA.

Few noises are constant. Most fluctuate in decibel level over short periods of time. One way of describing fluctuating sound is to present the fluctuating noise heard over a specific time period as if it had been a steady, unchanging sound. For this, a descriptor called the equivalent sound level, L_{eq}, is computed. L_{eq} is the constant sound level (A-weighted) that, for a given situation and time period (e.g., 1-hour L_{eq} or 24-hour L_{eq}), conveys the same sound energy as the actual time-varying sound. The 1-hour L_{eq} during the peak-hour traffic period is often used to determine potential mitigation measures from roadway noise, while 24-hour cumulative L_{eq} averaging methods are used to evaluate typical noise exposure in an area. These averaging methods typically add more weight to evening and nighttime noise levels because of their greater potential for disturbance.

Roadway noise is dependent on many factors: vehicle type, speed, number of vehicles, roadway surface and gradient, distance from the roadway to the receiver, ground surface (whether hard or soft), and shielding due to structures, noise barriers, hills, the edge of a roadway, and earth berms between a receiver and the road. Generally, as vehicle speeds and/or traffic volumes increase, so does the noise level.

The noisiest component from cars is typically the tires and the tire/road interface, while for most trucks much of the noise emanates from the exhaust stack. This affects the noise reduction provided by a barrier because both the height and proximity of the source and receiver with respect to the barrier's location and height are important in determining the effectiveness of the barrier. The shape and surface of the barrier will also affect the attenuation provided by the barrier. For example, an absorptive earth berm or a hill may provide a 3- to 4-dBA greater attenuation compared to a masonry barrier of the same height.

Roadway surface and gradient also affect the resultant noise. Surfaces vary from rough and potholed to smooth and seal-coated, and this can lead to about a 3- to 4-dBA difference between surfaces. The roadway gradient influences noise levels essentially only for heavy-truck traffic; the greatest effect is from an uphill surface, which increases noise levels.

Noise impacts are usually assessed by evaluating the total predicted noise level and evaluating differences between the existing and future noise environments. When evaluating noise increases in the environment, the following relationships to quantifiable increases are used as a basis for assessing impacts:

- Except in a carefully controlled laboratory condition, a change of 1 dBA cannot be perceived;

- In the outside environment, a 3 dBA change is considered barely noticeable;
- An increase of 5 dBA is generally required before any noticeable change in community response would be expected; and
- A 10 dBA increase is perceived as a doubling in loudness and would likely result in a widespread community response.

3.4.5.1 Regulatory Background

Federal and State Policies and Procedures

The Traffic Noise Analysis Protocol (October 1998) used as guidance for this study contains Caltrans noise policies. These policies fulfill the highway noise analysis and abatement/mitigation requirements contained in the following State and Federal environmental statutes:

- CEQA;
- NEPA;
- Title 23 U.S. CFR, Part 772 "Procedures for Abatement of Highway Traffic Noise and Construction Noise" (23 CFR 772); and
- Section 216 of the California Streets and Highways Code.

The FHWA stipulates procedures and criteria for noise assessment studies (23 CFR 772). It requires that noise abatement measures be considered on all major transportation projects if the project will cause a substantial increase in noise levels, or if projected noise levels approach or exceed the Noise Abatement Criteria (NAC) level for activities occurring on adjacent lands.

FHWA NAC for various land use ratings (called activity categories) are given in Table 3.4-7. These noise criteria are assigned to exterior and interior activities. Noise attenuation provided by most residential structures leads to compliance with the interior design noise level if the exterior criterion is attained (FHWA, 1995).

Table 3.4-7. Federal Noise Abatement Criteria
Hourly A-Weighted
Sound Level - Decibels (dBA)

Activity Category	L_{eq} (h)	Description of Activity Category
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (Exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 (Exterior)	Developed lands, properties, or activities not included in Categories A or B above.
D	--	Undeveloped lands.
E	52 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

Source: Federal Highway Administration 1982

If these criteria sound levels are predicted to be approached or exceeded during the noisiest 1-hour period, noise abatement measures must be considered and, if found to be reasonable and feasible, they must be incorporated as part of the project. Consistent with FHWA guidelines, Caltrans defines "approach" as a peak-noise-hour sound level of 66 dBA L_{eq}.

The Caltrans Technical Noise Supplement (TeNS) establishes guidelines for construction of noise barriers along highways where sensitive receivers (e.g., residences) are located. It specifies parameters such as barrier dimensions, locations, type of barriers, and standard aesthetic treatments. Under FHWA and Caltrans policies, noise barriers would be recommended for transportation improvement projects when the following criteria are met:

1. Predicted worst-case hourly-noise level is expected to approach or exceed FHWA NAC (e.g., 67 dBA L_{eq} for residences or other Category B land uses) or increase ambient noise levels substantially. Caltrans considers an increase of 12 dBA to be substantial. Under current Caltrans policy, a noise level of 66 dBA is considered to be approaching the NAC of 67 dBA.
2. A feasible noise barrier must provide a minimum noise reduction of 5 dBA to achieve a noticeable change in noise level.
3. A reasonable noise barrier must be cost-effective and should take into consideration the number of residences that would benefit from the barrier(s). In addition to cost of abatement and noise-related factors such as absolute noise levels and change in noise levels, many other factors are considered. These factors include: date of development along the highway, impacts of noise abatement on other resources, opinions of impacted residents, safety, social, economic, environmental, legal, and technological factors.
4. The noise barrier must interrupt the line-of-sight between the noise source (traffic on the roadway) and the receiver [assumed to be 1.5 meters (4.9 feet) high].

FHWA (23 CFR 772) and Caltrans (Traffic Noise Analysis Protocol) policies address the timing and applicability of noise abatement measures as part of the roadway project. Noise abatement at noise-

sensitive land uses must be considered as part of the project (when NAC are approached or exceeded) if noise-sensitive development was planned, designed and programmed prior to the roadway project's date of public knowledge. A development is considered planned, designed and programmed on the date that final approval is granted from the local jurisdiction (for example, issuance of building permits from the City planning agency). The date of public knowledge of the roadway project is the date of approval of the final environmental decision document (for example, the Record of Decision).

3.4.5.2 Local Noise Standards

The project would be constructed within the City of Bakersfield, which has construction noise standards that are applicable to this project.

The City of Bakersfield's Noise Ordinance does not permit loud or unnecessary noises that disturb the peace or quiet of any neighborhood or that cause discomfort or annoyance to persons residing within 300 meters (1,000 feet) of the noise source. There are no specific limit levels set in the noise ordinance to determine a violation of the ordinance; however, the duration and level of the noise, time of day it occurs, nature and zoning of the area within which the noise occurs, and the proximity to residential sleeping facilities may be considered.

For construction work within 300 meters (1,000 feet) of residential dwellings, construction work is restricted to the hours of 6 a.m. to 9 p.m. on weekdays, and 8 a.m. to 9 p.m. on weekends. At the discretion of the City manager, permits may be granted for work to be done beyond these hours. The Noise Ordinance restrictions on hours of construction operations do not apply to work performed more than 300 meters (1,000 feet) from the nearest residential dwelling.

3.4.5.3 Existing Noise Sources

Noise near the project alignment is primarily generated by traffic using the local road network crossed by the alignments. Other noise sources in the area include trains on the BNSF railroad line to the north of the project alignment, distant air traffic from the Bakersfield Airport, and localized sources of noise such as refinery operations and agricultural operations.

3.4.5.4 Existing Sensitive Receptors and Topography

Human response to noise varies considerably from one individual to another. Effects of noise at various levels can include interference with sleep, concentration, and communication; physiological and psychological stress; and hearing loss. Given these effects, some land uses are considered more sensitive to ambient noise levels than others. Sensitive noise receptors are generally found in uses such as hospitals, schools, parks, and residences.

Land uses in the vicinity of the project alignment consist of vacant lands, single-family residential, a senior assisted-living facility, educational, recreation, agricultural, industrial and commercial. The area is undergoing development at a rapid pace, primarily in the form of residential construction. Noise-sensitive land uses (existing and planned future residential, educational and recreation) are primarily limited to the area west of Coffee Road. Industrial and commercial land uses predominate in the eastern portion of the project area, with the exception of an area with residential and recreation land uses south of the Westside

Parkway alignment, near the intersection of Mohawk Street and Truxtun Avenue. The terrain is flat throughout the project area.

3.4.5.5 Existing Noise Levels (Ambient)

Existing noise levels were measured on January 15 and 16, 2003 using Caltrans-approved methodology for sampling noise (TeNS 1998). Brüel & Kjær Type 2231 and Larson-Davis LD-820 Sound Level Meters (SLMs) were used to measure the existing noise levels. These are Type 1 (Precision) instruments as defined in the American National Standard Institute (ANSI) specification S1.4-1984 and the International Electrotechnical Commission Publications 804 and 651. The SLMs were set on slow time response mode, and used the "A" weighting filter network that most closely approximates the hearing characteristics of the human ear. To ensure accuracy, the laboratory calibration of the noise instruments was field checked before and after each measurement period using an acoustical calibrator. The accuracy of the acoustical calibrator is maintained through a program established by the manufacturer, and is traceable to the National Institute of Standards and Technology. In all cases, the microphone heights were 1.5 meters (5.0 feet) above the ground and the microphones were equipped with windscreens.

Meteorological conditions were conducive to reliable and accurate noise measurements, with clear to partly cloudy skies (no precipitation), calm to light winds [0 – 8 km per hour (0-5 miles per hour)], temperatures between 10 and 16 degrees Celsius 50 and 60 degrees Fahrenheit, and relative humidity ranging from 46 to 70 percent during the short-term noise measurements.

Eight short-term noise measurements and one long-term noise measurement were conducted. The noise measurements were conducted at or adjacent to representative noise-sensitive land uses along the project alignment. At all but Site Number 4, the noise-sensitive land uses were residential. At Site Number 4, the noise-sensitive land use was recreational. The short-term noise measurements were 10 to 20 minutes in duration. Because most of the sites were comparable in terms of site topography and distance to the future project alignment, one measurement was conducted at each site except at Site 6, where a second measurement was conducted. A second noise measurement (conducted immediately after the first measurement) was performed at Site 6 because the field measurement operator perceived that the first measurement was affected by barking dogs. The short-term noise data is summarized in Table 3.4-8.

One long-term (24 hours or more in duration) noise measurement, LT-1, was conducted. The long-term measurement was conducted in the rear yard of a residence located along the eastbound side of the proposed project alignment, between Renfro Road and Allen Road. The purpose of the long-term noise measurement was to determine the changes in noise levels within the project area throughout a typical day. This data was used during the noise analysis to estimate existing peak-noise-hour levels at the representative receivers. The long-term noise data is summarized in Table 3.4-9. The noise measurement locations are shown graphically in Figure 4.4-2.

Because the proposed project is a new roadway, the primary purpose of the noise measurements was to assess the existing ambient noise conditions. Although traffic counts and speeds were noted where appropriate, the noise measurements were not utilized to calibrate the noise model because the existing conditions are not comparable to the future conditions.

Table 3.4-8. Short-Term Noise Measurement Data Summary

						MEASUREMENT 1								MEASUREMENT 2								
SEGMENT	SITE NUMBER	DIRECTION	ADDRESS	LOCATION	DATE	START TIME	END TIME	L_{eq} (dBA)	L_{max} (dBA)	L_{min} (dBA)	L_{90} (dBA)	L_{50} (dBA)	L_{10} (dBA)	START TIME	END TIME	L_{eq} (dBA)	L_{max} (dBA)	L_{min} (dBA)	L_{90} (dBA)	L_{50} (dBA)	L_{10} (dBA)	NOISE SOURCES / OTHER COMMENTS
SR-99 to Coffee Road	4	SB (from Mohawk Street)	Kern River Parkway, Truxtun Ave.	On path by volleyball park	1/16/03	9:40	10:00	59.1	68.5	52.6	56.0	58.5	61.0									Traffic on Truxtun Ave, birds
Coffee Road to Calloway Drive	1	WB	8604 Sand Fox Court	Rear yard	1/15/03	15:30	15:50	41.6	55.3	38.0	39.5	41.0	43.5									Birds, distant traffic, distant dogs barking, distant aircraft
	2	WB	405 Crown Pointe Drive	Adjacent to rear yard	1/15/03	16:05	16:25	43.4	52.1	39.4	40.5	42.0	46.0									Birds, distant traffic, distant children playing, distant dogs barking, distant aircraft
Calloway Drive to Allen Road	3	WB	10315 Bay Colony Drive	Rear yard	1/15/03	16:40	17:00	49.4	59.5	33.0	44.5	48.5	52.5									Traffic on Calloway Drive, birds, distant aircraft
	8	WB	End of Jewetta Ave.	On road opposite new residences	1/16/03	13:30	13:45	48.1	60.4	44.6	45.5	47.0	49.5									Distant children playing, birds, 2 distant motocross bikes, distant traffic, distant
Allen Road to Heath Road	5	EB	312 Ensenada Street	Adjacent to rear yard	1/16/03	11:00	11:20	60.6	72.3	43.6	48.5	57.5	65.0									Traffic on Allen Road, birds, distant dogs barking
	6	EB	13604 San Simeon Ave.	Adjacent to rear yard	1/16/03	11:50	12:10	47.6	62.4	44.1	45.0	46.0	48.5	12:15	12:25	46.1	48.6	44.8	45.5	46.0	47.0	Birds, distant oil wells, dogs barking (measurement 1 only)
	7	WB	15501 Black Hawk Ave.	Adjacent to rear yard	1/16/03	12:50	13:10	43.3	46.8	39.7	42.5	43.0	44.0									Distant traffic, birds

Table 3.4-9. Long-Term Noise Measurement Data Summary

Segment	Site Number	Direction	Address	Location	Date	Start Time	End Time	Peak-Noise-Hour L_{eq} (dBA)	Quietest-Hour L_{eq} (dBA)	24-Hour Avg. L_{eq} (dBA)	CNEL (dBA)
Allen Road to Heath Road	LT-1	EB	414 Via Sol	On ROW of proposed Westside Parkway	1/15/03	13:00	14:45	54	40	47	51

3.4.6 Cultural Resources

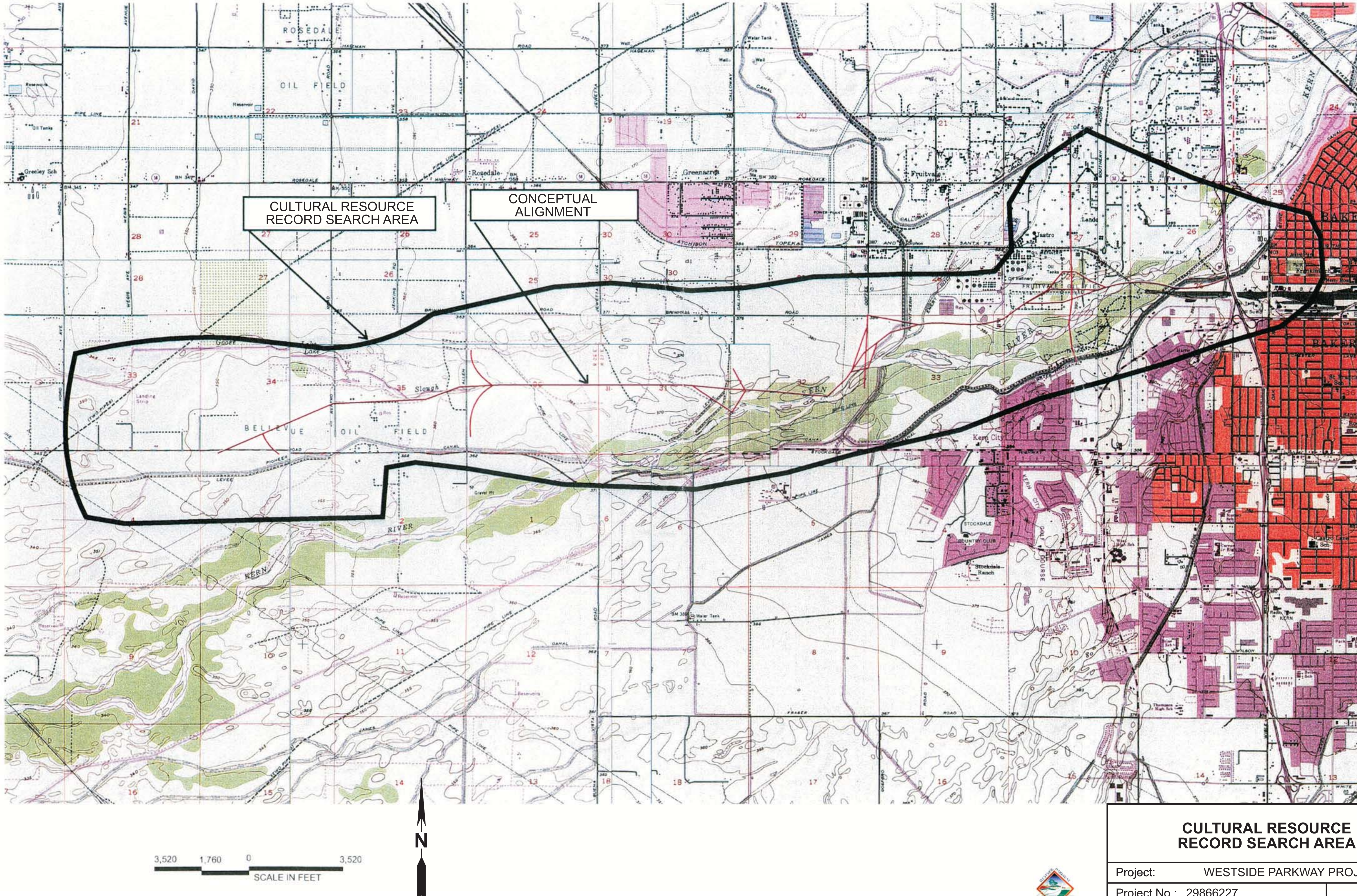
This section is based on an Archaeological Survey Report (ASR), a Historic Property Survey Report (HPSR), and a Historic Resources Evaluation Report (HRER), for the proposed project all dated December 2004. The following sections summarize information provided in those reports. A description of the historical context of the proposed project study area is provided in the HRER.

3.4.6.1 Archaeological Resources

A record search and archaeological survey for the Westside Parkway project was completed for the proposed project in December 2004. The project is located in various portions of the USGS *Gosford, Oildale, Rosedale, and Stevens, CA*. 7.5' topographic quadrangles (Figure 3.4-8). An archaeological resources record search was conducted on May 27, 2003, by the California Historical Resource Information System's (CHRIS) Southern San Joaquin Valley Information Center (SSJVIC), located at the Department of Anthropology, California State University, Bakersfield. The purpose of the archaeological records search was to identify all previously recorded cultural resources (prehistoric and historic archaeological sites, historic buildings, structures, objects, or districts) within a predefined area of potential effect (APE), as required by CEQA and Section 106 of the National Historic Preservation Act (NHPA) of 1966 and its implementing regulations, 36 CFR Part 800. The search required a review of all cultural resources records using an 800-meter (2,625 feet) search radius from the centerlines of the Westside Parkway options and the Mohawk Street extension. To identify any historic properties, current inventories of the National Register of Historic Places (NRHP), the California Register of Historic Resources (CRHR), the California Historical Landmarks (CHL), and the California Points of Historical Interest (CPHI) databases were reviewed. A review of the California State Historic Resources Inventory (HRI) for Kern County was also reviewed. The purpose of the cultural resource survey was to determine if any cultural resources were located within the APE, which was set at 150 meters (500 feet) beyond the planned centerlines of the Westside Parkway and Mohawk Street extension (Figure 3.4-9). Results of the records search are listed on Table 3.4-10. None of these sites were located near the areas surveyed in support of this report.

After review of the survey report for the project alignment (Parr and Osborne 1992) and other reports that had examined smaller portions of the project area (e.g., Napton and Greathouse 1988; LSA 1990; Nelson 2000), it was determined that virtually the entire project area had been surveyed to protocol within the past 11 years. Only a few small portions of the project had not been examined in the field by certified archeologists.

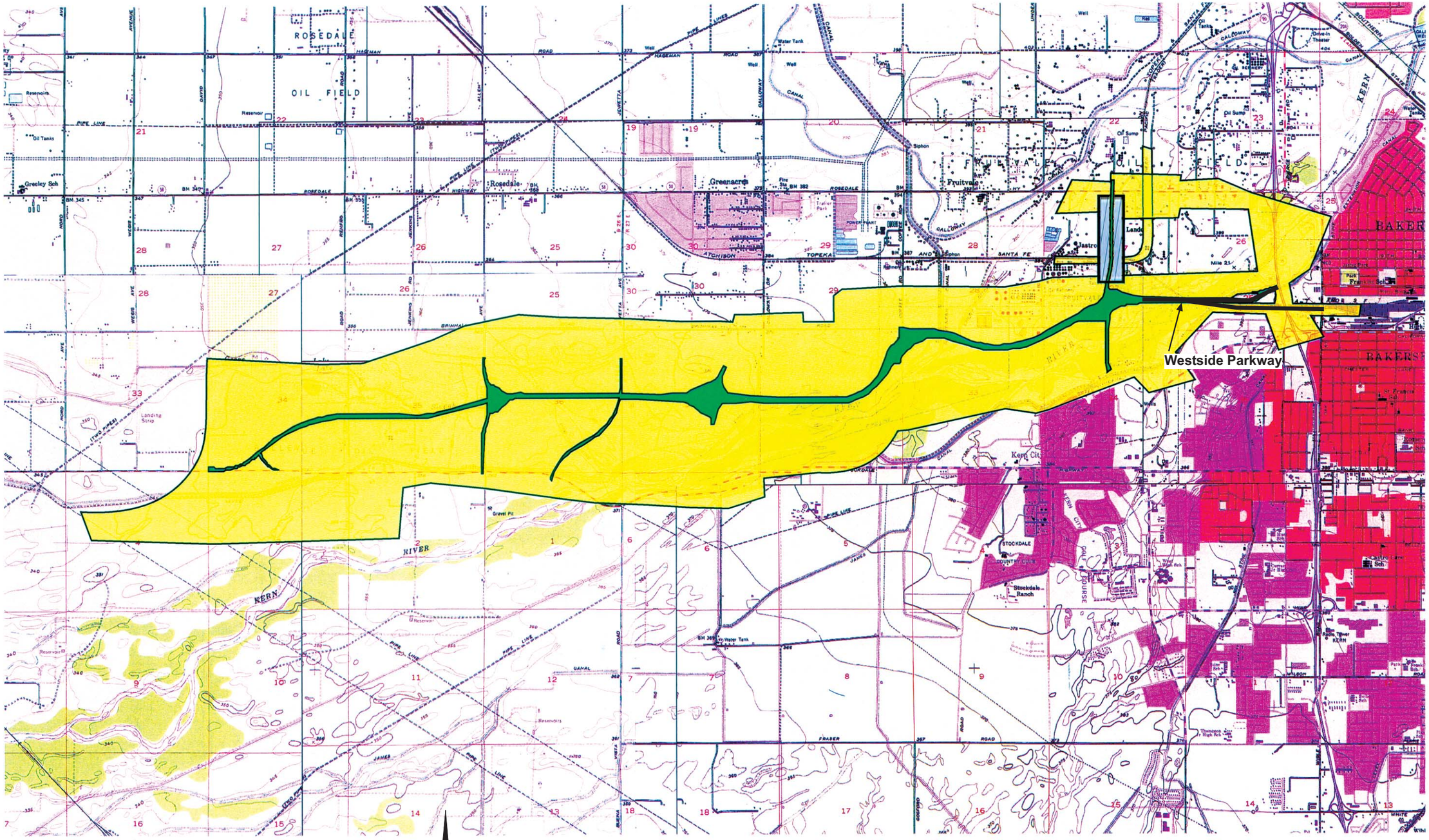
Concurrent with the records search, the California Native American Heritage Commission (NAHC) was contacted on August 8, 2003 to identify any sacred lands within the proposed project area that are identified in the NAHC's Sacred Lands File.



CULTURAL RESOURCE RECORD SEARCH AREA

Project: WESTSIDE PARKWAY PROJECT	
Project No.: 29866227	Figure 3.4-8
Date: SEPTEMBER 2004	

L:/westside pkwy/record search area.fh10 8/03



Source: Topo! @National Geographic Holdings, 2001.

3,520 1,760 0 3,520

SCALE IN FEET

N

- Surveyed by Parr and Osbourne (1992)
- Area Surveyed by MBA (2003)

CULTURAL RESOURCES SURVEY AREAS

Project: WESTSIDE PARKWAY PROJECT	
Project No.: 29866227	Figure 3.4-9
Date: JULY 2004	

L:/westside pkwy/PreSurveyedAreaMBA Survey.fh10 - 12/03

Table 3.4-10. Results of Archaeological Records Search

Trinomial	Approximate Location	Type	Eligibility	Potential for Impact
CA-KER-167	Near Oak and 16th	Prehistoric midden	Not evaluated	No: located about 600 meters (2,000 feet) northeast of the east end of the project.
CA-KER-3072	Between Friant-Kern Canal and Emery Ditch	Flake scatter	Not evaluated	Unlikely: appears to be about 90 meters (300 feet) north of the planned northeast exit ramp to Coffee Road.
IF-KER-675 (9788)	Northwest of Renfro Road and Stockdale Highway	Single chert flake	Ineligible	Possible: appears to be about 80 meters (260 feet) north of the far west end of the project. This is an isolate.
IF-KER-676 (9789)	West of Renfro Road and Stockdale Highway	Single chert percussion flake	Ineligible	No: appears to be about 185 meters (610 feet) south of the centerline in the Bellevue Oil Field. This is an isolate.

3.4.6.2 Historic Resources

A records search for this project was conducted on July 10, 2003 by the SSJVIC. This search (RS# 03-195) included a review of all recorded historic sites within a 0.8 km to 1.6 km (0.5 mile to 1.0 mile) radius of the project area, as well as a review of known cultural resources. The records search indicated that there are two recorded sites in the project area (Red Ribbon #23 oil well and the Kern River Railroad Bridge). Caltrans District 6 architectural historian, Chris Brewer, was consulted for pertinent canal site records for these features located within the APE.

In addition, the following resources were consulted as a part of this records search:

- National Register of Historic Places (NRHP) Index of Listed Properties
- City of Bakersfield Historic Preservation Commission
- California Historical Landmarks
- California Points of Historical Interest
- Caltrans State Bridge Survey
- Caltrans Local Bridge Survey

The historic resources survey identified three historic commercial buildings present on one parcel within the project's APE (Table 3.4-11). These include 2420 Mohawk Street, constructed in 1948; 2424 Mohawk Street, built in 1937; and 2430 Mohawk Street, constructed in 1943. Each of these buildings is in an industrial area west of SR99. A historic pole barn was identified on Coffee Road within the APE. The pole barn is associated with the local agricultural industry and pre-dates 1956. None of the historic commercial buildings or the pole barn possesses significant attributes that would make them eligible for listing on the NRHP.

Table 3.4-11. Historic Properties in the APE Determined Not to be Eligible for the NRHP

Name	Date Established	Description
2420 Mohawk Street	1948	Stucco clad false front commercial building with corrugated metal panel addition on east elevation
2424 Mohawk Street	1937	Poured concrete Streamline Modern façade with corrugated metal panel addition on east elevation
2430 Mohawk Street	1943	Stucco-clad vernacular style building with modern seamed metal panel addition on east elevation Corrugated metal panel outbuilding east of building
Coffee Road Pole Barn	Pre-1956	Pole barn with sixteen supports and corrugated metal panel-clad roof. Some panels have been replaced
Red Ribbon Ranch #1	1949	Oil well pumping unit Electric motor has replaced original gas-powered unit
Red Ribbon Ranch #14	1942	N-brand oil well pumping unit Electric motor has replaced original gas-powered unit The motor mount has been altered to accommodate new unit
Red Ribbon Ranch #17	1944	Lufkin oil well pumping unit Electric motor has replaced original gas-powered unit
Red Ribbon Ranch Lease 1, #3	1949	Bethlehem oil well pumping unit Electric motor has replaced original gas-powered unit
Sweitzer #8	1958	Lufkin oil well pumping unit Electric motor has replaced original gas-powered unit
Sawyer and Reid, Bethlehem #7	1958	Bethlehem oil well pumping unit Electric motor has replaced original gas-powered unit
CVC	1973-1976	Earthen-lined canal with 18-meter (60-foot) top width, and estimated 2.4-meter (8-foot) depth
Carrier/Gates Canal	1872-1873	Earthen canal 21-23 meters (70-75 feet) wide, depth unknown (water in canal at time of recordation)
RRBWSD Intake Canal	c. 1870	Earthen canal with 25-meter (80-foot) wide top width, 2.5 meters (8.25 feet) deep, and 20 degree sloped earthen banks
Mohawk Street Caboose	Unknown	ATSF red caboose with cupola windows
Kern River Railroad Bridge	1913	210-meter (690-foot) long 2.1-meter (7-foot) deep span through plate girder bridge
Mohawk Street/Refinery Avenue crossing	Unknown	Upgraded railroad crossing

The survey also documented six historic oil wells in the Fruitvale Oil Field (Table 3.4-11) within the project's study area that consist of:

1) Red Ribbon Ranch #1;
2) Red Ribbon Ranch #14;
3) Red Ribbon Ranch #17;
4) Red Ribbon Ranch Lease 1, #3;
5) Sweitzer #8; and
6) Sawyer and Reid, Bethlehem #7.

The wells in the project area are currently owned by Alexander Petroleum, San Joaquin Facilities Management, and Sawyer and Reid. They illustrate the varying periods of petroleum extractive technology and response to national economic conditions. None of the six oil wells possess significance or qualify for inclusion on the NRHP. The Red Ribbon #23, located within the Fruitvale Oil Field, is another oil well within the study area. The previously recorded oil well, by itself, was not considered eligible for listing on the NRHP.

There are also four water supply canals present within the project's study area; they include the Cross Valley, Friant-Kern, Carrier/Gates, and RRBWSD intake canals. The proposed Westside Parkway would cross each of these canals. These canals were previously inventoried and the site records were updated for the Westside Parkway project. As required under current Caltrans guidance, the four canals were evaluated and it was determined that the Friant-Kern Canal has been listed on the NRHP. The canal has achieved importance as a monumental engineering feat of artificial water transport, and its physical integrity has not been largely affected. None of the remaining canals that include the Cross Valley, Carrier/Gates, and RRBWSD intake canals are significant, and appear to be ineligible for listing on the NRHP (Table 3.4-11).

A series of three railroad-related properties were identified in the project area (Table 3.4-11). A salvaged railroad caboose car is located on Mohawk Street and appears to have been relocated to this site by a collector. The Kern River railroad bridge crossing was previously determined as ineligible for the NRHP. A portion of accessible Union Pacific and Burlington Northern Santa Fe grade was recorded at the intersection of Mohawk Street and Refinery Avenue. The grade, ballast, and tracks all appear to have been recently modernized. None of these railroad-related properties appear to be eligible to the NRHP.

The only NRHP-listed property within the Westside Parkway APE was the Friant-Kern Canal. In 1997, the canal was determined eligible under Criterion Consideration G as a significantly exceptional structure less than 50 years old. The structure is now more than 50 years old and is eligible under Criteria A and C for its contribution to agriculture and engineering. Its quality of exceptional significance coincides with the period of its construction from 1945 to 1951.

There are no California Historical Landmarks in the project study area listed in the State of California Office of Historic Preservation's Historic Property Data File. The nearest landmark is the Colonel Thomas Baker Memorial (Number 382) in downtown Bakersfield, located 3.2 km (2.0 miles) east of the project's APE. Additional research was performed at the following facilities:

- Bakersfield office of the California State Department of Conservation Division of Oil, Gas & Geothermal Resources;
- Beale Memorial Library History Room, Kern County Library; and the
- University of California Santa Barbara Map and Imagery Laboratory.

Additional historical research, architectural surveys, and a windshield survey were performed to evaluate the project study area's built environment for NRHP eligibility.

3.4.7 Public Services and Utilities

Fire Protection

The City of Bakersfield Fire Department and the Kern County Fire Department are responsible for fire protection services within metropolitan Bakersfield. The City of Bakersfield primarily serves the City of Bakersfield and the Kern County Fire Department primarily serves the unincorporated communities within metropolitan Bakersfield. Both departments combine to provide structural protection, fire protection and prevention service, emergency medical service (designated first responders), rescue service, hazardous materials response, arson investigation, environmental services (a unified permit/enforcement division) and safety education (City of Bakersfield, 2002).

The City of Bakersfield has 12 existing fire stations, consisting of 12 engine companies, two truck companies, and 150 suppression personnel. The Fire Department staffs its engines with a minimum of three personnel, ladder trucks with a minimum of four personnel, and a squad with a minimum of one personnel. The City of Bakersfield also assigns personnel to a Hazardous Materials Team (HMT). The HMT is certified by the State of California as Hazardous Material Technicians or Specialists and are generally the first arriving engine company to respond to a hazardous materials incident. Fire Department personnel are provided at a ratio of 0.79 per 1,000 population. A new fire station was recently constructed along Buena Vista Road near Deer Peak Avenue. The fire station is planned to house fire personnel as well as the City's hazardous materials response team.

The Kern County Fire Department operates a total of 48 fire stations within Kern County. The Fire Department has 13 stations within metropolitan Bakersfield. The Fire Department consists of six battalions for operation management. Each battalion covers a large geographical area and includes seven to nine stations (City of Bakersfield General Plan Update EIR, Public Services and Facilities, 2002). Battalion 6 is located in the northern portion of the unincorporated Bakersfield area and serves the project study area. The Battalion includes seven fire stations covering Oildale, Rosedale, and the Olive Drive areas (Kern County Fire Department, 2003). The Fire Department staffs its engines and ladder trucks with a minimum of three personnel and squads with a minimum of one personnel. The Fire Department has a total of 471 paid fire personnel which results in a 1.005 per 1,000 people ratio. Fire stations within the metropolitan Bakersfield metropolitan area have been situated to meet an emergency response time of five to seven minutes or less.

Table 3.4-12 summarizes the location and equipment of each station located within and adjacent to the project study area:

Table 3.4-12. Fire Department Protection Facilities Within the Project Study Area

Facility	Location	Equipment
City of Bakersfield		
Station No. 3	34000 Palm Street (Real Road and Palm Street)	1 – Engine
Station No. 11 .	70000 Stockdale Highway (Stockdale Highway east of El Rio Drive)	1 – Engine
Station No. 15	1301 Buena Vista Road (Buena Vista Road and Deer Peak Drive)	1 – Engine 1 – Hazardous Materials Van
Kern County Fire Department		
Station No. 65 – Greenacres .	9420 Rosedale Highway (Rosedale Highway and Calloway Drive)	1 – Type 1 Engine 1 – Type 4 FWD Watershed Patrol
Station No. 66 – Landco	3000 Landco Drive (Rosedale Highway and Landco Drive)	1 – Type 1 Engine 1 – Hazardous Materials Unit 1 – Type 4 FWD Watershed Patrol
Station No. 67 - Rosedale	14341 Brimhall Road (Brimhall Road just east of Renfro Road)	1 – Type 1 Engine 1 – Type 4, FWD Watershed Patrol

Source: City of Bakersfield, 2002.
Note: Type 4, FWD Watershed Patrol also known as a "squad"

Police Protection

The City of Bakersfield Police Department and the Kern County Sheriff's Department are responsible for providing law enforcement services through the enforcement of local, State, and Federal Laws. The Bakersfield Police Department provides law enforcement services to all areas within the City's limits. The Kern County Sheriff's Department provides law enforcement services to the unincorporated communities within metropolitan Bakersfield. Within the City, the Bakersfield Police Department handles both crimes and traffic accidents; in the County, the California Highway Patrol is responsible for traffic accidents and violations, while the Kern County Sheriff's Department is responsible for criminal matters (City of Bakersfield General Plan Update EIR, Public Services and Facilities, 2002).

There are currently 315 sworn police officer personnel and 124 non-sworn personnel employed by the City Police Department. In addition to the main police facility in downtown Bakersfield there are two Bakersfield Police Satellite Offices in operation servicing the communities in East and Southwest Bakersfield (City of Bakersfield Police Department, 2003). Current staffing levels are at approximately 1.3 officers per thousand residents. The average response times recorded during 2001 are summarized in Table 3.4-13.

Table 3.4-13. City of Bakersfield Police Department Response Times

Response Time Description	2000	2001
Priority I	5.50 Minutes	5.50 minutes
Priority II	7.83 minutes	8.00 minutes
Priority III	16.50 minutes	16.50 minutes

Notes:
-- Priority I call is classified as an in-progress violent crime
-- Priority II call is classified as an in-progress crime with no violence or weapons (potential for violence)
-- Priority III call is classified as a completed or interrupted crime, investigation is required.
-- Response times are derived as "initiation to arrival," or from the time a call is received to arrival of officer on scene.
Source: City of Bakersfield, 2003.

The Sheriff's Department has roughly 1,050 sworn, non-sworn, and civilian employees. The 452 authorized sworn (peace officer) positions are deployed as deputies in the Bakersfield metropolitan patrol, 14 substations, detentions, detectives and other support positions (Kern County Sheriff's Department, 2003). The Kern County Sheriff's Department is located at 1350 Norris Road and is the headquarters facility for law enforcement services in unincorporated Kern County.

Emergency Services

Several private companies provide ambulance and paramedic services throughout the project area. Hospitals that provide emergency medical services within the project area include San Joaquin Community Hospital, Mercy Hospital, Mercy Southwest Hospital, and Memorial Hospital. Bakersfield and Kern County Fire Department personnel typically arrive on scene first to provide basic life support service. Once an ambulance arrives to the incident, they provide advanced life support service and fire department personnel assist the ambulance crews as needed.

Schools

Metropolitan Bakersfield has 12 school districts with 56 elementary schools (K-6), 17 junior high schools (7 and 8), and 12 high schools. Currently, there are 10 additional schools being planned or in construction. Overall, the student-to-teacher ratio throughout the City is 22 students per teacher, slightly higher than the national average, which is 18 students per teacher. Bakersfield ranks slightly below the national average on expenditures per student. The City rate is $4,978 per student in comparison to the national average, which is $5,437 per student. The City of Bakersfield also has a continuation high school, Bakersfield College, California State University, Bakersfield (CSUB), nine vocational schools, an adult school, and the Pacific School of Law. Schools near the proposed Westside Parkway include Columbia Elementary School, Liberty High School, and CSUB. The Bakersfield Christian High School is located in the southeast corner of the Allen Road/Stockdale Highway intersection south of the project area.

Parks

Metropolitan Bakersfield has 88 park facilities, which include city parks, county parks, North Bakersfield parks, county regional parks, and the Bear Mountain Recreation and Park District. Conceptual plans have

been developed for the new Rio Vista Park. This new park would be located between the Kern River and Stockdale Highway at Buena Vista Road south of the project alignment (City of Bakersfield, 2003).

Utilities

Electric power supply and distribution for the project study area is furnished by Pacific Gas and Electric Company (PG&E) and Southern California Edison. Natural gas is supplied by PG&E and by Southern California Gas Company. Telephone service is supplied to the Bakersfield metropolitan area by Pacific Bell. Cable television service is provided by Cox Cable and Warner Amex Time-Warner.

The City of Bakersfield Water Resources Department oversees the divisions of agricultural water and domestic water. The Water Resources Department delivers and conserves water for the benefit of current and future citizens of Bakersfield. The majority of the City of Bakersfield is served by the California Water Service Company, with the remainder of the incorporated City primarily served by the City of Bakersfield's Ashe Water Company. Other water purveyors in the project vicinity include Oildale Mutual Water Company and Vaughn Mutual Water Company. The City of Bakersfield Public Works Department provides sewer services and maintenance for the City. The County of Kern provides water and sewer services to that portion of the Westside Parkway located within unincorporated land. Solid waste collection services (residential and commercial) are provided within the City by the City Sanitation Division and contracted private haulers, and in the unincorporated area by a County franchise hauler. Solid waste generated in the area is disposed of in County-operated landfills.

Public Transportation

Golden Empire Transit (GET) provides public transportation within the project area. GET operates 18 routes and serves approximately 23,000 passengers daily throughout the metropolitan Bakersfield area. Several routes serve various portions of the project area, in particular routes 9, 14, and 15.

4.0 ENVIRONMENTAL CONSEQUENCES AND MITIGATION MEASURES

4.1 INTRODUCTION

This section describes the likely effects of the proposed project on the physical, natural, and socioeconomic environment and compares these effects with the No Action Alternative. The impact analysis addresses the general impacts of constructing this transportation facility. To provide a worst-case analysis of possible impacts, it was assumed that an ultimate eight-lane parkway (as defined in Section 2.0) would be constructed. Mitigation measures to reduce adverse impacts related to construction of the Westside Parkway are also identified in this section.

This impact analysis evaluates three alternative alignments: Westside Parkway Truxtun Option, Westside Parkway Oak Option, and the No Action Alternative.

As mentioned in Section 3.1, the following reports were prepared for the proposed project:

- Location Hydraulic Study
- Air Quality Study
- Hazardous Waste Study
- Natural Environment Study
- Community Impact Assessment
- Visual Impact Assessment Report
- Noise Study Report
- Archaeological Survey Report
- Historic Resources Evaluation Report
- Historic Properties Survey Report
- Traffic Impact Report

The reports contain detailed analyses that are summarized in this Environmental Assessment/Draft Environmental Impact Report (EA/DEIR). Copies of these reports are available for review at Beale Memorial Library located at 701 Truxtun Avenue, Bakersfield, and the City of Bakersfield Public Works Department located at 1501 Truxtun Avenue, Bakersfield.

Table 4.1-1 summarizes impact areas and mitigation measures for the proposed project and the alternatives.

Table 4.1-1. Summary of Impacts

Westside Parkway Truxtun Option	Westside Parkway Oak Option	No Action Alternative	Mitigation Measures
Geology			
Potential structural damage from seismic activity.	Potential structural damage from seismic activity.	No impact	Geotechnical investigations in support of facility design. Standard design and construction activities for new roadway.
Mineral Resources			
Use of sand and gravel from Kern River fan. Possible loss of oil reserves.	Use of sand and gravel from Kern River fan. Possible loss of oil reserves.	No impact	Sand and gravel obtained from off-channel resources whenever possible. Review design plans for Westside Parkway with oil and gas operators.
Agricultural Resources			
Loss of up to 32 hectares (79 acres) of designated Prime Farmland.	Loss of up to 32 hectares (79 acres) of designated Prime Farmland.	No impact	No mitigation required. Conversion of these lands is consistent with the General Plan and zoning land use designation and ongoing development in the project area.
Hydrology			
Two transverse and one longitudinal encroachment of Kern River floodplain. Longitudinal encroachment is in an overflow area of 100-year flood on Kern River.	Two transverse and one longitudinal encroachment of Kern River floodplain. Longitudinal encroachment is in an overflow area of 100-year flood on Kern River.	No impact	Storm water runoff from the proposed project would be collected and stored onsite in retention basins. Culvert drainage facilities would be installed underneath Westside Parkway embankments, where required, in order to maintain existing storm water runoff patterns in the study area.
Increase 100-year flood elevation 0.07 m (0.23 foot) immediately upstream of Westside Parkway bridge across Kern River.	Increase 100-year flood elevation 0.05 m (0.16 foot) immediately upstream of Westside Parkway bridge across Kern River.	No impact	No mitigation required.
Increase 100-year flood elevation 0.04 m (0.13 foot) in immediate vicinity of Mohawk Street bridge across Kern River.	Increase 100-year flood elevation 0.04 m (0.13 foot) in immediate vicinity of Mohawk Street bridge across Kern River.	No impact	No mitigation required.
Remove 4.5 hectares (11.1 acres) of spreading basin area from Rosedale-Rio Bravo Water Storage District.	Remove 4.5 hectares (11.1 acres) of spreading basin area from Rosedale-Rio Bravo Water Storage District.	No impact	Purchase and develop land with equivalent recharge capacity.
Water Quality			
Surface water quality impacts from storm water runoff.	Surface water quality impacts from storm water runoff.	No impact	Use of retention basins to capture storm water runoff.
Surface water quality impacts from hazardous material spills.	Surface water quality impacts from hazardous material spills.	No impact	Completely contained pavement sections in areas adjacent to Kern River, canals, and infiltration areas, spill response procedures, retention basins.
Air Quality			
Conforms with State Implementation Plan.	Conforms with State Implementation Plan.	No impact	No mitigation required.

Westside Parkway Truxtun Option	Westside Parkway Oak Option	No Action Alternative	Mitigation Measures
Hazardous Waste			
34 known or potential parcels with hazardous waste.	38 known or potential parcels with hazardous waste.	No impact	Any hazardous waste to be remediated in accordance with Federal and State regulations and Caltrans procedures.
Biological Resources			
42.7 hectares (105.5 acres) of non-native grassland.	42.8 hectares (105.8 acres) of non-native grassland.	No impact	Compensation in accordance with Metropolitan Bakersfield Habitat Conservation Plan (MBHCP).
0.5 hectare (1.3 acres) of Great Valley cottonwood riparian forest.	0.4 hectare (1.0 acre) of Great Valley cottonwood riparian forest.	No impact	Compensation in accordance with MBHCP.
33.5 hectares (82.8 acres) of agricultural land.	33.5 hectares (82.8 acres) of agricultural land.	No impact	Compensation in accordance with MBHCP.
0.24 hectare (0.59 acre) of non-wetland waters of U.S.	0.07 hectare (0.18 acre) of non-wetland waters of U.S.	No impact	Compensation in accordance with MBHCP.
Impact San Joaquin kit fox, western burrowing owl, blunt-nosed leopard lizard, San Joaquin antelope squirrel, Swainson's hawk, and Tipton kangaroo rat.	Impact San Joaquin kit fox, western burrowing owl, blunt-nosed leopard lizard, San Joaquin antelope squirrel, Swainson's hawk, and Tipton kangaroo rat.	No impact	Compensation in accordance with MBHCP.
Land Use			
Consistent with land use plans and policies.	Consistent with land use plans and policies.	Not consistent with land use plans and policies.	No mitigation required.
Socioeconomics			
Displacement of City of Bakersfield Corporation Yard and up to four commercial businesses.	Displacement of approximately 18 percent of BNSF rail yard and up to six commercial businesses.	No impact	Provide relocation assistance in accordance with the Federal Uniform Relocation Assistance and Real Properties Acquisition Act, as amended. The City of Bakersfield would coordinate with BNSF to determine relocation requirements for the potential loss of rail yard.
Visual Resources			
Elevation where Westside Parkway crosses Kern River and BNSF railroad tracks is as high as 13 meters (42 feet).	Elevation where Westside Parkway crosses Kern River is as high as 8 meters (26 feet).	No impact	Landscaping and aesthetic treatments on structures.
Traffic			
Of 27 intersections studied, 24 in the a.m. peak and 17 in the p.m. peak operate at LOS C or better in 2030.	Of 27 intersections studied, 24 in the a.m. peak and 18 in the p.m. peak operate at LOS C or better in 2030.	Of 27 intersections studied, 19 in the a.m. peak and 13 in the p.m. peak operate at LOS C or better in 2030.	No mitigation required.
One intersection in a.m. peak and two intersections in p.m. peak operate at LOS E or F in 2030.	One intersection in a.m. peak and two intersections in p.m. peak operate at LOS E or F in 2030.	Four intersections in a.m. peak and eight intersections in p.m. peak operate at LOS E or F in 2030.	No mitigation required.

Westside Parkway Truxtun Option	Westside Parkway Oak Option	No Action Alternative	Mitigation Measures
Increased connectivity of arterial grid in west Bakersfield.	Increased connectivity of arterial grid in west Bakersfield.	No improvement in connectivity of arterial grid in west Bakersfield.	No mitigation required.
Noise			
67 dBA peak-hour noise approached or exceeded at 29 of 36 sensitive receptor modeling locations.	67 dBA peak-hour noise approached or exceeded at 29 of 36 sensitive receptor modeling locations.	No impact	Installation of sound barriers and/or combination of sound barriers and low-noise pavement.
Cultural Resources			
The alignment would cross the Friant-Kern Canal.	The alignment would cross the Friant-Kern Canal.	No impact	The project would comply with the design recommendations set forth in the *Finding of No Adverse Effect* issued by Caltrans and FHWA.

The purpose of the impact assessment for this EA/DEIR is to identify potential impacts associated with the project as currently proposed. This assessment will address specific design features of the project.

4.2 PHYSICAL ENVIRONMENT

The characteristics of the physical environment within the project area are similar between the Westside Parkway Truxtun Option and the Westside Parkway Oak Option. Therefore, unless specifically stated otherwise in the text, physical impacts described herein are the same for both alternative alignments and are described mutually under the heading of "Westside Parkway Alternatives."

4.2.1 Geology and Soils

4.2.1.1 Environmental Impacts

Westside Parkway Alternatives

There is no evidence of landslides or slumps in the project area. Conditions favorable to the development of landslides do not appear to be present along the alternative alignments. Therefore, no impacts to slope stability would be anticipated due to construction of a transportation facility on the proposed alternative alignments.

The Westside Parkway is situated on a relatively flat alluvial plain and no significant slopes are proposed along the alternative alignments. There are no significant slopes on the project site, so the project would not be subject to hazards from slope instability, from both landslides and debris flows. The proposed alternatives would be landscaped or covered with asphalt or concrete and would not be readily susceptible to erosion.

The project area is underlain primarily by unconsolidated or weakly consolidated alluvial soils. Structures and embankments built on these materials are likely to undergo minor settlement related to the consolidation of the alluvium with time. Embankments would also settle to a minor degree as a result of

compression of the embankment fill under self-load. These effects are normal and are taken into account in the design of transportation facilities.

The soil underlying the Westside Parkway consists primarily of sands that exhibit low expansion potential. In addition, relatively dense soil conditions underlie much of the alignment, reducing the potential impacts due to poor soil conditions. Subsidence within the vicinity of Bakersfield has been relatively minor due to the rapid recharge of the underlying aquifer from the Kern River. The risk due to subsidence of the underlying soils is considered minor.

Differential settlement between embankments and bridge or ramp structures could occur, with potential effects on roadway performance. This potential effect would be minimized by allowing the embankment to preload underlying soils for an appropriate length of time, thus causing most of the settlement to take place before the structure is built. Some localized clay soils along the alternative alignments are likely to be moderately too highly expansive. Transportation facilities built on these expansive soils could be subject to some differential settlement, which could cause cracking of pavement. Various standard engineering practices such as replacement of expansive soils with appropriate fill can be used to prevent this impact. Site-specific geotechnical investigations would be conducted during final engineering design to identify the presence of expansive soils and determine appropriate engineering treatment of those soils to prevent impacts to the facility.

Based on existing geologic information, soils in the project area appear to have relatively good engineering properties for the support of transportation facility structures. Suitable foundation systems can be designed for these materials by conventional methods to accommodate the design loads. Depending on the location, type, and weight of any given structure, and the site-specific geologic conditions ascertained in field and laboratory tests conducted for final engineering design, options for the foundation system could include drilled piers, piles, or spread footings.

Construction of bridge foundations in a river with potential flows like the Kern River requires design consideration for scour around the foundations. Flows in the Kern River are largely controlled by operation of Isabella Dam. High annual flows during spring runoff that are most effective at causing severe enough scour of bridge foundations to ultimately affect the stability of the structure are substantially lessened by the operation of this dam. Bridge designs to withstand the type of high flows that can take place in the Kern River are available, as is evidenced by the structural integrity of the existing SR99 bridge and other roadway bridges across the river in the metropolitan Bakersfield area.

No known active or potentially active fault traces have been recognized as crossing, or being closer than 14 km (8.5 miles) from the proposed Westside Parkway. The California Geologic Survey (CGS) does not delineate any part of the project area as being within an Alquist-Priolo Earthquake Fault Zone (California Division of Mines and Geology, 1997b and Hart, 1984). Therefore, the potential for surface fault rupture along the freeway is considered low. However, the project would likely be subjected to moderate or strong earthquake motions over time. The Westside Parkway would be designed and constructed in accordance with the Uniform Building Code and Uniform Seismic Code, and would adhere to modern earthquake standards. Proper design and construction of the project components would reduce impacts from seismically-related hazards.

The Westside Parkway is underlain by relatively dense alluvial soils that are not prone to settlement under earthquake loading conditions. Therefore, seismically induced settlement or differential compaction are not considered significant seismic hazards to the proposed Westside Parkway. Earth embankments and excavated slopes would undergo ground shaking in the event of a strong earthquake felt within the project area. These embankments and excavated slopes would be built in accordance with Caltrans seismic standards; therefore, they would be unlikely to undergo a major failure from earthquake induced ground shaking. However, seismically induced minor cracking of the embankments and pavement could occur, with a resultant need for minor repair.

No recent centers of potential volcanic activity occur within hundreds of kilometers of the proposed Westside Parkway. Volcanic hazards, such as lava flows and ash falls, are therefore not anticipated to present a hazard to this alternative.

No Action Alternative

The No Action Alternative would not result in geologic or soils impacts.

4.2.1.2 Mitigation Measures

Geotechnical investigations would be conducted in support of the design of a new transportation facility. The use of standard Caltrans design and construction procedures, as contained in the Highway Design Manual and Standard Specifications, would obviate any additional mitigation measures.

4.2.2 Mineral Resources

4.2.2.1 Environmental Impacts

Westside Parkway Truxtun Option

The Westside Parkway Truxtun Option would require the consumption of sand and gravel to construct the facility; however, no impacts on mineral resources are anticipated due to the large amount of sand and aggregate available in the region. Approximately four active oil wells located near the Mohawk Street interchange could potentially be displaced by the Westside Parkway Truxtun Option and access to approximately three active oil wells located in the southwest quadrant of the Mohawk Street interchange could potentially be affected. Oil production would continue at surrounding oil wells in the nearby vicinity. Reserves in the drainage radius of a particular well that conflicts with the transportation improvements could be irredeemably lost.

There are previously plugged and abandoned wells in the vicinity of the Westside Parkway Truxtun Option. Damage to these wells during project construction could result in the release of hazardous materials.

Westside Parkway Oak Option

The Westside Parkway Oak Option would require the consumption of sand and gravel to construct the facility; however, no impacts on mineral resources are anticipated due to the large amount of sand and aggregate available in the region. Approximately seven active oil wells near the Mohawk Street interchange could potentially be displaced by the Westside Parkway Oak Option and access to

approximately three active oil wells located in the southwest quadrant of the Mohawk Street interchange could potentially be affected. Oil production would continue at surrounding oil wells in the nearby vicinity. Reserves in the drainage radius of a particular well that conflicts with the transportation improvements could be irredeemably lost.

There are previously plugged and abandoned wells in the vicinity of the Westside Parkway Oak Option. Damage to these wells during project construction could result in the release of hazardous materials.

No Action Alternative

The No Action Alternative would not result in impacts to mineral resources.

4.2.2.2 Mitigation Measures

To the extent possible, sand and gravel required for project construction would be obtained from off-channel resources.

In accordance with the Bakersfield Municipal Code, all reasonable efforts would be made to keep the Westside Parkway at least 75 feet from existing oil and gas wells. The City of Bakersfield would contact the active oil and gas operators listed by the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (Appendix I), as appropriate, and review the design plans for the Westside Parkway with these operators to ensure that buried flowlines or pipelines associated with oil field production are not damaged by project construction. The City of Bakersfield would identify the locations of previously plugged and abandoned wells prior to construction. If conflicts with these wells cannot be avoided, the Department of Conservation, Division of Oil, Gas, and Geothermal Resources in Bakersfield would be contacted to determine appropriate measures to ensure that the abandoned wells are not damaged, which may include re-abandonment. If any abandoned or unrecorded wells are uncovered or damaged during project construction, the Department of Conservation, Division of Oil, Gas and Geothermal Resources in Bakersfield would be contacted to obtain information on the requirements for and approval to perform remedial operations on these wells.

4.2.3 Agricultural Soils and Farmlands

4.2.3.1 Environmental Impacts

Westside Parkway Alternatives

An analysis of farmland impacts was conducted based on maps provided by the California Department of Conservation, Farmland Mapping and Monitoring Program. As discussed in Section 3.2.5, areas currently designated as Prime Farmland along the project alignment are generally from the western project terminus at Heath Road to Renfro Road; and from Allen Road to Calloway Drive. There are no important farmland categories east of Calloway Drive. Therefore, both alternatives would be identical in terms of farmland impacts. Based on the alignment in the above areas, it was estimated that approximately 32 hectares (79 acres) of Prime Farmland would be lost due to the project.

Caltrans consulted with the Natural Resources Conservation Service (NRCS) on farmland impacts in 1994 for the SR58 Route Adoption project (Caltrans and FHWA, 2003). Based on a conceptual eight-

lane freeway facility from SR99 to I-5, that project would have covered 187 hectares (461 acres) of agricultural land. Of this total, 170 hectares (420 acres) were Prime Farmland. Based on the Farmland Conversion Impact Rating system developed by the U.S. Department of Agriculture, the impact of a freeway on the Tier 1 route to farmland scored 196 points on a scale of 0 (least impact) to 260 (greatest impact) (Appendix C). Sites with scores above 160 points are afforded increasingly higher levels of consideration for farmland protection. The criteria used to estimate farmland impacts include farmland classification, farming practices and services, and regional urban development. These criteria are explained in 7 CFR 658.5(b).

As discussed in the Tier I EIS/EIR for the Route 58 Route Adoption Project, construction of a transportation facility between SR99 and I-5 in Kern County must cross agricultural lands to the west of Bakersfield. The Tier 1 route minimizes disruption of farm operations.

West of Calloway Drive, where important farmland is present in the project area, the Westside Parkway alternatives follow the same alignment as the Tier 1 alignment for the previous SR58 Route Adoption project. As indicated above, the Westside Parkway alternatives would impact 32 hectares (79 acres) of Prime Farmland, approximately 19% of the farmland impact associated with construction of a transportation facility over the entire alignment (i.e., SR99 to I-5) for the SR58 Route Adoption project. Therefore, farmland impacts for the Westside Parkway alternatives would be substantially less than those for the SR58 Route Adoption project, which were determined through consultation with the NRCS not to be substantial.

The proposed alignment in the area of designated Prime Farmland near Heath Road affects access to farmlands. As a result, farming activities could be reduced by more area than just the right of way take. However, if access can be maintained for these parcels, no additional right of way take would occur. The area east of Allen Road, both north and south of the project alignment, has been approved and is undergoing residential development. With the construction of these residential developments, the area planned for the Westside Parkway (i.e., a linear area between housing tracts) would no longer be feasible to be used as farmland. Conversion of 32 hectares (79 acres) of Prime Farmland to transportation use is consistent with the Metropolitan Bakersfield General Plan and zoning land use designations and ongoing urbanization and residential development in the project vicinity. The loss of Prime Farmland is not considered adverse.

No Action Alternative

The No Action Alternative would not impact agricultural soils or farmlands.

4.2.3.2 Mitigation Measures

The loss of Prime Farmland cannot be mitigated, but is consistent with the Metropolitan Bakersfield General Plan and zoning land use designations and ongoing urbanization and residential development in the project vicinity. Farmland purchased would be leased back to the property owner until construction occurs. Compensation would be provided to property owners and farm operators needed to pay for costs of on-farm investments of reorganization of their operations needed to make divided parcels into viable farm units. Should non-farmable remnant parcels be created, these parcels would be offered to the

adjoining property owners and would be offered for public sale only if all reasonable efforts at sale to the adjoining property owners are unsuccessful.

4.2.4 Hydrology

4.2.4.1 Environmental Impacts

Westside Parkway Alternatives

The Westside Parkway would encroach on the Kern River floodplain in three locations: (1) at the Kern River main alignment crossing near the BNSF railroad bridge (transverse encroachment); (2) at the Mohawk Street extension crossing (transverse encroachment); and (3) between the Friant-Kern Canal and Mohawk Street (longitudinal encroachment).

Although detailed design of the main alignment and Mohawk Street extension have not yet been developed, the crossings are expected to have multiple bridge piers and abutments that would parallel the direction of flow to minimize obstructions to flow conveyance. Pursuant to State regulations, the bridges would be designed to have sufficient freeboard above the 100-year flood water surface elevation; therefore, the bridge deck would not impact flood flows.

The alignment between the Friant-Kern Canal and Mohawk Street is expected to encroach into an overflow area of the 100-year floodplain. This overflow area is most likely a temporary pond of flow caused by local breakouts from the mainstream or side tributaries. This area is not within the main flow path of the Kern River floodplain and has no effect on the river's hydraulic characteristics at the peak flow. The overflow area can thus also be called non-effective floodplain area. With the Westside Parkway's encroachment, flooding within the overflow area would be eliminated. Since the encroachment occurs outside the effective (or main) flood flow path, impact to the existing hydraulic characteristics of the Kern River floodplain is not expected. In order to evaluate the hydraulic characteristics of this portion of the Kern River, a HEC-RAS model was prepared using available information to identify the potential water surface elevation changes that may be induced by the proposed roadway project. The results of the hydraulic analysis are discussed in the following paragraph. The potential floodway impact is also addressed.

Hydraulic Analysis

In order to determine the impacts of the proposed Westside Parkway encroachments on the Kern River floodplain, both the 100-year flood baseline (or existing) and 100-year flood under proposed conditions were evaluated. The U.S. Army Corps of Engineers' (USACOE) HEC-RAS modeling software was used in the analysis. The baseline condition hydraulic model was developed based upon the river geometry data that was used in the 1984 FEMA Flood Insurance Study. The project condition model was prepared by modifying the baseline condition to incorporate the proposed bridge encroachments.

The study reach encompasses the areas impacted by the proposed alignment; namely, 1.6 km (1.0 mile) downstream of the Coffee Road bridge to 1.3 km (0.8 mile) upstream of the BNSF railroad bridge. A total of 37 cross-sections were taken to characterize the geometry of this reach (refer to the Location Hydraulic

Study for the location of these cross-sections). The project would require two new bridges across the Kern River: the Westside Parkway river crossing near the BNSF bridge and the Mohawk Street crossing.

The hydraulic analysis results indicate that the alternative bridge crossings would have minor local effects on the existing maximum water surface elevations during a 100-year flood event. At Mohawk Street, the proposed river crossing would cause an increase in the water surface of 0.04 meter (0.13 foot) in the immediate vicinity of the bridge. The Westside Parkway Truxtun Option crosses the Kern River on a highly skewed alignment. This requires 18 bridge piers to be located within the river floodway. The water surface elevations immediately upstream of this river crossing would increase 0.07 meter (0.23 foot). Under the Westside Parkway Oak Option, the proposed mainline bridge crossing of the Kern River would be nearly perpendicular to the river and have 8 bridge piers within the floodway. The hydraulic analysis indicates that the water surface elevation immediately upstream of the bridge crossing would increase 0.05 meter (0.16 foot). The minor increases in flood depths resulting from these alternative bridge crossings would not change the risk of flooding associated with the Kern River or increase the amount of property at risk of flooding.

Overall, the Westside Parkway would not involve a substantial encroachment of a 100-year floodplain because the encroachments would not result in any of the following:

Flooding Risks: There are no properties that would be put at risk due to impacts of the proposed Westside Parkway. Although flood levels may slightly increase due to the project at some locations along the Kern River, these increases are anticipated to be minor and do not impose flood hazard risks to any properties. There are no unmitigated damages that would result from the proposed Westside Parkway project.

Impacts to Natural Floodplain Values: Natural and beneficial uses of the Kern River channel and adjacent floodplain include wildlife foraging, migration, and breeding, flood flow conveyance and storage, groundwater recharge, and recreational activities. The Kern River channel and adjacent floodplain have moderate wildlife habitat values. The proposed Westside Parkway and Mohawk Street crossings of the Kern River would result in the removal of 0.5 hectare (1.3 acres) and 0.4 hectare (1.0 acre) of poorly developed Great Valley cottonwood riparian forest for the Westside Parkway Truxtun Option and the Westside Parkway Oak Option, respectively. Because this habitat is very narrow, it does not provide important value to the wildlife of the area. The loss would not alter the beneficial use of the floodplain by wildlife because the amount to be removed is very small and this habitat is not critical to the survival of populations of species inhabiting the area. The bridges would not impede the use of the floodplain as a movement corridor for wildlife.

The bridges would not substantially alter the habitat for any fish in the Kern River. Bridge piers would occupy a small space (several hundred square meters) on the bottom of the river, and the decks of the bridges would shade a small area of the river. Neither of these effects would alter the population size of any fish inhabiting the river.

Hydraulic modeling of the river indicates that the bridges would not substantially alter surface elevations of the 100-year flood. Therefore, the project would not impact the benefit of the floodplain for conveyance and storage of flood flows. The longitudinal encroachment of the proposed Westside

Parkway would cross an area inundated by the overflow of a 100-year flood. This area belongs to an oil refinery and has no apparent valuable habitat. The proposed project would offer flood protection for this area.

The Kern River channel is important for recharge of the groundwater aquifer. Bridge piers would occupy a few hundred square meters of the channel floor, reducing the area available for recharge. The amount of channel bottom occupied by impermeable concrete piers would be too small to measurably change the amount of recharge provided by the river channel.

Support of Incompatible Floodplain Development: The proposed project alternatives would provide no access to the Kern River floodplain. Therefore, they would not support incompatible floodplain development.

Potential for Interruption or Termination of a Transportation Facility in the Event of Flooding: As stated above, the project would not substantially alter water surface elevations of the 100-year flood, and therefore would not affect the potential for interruption or termination of a transportation facility in the event of flooding.

No Action Alternative

The No Action Alternative would not result in flooding risks to transportation facilities or impacts to floodplains, drainages, or groundwater recharge facilities.

4.2.4.2 Mitigation Measures

Although the proposed project would result in negligible floodplain impacts, the following measures are planned to control drainage from project facilities:

- Storm water runoff from the proposed project would be collected and stored in retention basins.
- Culvert drainage facilities would be installed underneath Westside Parkway embankments, where required, in order to maintain existing storm water runoff patterns in the study area.

4.2.5 Water Quality

Highway runoff was sampled in 2001-2002 as part of the Caltrans Statewide Highway Runoff Characterization study. The 2001-2002 highway runoff data have been divided into two groups: data from non-urban highways [annual average daily traffic (AADT) <30,000], and data from urban highways (AADT >30,000). The projected 2030 AADT for the Westside Parkway is >30,000; therefore, only data for urban highways is listed in Table 4.2-1. In considering potential impacts of highway runoff on surface water and groundwater quality, these data are assumed to reflect water quality similar to the quality of runoff from the Westside Parkway.

Table 4.2-1. 2001-2002 Statewide Highway Runoff Water Quality - Urban (AADT >30,000)

Constituent	Units	Range	Mean	Std Dev	n	% Detected
Conventionals						
Dissolved Oxygen Content	mg/L	2.7-117	26.8	23.5	104	100%
Electrical Conductivity	umhos/cm	24-317	115	74	103	100%
Hardness as $CaCO_3$	mg/L	5-400	43.5	49.2	104	100%
pH	pH Units	5.4-8.4	6.998	0.55	103	100%
Total Dissolved Solids	mg/L	<1-1800	126	222	104	97%
Temperature	oC	6.7-21.7	12.6	3.9	59	100%
Total Oxygen Content	mg/L	2.8-142	32.4	28.6	104	100%
Total Suspended Solids	mg/L	<1-2988	147	362	104	99%
Metals						
Arsenic, AS (Diss)	ug/L	<0.5-13.2	1.30	1.72	104	48%
Arsenic, AS (Total)	ug/L	<0.5-8.4	1.97	1.71	104	71%
Cadmium, Cd (Diss)	ug/L	<0.2-1.6	0.30	0.25	104	61%
Cadmium, Cd (Total)	ug/L	<0.2-4.1	0.80	0.73	104	92%
Chromium, Cr (Diss)	ug/L	<1-21	3.35	3.18	104	84%
Chromium, Cr (Total)	ug/L	<1-72	9.91	9.58	104	99%
Copper, Cu (Diss)	ug/L	3.58-130	21.9	19.5	104	100%
Copper, Cu (Total)	ug/L	5.1-270	43.1	37.7	104	100%
Mercury, Hg (Diss)	ug/L	<50-<50	---	---	8	0%
Mercury, Hg (Total)	ug/L	<50-83	---	---	8	13%
Nickel, Ni (Diss)	ug/L	1.55-23	6.13	5.48	104	78%
Nickel, Ni (Total)	ug/L	<2-96.5	13.2	12.3	104	97%
Lead, Pb (Diss)	ug/L	<1-470	17.1	63.4	104	61%
Lead, Pb (Total)	ug/L	<1-1400	69.1	206.8	104	98%
Zinc, Zn (Diss)	ug/L	16-551	103	120	104	100%
Zinc, Zn (Total)	ug/L	20.16-1300	231	216	104	100%
Nutrients						
NO_3-N	mg/L	<0.1-6.2	1.43	1.38	103	99%
Ortho-P (Diss)	mg/L	<0.03-1.34	0.13	0.20	103	64%
P (Total)	mg/L	<0.03-2.56	0.36	0.38	104	94%
Total Kjeldahl Nitrogen	mg/L	<0.1-11	2.79	2.15	103	96%
Pesticides						
Diazinon	ug/L	<0.05-0.3	0.065	0.106	12	25%
Diuron	ug/L	<0.5-37.4	3.63	7.18	73	55%
Glyphosate	ug/L	<5-116	19.0	26.5	74	57%
Oryzalin	ug/L	<0.5-77.8	2.26	11.65	73	27%
Oxadiazon	ug/L	<0.05-0.8	---	---	73	14%
Trichlopyr	ug/L	<0.2-<1	---	---	73	1%

Source: California Department of Transportation, 2002.

As discussed in Section 3.2.6, the Water Quality Control Plan for the Tulare Lake Basin (Basin Plan) (CVRWQCB, 1995) identified the following beneficial uses for the Kern River within the project area:

- Agricultural supply
- Freshwater habitat
- Groundwater recharge
- Hydropower generation
- Industrial service supply
- Municipal supply
- Rare, threatened or endangered species
- Recreation

- Industrial process supply
- Wildlife habitat

For those constituents that were measured as summarized in Table 4.2-1, the quality of highway runoff falls within the water quality objectives set forth in the Basin Plan for the above mentioned beneficial uses.

4.2.5.1 Environmental Impacts

Westside Parkway Alternatives

Impacts of Highway Runoff on Surface Water Quality

Storm water runoff from this roadway would be routed to retention facilities in or near the project right of way. There are expected to be at least two types of retention facilities along the alignment: retention basins and on-site infiltration areas. Retention basins would be 2.4 meters (8 feet) deep with 1:2 slopes and designed to contain runoff from a 24-hour, 100-year storm event, which is approximately 46 mm (1.8 inches) of precipitation. Retention basins would be sized in accordance with the method described in the Kern County Hydrology Manual that requires the total basin volume for this project to be about 32,870 m3 (26.65 acre-ft.). The on-site infiltration areas would be located between ramps within interchanges and between the roadway pavement and the edge of right of way. These facilities would be landscaped, shallower than the basins, and have gentle slopes.

As summarized in Table 4.2-2 and shown in Figure 2.3-4, the proposed project alternatives are expected to include approximately 10 retention basins plus 15 infiltration areas. The exact numbers and locations of infiltration areas and retention basins have not been finalized. Regardless of the number and location of the retention basins, they would have a combined volume of approximately 32,870 m3 (26.65 acre-ft.). The 15 infiltration areas, as currently planned, would have capacity to retain a combined volume of approximately 2,365 m3 (1.9 acre-ft.).

Table 4.2-2. Retention Basin Facility Volumes, City of Bakersfield Method

Retention Basins		
Basin #	Approximate Location	24hr – 100 year [m3 (acre-feet)]
B-1	South of freeway, between Heath Rd. and Renfro Rd.	2,899 (2.35)
B-2	South of freeway, west of Renfro Rd.	2,701 (2.19)
B-3	South of freeway, east of Renfro Rd.	3,130 (2.54)
B-4	North of freeway; within the Allen Rd. westbound entrance ramp	4,782 (3.88)
B-5	North of freeway, west of Calloway Dr.	3,345 (2.71)
B-6	North of freeway, west of Coffee Rd.	5,479 (4.44)
B-7	North of freeway, east of Friant-Kern Canal	5,717 (4.63)
B-8	Within the Mohawk St. interchange	2,169 (1.76)
B-9	West of the Carrier Canal	1,311 (1.06)
B-10	South of the Carrier Canal, west of SR99	1,335 (1.08)
	Totals	32,869 (26.65)

Dikes of 100 to 200 mm (4 to 8 inches) in height would be constructed along the pavement edge on both sides of the Westside Parkway. Safety design criteria dictate the height of the dike based upon acceptable flooding on the shoulder. In general, runoff would be directed to unpaved V-ditches. However, in some sections, the V-ditches may be paved to accommodate flow velocities. The V-ditches would be designed to convey a 25-year storm event and would convey runoff to the retention basins and infiltration areas. The methodologies used for sizing the conveyance facilities (V-ditches) and the retention facilities are different. The V-ditches are sized to convey peak flow while the retention basins are sized to retain runoff volume.

The storage volume of the basins would typically be sufficient to contain runoff from the newly constructed paved surfaces and right of way of the freeway. Under the design criteria being utilized, no adverse impacts to surface water bodies are generally expected since under most conditions runoff would not leave the Westside Parkway corridor. However, if a storm or a series of storms were to occur that produced runoff that exceeded the capacity of the retention basins (runoff volume greater than that of the 24-hour, 100-year storm event), the basins may potentially overflow and discharge into the nearest surface water body. A discharge to local surface water bodies would be expected to occur only during such a large storm event (return frequency greater than 100 years) or a rapid series of storm events when flows in the Kern River would provide a large amount of dilution water. Retention basins would be located far enough from unlined portions of the CVC to avoid infiltration of freeway runoff into the canal. As indicated in Table 4.2-1, the quality of storm water runoff from the proposed highway would not impact the beneficial uses designated for the Kern River.

Impacts of Hazardous Material Spills on Surface Water Quality

Hazardous material spills resulting from traffic accidents and fluids leaking from vehicles have the potential to contaminate the groundwater below and adjacent to the Westside Parkway. To prevent these pollutants from contaminating surface waters, runoff (storm water or spilled material) from the Westside Parkway would be retained in completely sealed pavement sections in areas adjacent to groundwater recharge areas. In other areas, runoff (storm water or spilled material) would be conveyed to and contained by the project's retention basins and infiltration areas.

In order for a hazardous spill to discharge directly into surface waters in the project area, the vehicle hauling the hazardous material would have to leave the roadway during an accident. In order to prevent vehicles from leaving the roadway, barriers would be placed along portions of the roadway that are on embankments and that are immediately adjacent to the RRBWSD spreading basins. If the vehicle involved in the accident remains on a bridge, spilled material would be confined to the bridge and the storm water containment features at either end of the structure.

Any spill that does leave the roadway would be conveyed by V-ditches and contained by the series of retention basins and infiltration areas that comprise the storm drain system. In areas where the Westside Parkway is below grade, a hazardous material spill would flow into a sump. Spill response would include the removal and proper disposal of contaminated soils within the V-ditches, retention basins, and infiltration areas.

Impacts of Paving Recharge Areas on Groundwater

Within the RRBWSD, 4.5 hectares (11.1 acres) of the existing spreading basin area would be taken by the proposed project. The recharge area that would be impacted by the project is located west of Allen Road and north of Stockdale Highway. The RRBWSD intake canal would be south of the proposed roadway. Spreading basins impacted by the project are being replaced by 12 hectares (30 acres) of new basins on the east side of Allen Road (Figure 2.3-1c) concurrent with ongoing residential development in that area. Water would flow from the RRBWSD's existing basins to the new basins through a large concrete box culvert that would run under the Allen Road interchange. The soils in the new recharge area have been tested to determine their suitability for recharge and they have been determined to be of equal or superior recharge capability to the spreading basin area impacted by the proposed project. Since the spreading basins are being replaced with more capacity in soils that have excellent recharge capacity, the proposed project would not adversely impact the RRBWSD.

Impacts of Highway Runoff on Groundwater Quality

Storm water runoff from the project right of way would be captured in a series of retention basins and on-site ground infiltration areas where it would percolate to groundwater. Studies conducted by the Fresno Metropolitan Flood Control District (FMFCD) (1984), indicate that sandy loam soils similar to those present along the alternative alignments provide a high degree of removal of storm water contaminants. The FMFCD study showed that the metal concentrations in the soil water and groundwater were similar to the metal concentrations in the regional groundwater, indicating that the majority of the pollutants had adsorbed onto the soil from the soil water and had not entered the groundwater. As part of the study, soil samples from storm water retention basins receiving highway runoff were analyzed for concentrations of heavy metals such as copper, lead, arsenic, and nickel. This analysis determined that most of the pollutants in highway runoff were removed and adsorbed to the soil beneath the retention basins within the first 0.6 meter (two feet) below the ground surface. While the sandy loam soils in the Fresno area have more adsorption capability than the sandy soils of the project area, the adsorption of pollutants may typically be expected within the top meter or two of these soils. Therefore, percolation of highway storm water runoff is not expected to impact regional groundwater.

The City of Bakersfield has required on-site retention and infiltration of storm water runoff for years with no identified impairments to groundwater quality. The City of Bakersfield and Kern County assume removal efficiencies for retention/detention basins as summarized in Table 4.2-3.

The overall increase in contaminant concentrations in groundwater resulting from infiltration of highway runoff was estimated in the 1994 Tier I EIS/EIR for the Route 58 Route Adoption project using a mass balance approach (Caltrans, FHWA, and Kern COG, 1994). This analysis assumed that the total volume of runoff after two back-to-back 10-year, 24-hour storms, 104 acre-feet of water, would percolate to the groundwater with no evaporative losses and no reduction in pollutant concentrations due to adsorption on soil particles. These are conservative estimates. Even if all of the pollutants in the runoff were not adsorbed to the soil, some amount would be thus reducing the volume of pollutants reaching groundwater. The evaporation rate in the project area is approximately 43 centimeters (17 inches) between October and April (KCWA, 1996) and the average rainfall is 157 millimeters (6.2 inches); therefore, it would not be possible for all of the runoff to percolate into the soil. Using concentrations of metals for storm water

runoff from urban highways that were similar to or higher than the means provided in Table 4.2-1, and assuming that the pollutant concentrations measured in the Kern River are indicative of the concentrations found in water presently used to recharge the groundwater aquifer, the mass balance analysis indicated that water recharging the aquifer that contains runoff from a highway would not exceed the EPA Safe Drinking Water Act criteria for the pollutants evaluated in the analysis.

Table 4.2-3. Removal Efficiencies Assumed for Dry Detention

Constituents		Removal Efficiency
Arsenic, AS[2]		0.5
Cadmium, Cd[1]		0.8
Chromium, Cr[3]		0.3
Total	Copper, Cu[1]	0.6
Metals	Lead, Pb[1]	0.8
(ug/l)	Mercury, Hg[2]	0.8
Nickel, Ni[3]		0.5
Selenium, Se[2]		0.5
Zinc, Zn[1]		0.5
BOD5[1]		0.3
COD[1]		0.3
TOC[4]		0.3
Conventionals	TDS[1,]	0.0
	TSS[1]	0.9
(mg/l)	Hardness[3]	0.0
Magnesium, Mg		0.0
Calcium, Ca		0.0
P (total)[1]		0.3
Nutrients	P (dissolved)[1]	0.0
(mg/l)	TKN[1]	0.4
Nitrate/Nitrite-NO_3[1]		0.2
NH_4-N[4]		0.6
Hydrocarbons (mg/l)	Oil & Grease[3]	0.1

Source: Bale, A., 2002
[1] WMM Manual (CDM, 1992)
[2] As and Se assumed similar to Zn. Hg based on assumed 90% partitioning to TSS.
[3] Sunnyvale Detention Basin Demonstration Project. (Woodward-Clyde, 1994)
[4] Current Assessment of Urban BMPs. (Schueler, 1992)

Impacts of Hazardous Material Spills on Groundwater Quality

As mentioned above, hazardous material spills resulting from traffic accidents and fluids leaking from vehicles have the potential to contaminate groundwater below and adjacent to the Westside Parkway. To prevent these pollutants from contaminating groundwater, runoff (storm water or spilled material) from the Westside Parkway would be retained in completely sealed pavement sections in areas adjacent to groundwater recharge areas. In other areas, runoff (storm water or spilled material) would be conveyed to and contained by the project's retention basins and infiltration areas.

A spill on the proposed freeway of any large magnitude would also generate immediate response actions by local agencies to report, contain, and mitigate the incident. Based on the history of prior incidents in the area, spills have had no impact or minimal impact to groundwater because of the immediate response and clean-up that has prevented contaminant migration to the groundwater.

In order to ensure the appropriate response in the event of an accident, vehicles transporting hazardous waste are subject to the requirements of the U.S. Department of Transportation. These requirements involve proper labeling and identification of hazardous materials. In addition, requirements for vehicles that handle hazardous waste include construction features that enable them to withstand the impact of an overturn or collision. Operators of vehicles must successfully complete a safety training course, in which they are instructed on the nature and hazards associated with their cargo and proper operating procedures including inspection of the vehicle and loading, handling and securing of hazardous materials. These response procedures reduce the potential for a spill to impact water quality.

Impacts from Relocation of the CVC

The above-grade segment of the CVC in the area south of the Flying J Refinery (formerly Shell Bakersfield Refinery) conflicts with the Westside Parkway alignment and would need to be relocated. Costs for relocating the CVC such as acquisition of right of way, planning, design and construction of relocated facilities would be the subject of a cooperative agreement between the City of Bakersfield and the KCWA. A relocated alignment of the CVC that is parallel to and directly adjacent to the Westside Parkway in this area would cross the site of the former Equilon Refinery (see Section 3.2.8). While remedial actions have been completed at this site, residual contamination such as Total Recoverable Petroleum Hydrocarbons (TRPH) may be present. Relocation of CVC facilities within this area would be designed to prevent contamination of CVC water from the property through which it is conveyed. Relocation designs would be prepared in coordination with KCWA staff and would be subject to KCWA approval. Construction contractors, City of Bakersfield, and KCWA staff working in this area would need to adhere to a site health and safety plan that would be reviewed and approved by the City and the KCWA. This type of health and safety plan is common for construction projects in urban areas and would include pre-construction soil sampling to identify contaminants, air monitoring, as appropriate, and personal protective equipment at the safety level appropriate for the types of contaminants that are identified from soil samples.

No Action Alternative

The No Action Alternative would not result in water quality impacts.

4.2.5.2 Mitigation Measures

No mitigation measures are required. Construction and operation of the Westside Parkway project would comply with National Pollutant Discharge Elimination System (NPDES) permit requirements as discussed in Section 3.2.6.1.

4.2.6 Air Quality

4.2.6.1 Environmental Impacts

Pollutants of Concern

Ozone is produced in the atmosphere by photochemical reactions that require both nitrogen oxides (NO_x) and reactive organic gases (ROG). Vehicular exhaust is a major contributor of these two ozone precursors to the atmosphere. The San Joaquin Valley is classified as “severe non-attainment” for the State and

Federal ozone standards, and ozone is generally regarded as the most important air quality problem in the San Joaquin Valley.

The second most significant air quality problem in the San Joaquin Valley is particulate matter less than 10 microns in diameter (PM_{10}). The San Joaquin Valley is classified as "serious non-attainment" for the Federal PM_{10} standard.

The PM_{10} problem is most complex in terms of its character and cause. There are both directly emitted or primary, PM_{10} particles, and secondary particles. PM_{10} is both a localized and regional pollutant; some of the particles found in any given place originate from nearby sources, while others have been transported from a distance. A number of studies conducted as part of, and in conjunction with, the San Joaquin Valley Air Quality Study characterize particulate matter at various monitoring sites in the region that include the project area. These studies indicate that both local sources of windblown soils (including dust disturbed by vehicles), and secondary particulate formed in part by vehicle gaseous emissions, contribute to elevated PM_{10} levels.

Local carbon monoxide (CO) concentrations tend to be dominated by vehicle emissions. Ambient concentrations are highest during periods of atmospheric stagnation. Vehicles also emit higher levels of CO during cold weather. For these reasons, CO levels are of greatest concern in the winter months (November through February) when the San Joaquin Valley experiences both cooler temperatures and extended periods of air stagnation. The San Joaquin Valley is currently in attainment of the air quality standards for CO.

Emission Control Strategies

Control measures to reduce motor vehicle emissions have the greatest impact on San Joaquin Valley air quality, including the project area. Despite California's stringent control requirements, motor vehicles are still the largest emitters of NO_x and ROG not found in nature in the Bakersfield area and throughout the San Joaquin Valley. In addition, motor vehicles produce approximately 90% of the CO. Hence, various agencies such as Caltrans, the San Joaquin Valley Air Pollution Control District (SJVAPCD), transportation planning agencies, FHWA, the California Air Resources Board (CARB), and county and city officials meet to strategize reasonably available control measures (RACM) to reduce emissions from motor vehicles. Some of the RACM being considered are a feasibility study of HOV lanes within the San Joaquin Valley, scheduling maintenance of roadways such that lane closures do not occur during peak traffic hours and peak ozone periods, provide road conditions and traffic information to highway users to assist in making travel decisions, provide message signs informing travelers of major incidents and congestion, and provide real-time traffic information to trucking centers. Other existing vehicle control programs are as follows:

- Reformulated gasoline requirements; a major reformulation of existing gasoline that took full effect in 1996. It has reduced emissions of reactive organic gases, NO_x, and CO for all gasoline-powered vehicles.
- Wintertime oxygenates; a requirement that gasoline be blended with increased oxygen content in the winter "CO season." This program, reducing CO emissions from all gasoline-powered vehicles, began in 1992.

- Inspection and Maintenance Programs ("Smog Check"); an existing program required by Federal law to be upgraded to achieve greater reductions. The upgraded or "enhanced" program will further reduce reactive organic gases, NO_x, and CO. The upgraded program was implemented in the San Joaquin Valley in 1996 but is the subject of controversy in some areas of the State. A second existing program also requires the inspection of heavy-duty trucks to reduce particulate emissions.
- Reformulated Diesel Fuel; a requirement to modify the formulation of diesel fuel to reduce SO_2, NO_x, and particulate emissions began in 1994.
- Transportation Control Measures (TCM); a strategy to reduce mobile source emissions through reductions in vehicle trips, vehicle miles traveled, vehicle use, or traffic congestion reduction. These measures include improvements to traffic flow and public transit, employer trip reductions, rideshare programs, parking management strategies, increased park-and-ride lots, increased bicycle commuting and passenger rail and support facilities.

The CARB has also adopted a series of requirements to reduce reactive organic gas emissions from over two dozen categories of consumer products, and has established future effective standards to reduce reactive organic gas and NO_x emissions from various engines used in off-road vehicles and utility equipment. These requirements were phased in during the mid-to-late 1990s.

Finally, the SJVAPCD is responsible for numerous control measures that apply to stationary sources of air emissions. These controls address reactive organic gases, NO_x PM_{10}, and sulfur dioxide (SO_2). The SJVAPCD also has the responsibility to reduce fugitive PM_{10} emissions.

4.2.6.2 Westside Parkway Alternatives

Transportation Conformity

The Clean Air Act Amendments (CAAA) of 1990 requires that transportation plans, programs, and projects funded by or approved under Title 23 and 49 of U.S. Code or the Federal Transit Act conform to State or Federal air quality plans. Transportation conformity ensures that transportation agencies and air quality planning are integrated at the metropolitan and State levels such that the State Implementation Plan (SIP) and transportation plans and programs are consistent in identifying and implementing strategies to reduce emissions from mobile sources and meet the National Ambient Air Quality Standards (NAAQS). The Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP), are developed by Kern COG, other local COGs, and Caltrans. The RTP consists of policies, programs, and projects, which if implemented, would potentially reduce emissions from mobile sources in the project area. The TIP must be consistent with the conforming transportation plan, and the TIP must conform with the SIP. Specifically, the plans set forth in the RTP and the TIP must reduce emissions consistent with the emissions inventory proposed in the SIP. In order for a project to be found to conform, the project must be included in a conforming transportation plan and TIP; the design concept and the scope of the project that was in place at the time of the conformity finding must be maintained through implementation; and the project design concept and scope must be sufficiently defined to determine emissions at the time of the conformity determination.

An RTP is a transportation plan in place that presents a 20-year perspective on transportation investments for a specific region. Kern COG is responsible for adopting regional growth forecasts and the Regional

Transportation Improvement Program (RTIP). The RTIP is a listing of all transportation projects proposed over a four-year period by the local agencies. The projects include programs such as highway improvements, transit, rail and bus facilities, high occupancy vehicle lanes, signal synchronization, intersection improvements, and freeway ramps. Once the RTIP is reviewed for compliance with State and Federal requirements and is approved, it is incorporated into the Preliminary State Transportation Improvement Program, and subsequently included into the Federal Transportation Improvement Program (FTIP) and the Federal State Transportation Improvement Program (FSTIP). The FSTIP is then submitted to the FHWA and the Federal Transit Administration (FTA) for consistency analysis and approval.

The Destination 2030 (2004) Regional Transportation Plan (RTP) was found to conform by Kern COG on August 19, 2004 and FHWA and the Federal Transit Administration (FTA) adopted the air quality conformity finding on September 22, 2004. The project is also included in Kern COG's financially constrained 2004 RTIP (page 25). The Kern COG 2004 RTIP was found to conform by FHWA and FTA on September 22, 2004. The design concept and scope of the proposed project is consistent with the project description in the 2004 RTP, the 2004 RTIP, and the assumptions in the Kern COG's regional emissions analysis.

Construction Impacts

Construction equipment, especially diesel-powered heavy equipment, would emit gaseous air pollutants such as NO_x and CO. Fugitive dust emissions would also be generated during construction as a result of land clearing, ground excavation, cut and fill operations, and the construction of the roadway and structures themselves.

Construction equipment emissions would vary daily as construction activity levels change. A worst-case peak-day estimate of equipment emissions was developed based on estimates of daily construction activity, equipment type, potential construction schedule, and construction phasing. That estimate is provided in Table 4.2-4.

Table 4.2-4. Estimated Peak Day Construction Emissions

Source [1]	Parameter 1 [1]	Parameter 2 [2]	Parameter 3 [1]	Parameter 4 [1]	CO Emission Factor	CO Emission (lbs/day)	ROC Emission Factor	ROC Emission (lbs/day)	NO_x Emission Factor	NO_x Emission (lbs/day)	SO_x Emission Factor	SO_x Emission (lbs/day)	PM_{10} Emission Factor	PM_{10} Emission (lbs/day)	Notes
MOBILE EQUIPMENT:															
(1) Grading															
Scraper (651E Model)	594 hp	0.66 load factor	8 hours/day	3 unit	0.011 lb/hp-hr	103.5	0.001 lb/hp-hr	9.4	0.019 lb/hp-hr	178.8	0.002 lb/hp-hr	18.8	0.0015 lb/hp-hr	14.1	[2]
Dozer (D10N Model)	520 hp	0.59 load factor	8 hours/day	1 unit	0.011 lb/hp-hr	27.0	0.002 lb/hp-hr	4.9	0.023 lb/hp-hr	56.5	0.002 lb/hp-hr	4.9	0.001 lb/hp-hr	2.5	[2]
Utility Dozer (D11N Model)	770 hp	0.59 load factor	8 hours/day	1 unit	0.011 lb/hp-hr	40.0	0.002 lb/hp-hr	7.3	0.023 lb/hp-hr	83.6	0.002 lb/hp-hr	7.3	0.001 lb/hp-hr	3.6	[2]
Motor Grader (135H Model)	155 hp	0.575 load factor	8 hours/day	1 unit	0.008 lb/hp-hr	5.7	0.003 lb/hp-hr	2.1	0.021 lb/hp-hr	15.0	0.002 lb/hp-hr	1.4	0.001 lb/hp-hr	0.7	[2]
Compactor (825C Model)	315 hp	0.59 load factor	8 hours/day	1 unit	0.015 lb/hp-hr	22.3	0.003 lb/hp-hr	4.5	0.022 lb/hp-hr	32.7	0.002 lb/hp-hr	3.0	0.001 lb/hp-hr	1.5	[2]
Water Truck (651E Model)	594 hp	0.66 load factor	8 hours/day	1 unit	0.011 lb/hp-hr	34.5	0.001 lb/hp-hr	3.1	0.019 lb/hp-hr	59.6	0.002 lb/hp-hr	6.3	0.0015 lb/hp-hr	4.7	[2]
Fuel Truck (Delivery Truck)	40 miles	--	--	1 unit	0.006 lbs/mile	0.2	0.001 lbs/mile	0.1	0.007 lbs/mile	0.3	0.00004 lbs/mile	0.001	0.0004 lbs/mile	0.02	[3]
Foreman Truck (Passenger Vehicle)	55 miles	--	--	1 unit	0.004 lbs/mile	0.2	0.001 lbs/mile	0.03	0.0004 lbs/mile	0.02	0.000009 lbs/mile	0.0005	0.00012 lbs/mile	0.01	[3]
Worker Commute (Passenger Vehicles)	50 miles	--	--	11 trips per day	0.004 lbs/mile	2.4	0.001 lbs/mile	0.30	0.0004 lbs/mile	0.24	0.000009 lbs/mile	0.0050	0.00012 lbs/mile	0.07	[3]
Fugitive Dust			8 acres	30 days/month									0.42 tons/acre-month	224.0	[4]
<SUBTOTAL>						235.8		31.7		426.8		41.7		251.2	
(2) Paving															
Paver (BG-265B Model)	200 hp	0.59 load factor	8 hours/day	1 unit	0.010 lb/hp-hr	9.4	0.002 lb/hp-hr	1.9	0.024 lb/hp-hr	22.7	0.002 lb/hp-hr	1.9	0.001 lb/hp-hr	0.9	[2]
Roller (CB-634 Model)	145 hp	0.58 load factor	8 hours/day	2 unit	0.007 lb/hp-hr	9.4	0.002 lb/hp-hr	2.7	0.020 lb/hp-hr	26.9	0.002 lb/hp-hr	2.7	0.001 lb/hp-hr	1.3	[2]
Asphalt Truck (Delivery Truck)	40 miles	--	--	3 unit	0.006 lbs/mile	0.7	0.001 lbs/mile	0.2	0.007 lbs/mile	0.8	0.00004 lbs/mile	0.004	0.0004 lbs/mile	0.05	[3]
Foreman Truck (Passenger Vehicle)	50 miles	--	--	1 unit	0.004 lbs/mile	0.2	0.001 lbs/mile	0.03	0.0004 lbs/mile	0.02	0.000009 lbs/mile	0.0005	0.00012 lbs/mile	0.01	[3]
Worker Commute (Passenger Vehicles)	50 miles	--	--	10 trips per day	0.004 lbs/mile	2.2	0.001 lbs/mile	0.28	0.0004 lbs/mile	0.22	0.000009 lbs/mile	0.0045	0.00012 lbs/mile	0.06	[3]
<SUBTOTAL>						21.9		5.1		50.6		4.6		2.3	
TOTAL						257.7		36.8		477.4		46.3		253.5	

[1] Equipment inventory, engine sizes, hours of operation, and haul distances were estimated using Caterpillar Performance Handbook Edition 26 and experience with similar projects.
[2] Emission factors and load factors are from SCAQMD's CEQA Air Quality Handbook (SCAQMD, 1993), Table A9-8-B and Table A9-8-D, respectively.
[3] Delivery trucks and passenger vehicles emission factors are based on EMFAC2002 data for year 2020 provided on the SCAQMD webpage.
[4] Emissions from fugitive dust were calculated using SCAQMD PM_{10} emissions factor on a peak day construction scenario.

An estimate of fugitive dust emissions of PM_{10} was made for the proposed project based on an emission factor of 0.94 tonne (0.42 ton) of PM_{10} emissions per hectare (acre) of ground-disturbing activity per month (SCAQMD). Based on an average of 3 hectares (8 acres) disturbed per month, fugitive dust emissions were estimated to be approximately 102 kilograms (224 pounds) per day.

Construction activities would be temporary and transient in nature. Construction emission control measures recommended by the San Joaquin Valley Air Pollution Control District (SJVAPCD) would be implemented, as discussed below under mitigation. In December 2005, the SJVAPCD passed Rule 9510 requiring further mitigation for construction emissions so that the District can achieve the goals set forth in its PM_{10} and Ozone Attainment Plans. The City of Bakersfield would comply with the requirements of Rule 9510.

Operational Impacts

NO_x and ROG emissions are generated from vehicle trips; therefore, they are a function of vehicle miles traveled (VMT) and the efficient movement of vehicles. The existing traffic volumes and future traffic volume forecast analysis for the project area indicated that overall:

- The regional VMT are expected to remain the same with or without implementation of the proposed Westside Parkway;
- LOS would improve or remain the same at most intersections; and
- Average delay time for vehicles at many intersections in the vicinity of the Westside Parkway would be reduced between 8% and 20%.

Considering motor vehicle emissions are higher during low speeds and idling, it can be concluded that the improved LOS and reduction in average delay time would allow vehicles to travel at a higher speed with less idling time. The difference in vehicle speed and idling time would reduce regional vehicle emissions and improve air quality. Furthermore, as discussed in Section 4.4.4, the proposed Westside Parkway would reduce traffic on Stockdale Highway and Brimhall Road and many other east-west roadways west of SR99 such as Rosedale Highway and Hageman Road. This reduction in traffic along existing main thoroughfares would reduce overall traffic congestion in the project area and potentially improve overall air quality in the region.

Hotspot Analysis

One-hour and eight-hour CO concentrations at the following Westside Parkway intersections and interchanges were estimated for 2030 using the CALINE4 computer model.

- Westside Parkway and Allen Road interchange
- Westside Parkway and Calloway Drive interchange
- Westside Parkway and Coffee Road interchange
- Westside Parkway and Mohawk Street interchange
- Westside Parkway and Oak Street (Oak Option only)
- Coffee Road at Rosedale Highway
- Fruitvale Avenue at Rosedale Highway

- Mohawk Street at Rosedale Highway
- Mohawk Street at California Avenue
- SR99 southbound ramps at California Avenue

This modeling was based on estimates of 2030 p.m. peak hour traffic. Modeled concentrations were added to background CO concentrations to estimate the one-hour and eight-hour CO concentrations at these intersections and interchanges.

Ambient CO concentrations in the immediate project vicinity are not available. The USEPA has recommended that in this situation, the second highest CO level measured in the project region in the last five years be used as an estimate of future baseline ambient CO levels. The second highest CO concentrations measured in the Bakersfield area are 5.8 ppm for one hour and 4.5 ppm for the eight-hour average.

The one-hour CO concentration was estimated to range from 8.9 to 11.0 ppm at intersections and interchanges on the Westside Parkway in 2030. This is substantially lower than the State and Federal one-hour standards of 20 and 35 ppm, respectively.

The eight-hour CO concentration was estimated to range from 6.7 to 8.1 ppm at intersections and interchanges on the Westside Parkway in 2030. This is lower than the State and Federal eight-hour standard of 9 ppm.

A qualitative PM_{10} and $PM_{2.5}$ Hotspots analysis was also conducted following the protocol outlined in the Caltrans Technical Report titled "Particulate Matter and Transportation Projects, An Analysis Protocol (Caltrans, 2005). The EPA has designated the San Joaquin Valley portion of Kern County non-attainment for PM_{10} and $PM_{2.5}$. The PM_{10} and $PM_{2.5}$ monitoring station nearest the project area is located at 5558 California Avenue in Bakersfield. The monitored PM_{10} concentration has exceeded the California 24-hour (50 $\mu g/m^3$) standard for this pollutant in 2003 through 2005, although the number of days that the standard has been exceeded has decreased each year (Table 4.2-5). The monitored $PM_{2.5}$ concentration exceeded the California 24-hour standard (65 $\mu g/m^3$) for three days in 2004 (Table 4.2-5).

Table 4.2-5. PM_{10} and $PM_{2.5}$ Monitoring Data at 5558 California Avenue in Bakersfield for 2003-2005

Year	PM_{10} ($\mu g/m^3$)		$PM_{2.5}$ ($\mu g/m^3$)	
	24-hr Average (first high)	Number of Days California Standard Exceeded	24-hr Average (first high)	Number of Days California Standard Exceeded
2005	86	4	68.2	0
2004	93	22	72.8	3
2003	116	30	84.5	0

Source: http://www.arb.ca.gov/adam/cgi-bin/db2www/adamtop4b.d2w/Branch

Kern County's 2004 Regional Transportation Plan and Regional Transportation Improvement Program Air Quality Conformity Findings have demonstrated that Kern County can meet the PM_{10} and $PM_{2.5}$ attainment standards set by the EPA for 2010. The Westside Parkway project would reduce PM_{10} and $PM_{2.5}$ emissions in the region.

This project would improve the level of service and reduce overall idling time at intersections in the western Bakersfield metropolitan area. It would also reduce the total vehicle miles traveled in the area. The reduction in idling time would reduce idle emissions of PM_{10} and $PM_{2.5}$, and the reduction in vehicle miles traveled would reduce PM_{10} and $PM_{2.5}$ emissions, providing an overall air quality benefit. Based on the above, the project would not create a new violation or worsen an existing violation of the National Ambient Air Quality Standards for particulate matter. Therefore, no mitigation measures are required for long-term operational air quality effects.

On March 29, 2006, FHWA and EPA issued new guidance for qualitative hot-spot analysis in PM2.5 and PM10 nonattainment and maintenance areas. According to that guidance, a PM2.5 hot-spot analysis following the protocol established in the new guidance is required for Projects of Air Quality Concern (POAQC) in nonattainment areas (40 CFR 93.123(b)(1)). Projects that are exempt or not POAQC do not require hot-spot analysis.

The Westside Parkway does not meet the criteria of an exempt project under 40 CFR 93.126. However, the City of Bakersfield has determined that the project does not meet criteria for a POAQC as defined in the final rule by 40 CFR 93.123(b)(1). According to the EPA Transportation Conformity Guidance (final rule) of March 10, 2006, the following are considered projects of air quality concern:

- New or expanded highway projects with greater than 125,000 Annual Average Daily Traffic (AADT) and 8 percent or more of such AADT is diesel truck traffic
- New or expanded highway projects that affect a transportation facility at a Level of Service (LOS) D, E, or F, or will become a LOS of D, E, or F
- New or expanded highway projects that will significantly increase the amount of diesel truck traffic.

The Westside Parkway does not meet any of these criteria for a POAQC. As indicated in Table 4.4-1, maximum ADT in 2030 is projected to be 96,000, well below the criterion of 125,000 AADT. Based on measured truck traffic volumes on adjacent, parallel east-west arterials in west Bakersfield, truck traffic on the Westside Parkway would be approximately four percent of total traffic. The percentage of diesel trucks using Westside Parkway would be some fraction of the total truck traffic. Trucks on Westside Parkway would generally be short-haul delivery trucks serving businesses and residents. Many of these trucks are gasoline powered and not diesel powered. Therefore, diesel truck traffic on Westside Parkway would be less than 4 percent of total AADT. This is substantially below the eight percent criterion for a POAQC. As shown in Table 4.4-2, the Westside Parkway would reduce congestion at major intersections in west Bakersfield relative to the No Action Alternative.

No Action Alternative

Under the No Action Alternative, the year 2030 VMT was estimated to be approximately the same as for the build alternatives. Although the VMT are approximately the same for all alternatives, the proposed Westside Parkway project is expected to reduce out-of-direction travel on a regional basis, resulting in fewer and/or shorter trips being made, improved LOS at certain intersections, and reduced delay time for vehicles at intersections in the general vicinity of the Westside Parkway, thereby improving air quality. Results from the traffic report prepared for this project also indicate that implementation of the proposed Westside Parkway would reduce traffic on Stockdale Highway and Brimhall Road and many other east-west roadways west of SR99, such as Rosedale Highway and Hageman Road.

4.2.6.3 Mitigation Measures

The project must comply with regional rules, which would assist in reducing short-term air pollutant emissions. SJVAPCD Regulation VIII requires that fugitive dust be controlled with best available control measures so that the amount of such dust from man-made sources is reduced. These dust suppression techniques are summarized below. Implementation of these techniques, as required by the SJVAPCD, would reduce the fugitive dust generation (and thus the PM_{10} component). Compliance with the BACMs listed below would reduce air quality impacts:

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.
- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emission, and at least 15 centimeters (six inches) of freeboard space from the top of the container shall be maintained.
- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. *(The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions.) (Use of blower devices is expressly forbidden).*
- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.
- Within urban areas, trackout shall be immediately removed when it extends 15 or more meters (50 or more feet) from the site and at the end of each workday.
- Any site with 150 or more vehicle trips per day shall prevent carryout and trackout.

The SJVAPCD further recommends the following control measures for a greater degree of PM_{10} reduction for construction projects of significant size:

- Limit traffic speeds on unpaved roads to 25 kph (15 mph).
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site;
- Install wind breaks at windward side(s) of construction areas.
- Suspend excavation and grading activity when winds exceed 30 kph (20 mph). *(Regardless of windspeed, an owner/operator must comply with Regulation VIII's 20 percent opacity limitation).*
- Limit area subject to excavation, grading, and other construction activity at any one time.

In an effort to further reduce emissions from construction equipment exhaust, the SJVAPCD has established the following control measures for emission sources such as heavy-duty equipment (scrapers, graders, excavators, backhoes, etc.). Some of these measures may be difficult to implement due to poor availability of alternative fueled equipment and the challenge of monitoring these activities.

- Use of alternative fueled or catalyst equipped diesel construction equipment.
- Minimize idling time (e.g., 10-minute maximum).
- Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use.
- Replace fossil-fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set).
- Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak-hour of vehicular traffic on adjacent roadways.
- Implement activity management (e.g., rescheduling activities to reduce short-term impacts).

Mitigation measures as stated in SJVAPCD Regulation VIII are required to be implemented during construction of the proposed project in order to minimize impacts.

The City of Bakersfield would submit an Air Impact Assessment to the SJVAPCD in accordance with District Rule 9510. The assessment would be used by the District in coordination with the City to identify all reasonable measures for reducing on-site emissions of NO_x and PM_{10} and to establish a monitoring and reporting schedule for that emissions reduction plan. The City may propose an off-site deferral schedule in-lieu of on-site emissions reductions.

4.2.7 Hazardous Waste

Initial Site Assessments (ISAs) were conducted for the project area to assess whether potential sources or evidence of hazardous waste contamination are present on parcels affected by the alternative alignments. The ISAs evaluated assessor parcels crossed by or immediately adjacent to the Westside Parkway Truxtun Option and the Westside Parkway Oak Option. As indicated in Table 3.2-5, of the 59 parcels evaluated, 43 were identified as potentially containing hazardous wastes and were classified as Rank 1, 2, or 3 parcels.

The principal environmental impacts involving hazardous materials discovered in the construction area are the excavation and handling of contaminated soils resulting in potential exposure of workers and the general public. A variety of contaminants including petroleum hydrocarbons, solvents, heavy metals, herbicides, and pesticides may be encountered along the right of way. Due to historical agricultural production in the project area, the project has the potential to encounter soils contaminated with pesticide residue. Contaminant types, concentrations and locations cannot be predicted without site-specific information.

4.2.7.1 Environmental Impacts

Westside Parkway Truxtun Option

This alternative is estimated to require acquisition from 50 parcels for which the potential for hazardous waste was considered. Nine parcels were identified as Rank 1 parcels, six were identified as Rank 2 parcels, and 19 were identified as Rank 3 parcels. These parcels are described in Section 3.2.8 and listed in Table 3.2-5. Refer to Figure 3.2-8 for the locations of these parcels.

Two of the nine Rank 1 parcels crossed by the Westside Parkway Truxtun Option are located at the Shell Bakersfield Refinery on parcels that were the former sites of waste disposal ponds. Those ponds were closed under a formal Closure Plan. The remediation was accepted by the CVRWQCB and DTSC with a deed restriction that precludes the building of a day care center or a facility with similar uses. The Westside Parkway use of this parcel as a transportation facility would be consistent with the deed restrictions in effect on the parcel. It is expected that Equilon Enterprises, LLC d.b.a. Shell Oil Products US (Shell) will continue to retain responsibility for cleanup. It is possible that other parcels to be acquired along the southern portion of the Shell Bakersfield Refinery may be impacted from historical operations or migrating contamination.

The Westside Parkway Truxtun Option crosses another Rank 1 parcel (APN 502-010-12-007) located south of the Shell Bakersfield Refinery. The parcel previously contained a storage pile of waste petroleum coke. Remediation is being conducted at the site under the oversight of the DTSC with deed restrictions that preclude any construction for residential purposes. The Westside Parkway use of this parcel as a transportation facility would be consistent with the deed restrictions in effect on the parcel.

Table 3.2-5 shows that six of the parcels located within or adjoining the alignment are classified as Rank 2 parcels. These Rank 2 parcels are described in Section 3.2.8. Refer to Figure 3.2-8 for the locations of these parcels. Rank 2 parcels are suspected of being contaminated with hazardous wastes based on past and present use of the property. However, cleanup of these Rank 2 parcels should be routine and predictable. Hazardous wastes at the six parcels are likely to consist of soil contamination from oil production activities, leaking underground fuel storage tanks, and ground storage of chemicals. Some of these parcels appear to have equipment, containers, and operating wells that may contain hazardous materials or hazardous wastes. Cleanup costs for underground fuel storage tanks and ground storage of chemicals are likely to be less than $50,000 per site. Cleanup costs for active and abandoned oil wells could be as high as $200,000.

Westside Parkway Oak Option

Hazardous waste impacts for the Westside Parkway Oak Option would be identical to the Westside Parkway Truxtun Option west of Mohawk Street. Table 3.2-5 shows that the Westside Parkway Oak Option would impact six Rank 1 parcels, 11 Rank 2 parcels, and 21 Rank 3 parcels. Six additional Rank 2 parcels, not impacted by the Westside Parkway Truxtun Option, located within or adjoining the Westside Parkway Oak Option, are located within the BNSF railroad right of way and rail yard. The BNSF railroad right of way and rail yard may contain hazardous materials or hazardous waste from historic railroad activities such as herbicide use or diesel spills. No information has been found concerning potential soil or groundwater contamination. This alternative may also require the acquisition of the Paragon Day Spa and a medical-dental office building. These parcels are considered Rank 3 parcels.

No Action Alternative

The No Action Alternative would not result in hazardous waste impacts.

4.2.7.2 Mitigation Measures

The City of Bakersfield would not acquire any project right of way involving potentially contaminated properties until Preliminary Site Investigations were completed, remediation plans developed, as necessary, and plans implemented in accordance with State and Federal guidelines. Remediation plans would be implemented in cooperation with the landowner.

Information would be placed in the project file to alert construction crews to the possibility of undetected soil contamination, particularly in the vicinity of the Shell Bakersfield Refinery. Hazardous materials discovered in the construction area would require special handling as hazardous waste. Contaminated soils exceeding regulatory limits would require on-site treatment or transportation to off-site processing facilities. Contaminated soil removed from the project area must be transported in accordance with State and Federal regulations. If odor or fumes were encountered during construction, work would be stopped for further investigation and remedial action, as appropriate. Appropriate subsurface testing and/or contingency planning should be in place to manage the unanticipated discovery of petroleum hydrocarbon contamination.

Sampling to determine the presence of pesticides would be conducted prior to excavation. Contaminated soils would be removed and transported offsite accompanied by a hazardous waste manifest and disposed of at a permitted Class I disposal facility.

The following mitigation could be anticipation for the Rank 1, 2 and 3 parcels:

Rank 1. Parcels with Rank 1, where remediation and assessments are being conducted under the direction and oversight of a lead regulatory agency, are not likely to incur additional remediation costs. The Responsible Party identified should be responsible for completion of site remediation prior to property transfer. The schedule for remediation and formal notice of site closure should be obtained from the property owner, if property acquisition is contemplated.

Rank 2. Parcels with Rank 2, where observations and regulatory records may indicate the potential for contaminated conditions, but where active remediation is not apparently occurring, should be assessed with a defined scope that most likely would include a Phase I Environmental Assessment (as defined by the American Society for Testing and Materials Standard E 1527-00) and appropriate subsurface investigations (Phase II), if conditions warrant. These assessments are typically $10,000 to $50,000, with additional costs for site remediation, if impacted conditions are encountered.

Rank 3. Parcels with Rank 3 may or may not have hazardous wastes or, if present, could be relatively easily remediated. Cleanup for these parcels, if "routine and predictable", may typically be accomplished on the order of $5,000 per site, with cleanup of more impacted parcels higher than this amount, commensurate with the severity and extent of contamination.

4.3 NATURAL ENVIRONMENT

4.3.1 Terrestrial Vegetation Types and Special-status Plant and Animal Species

Coordination with resource agencies regarding project effects on biological resources and waters of the U.S. was initiated by Caltrans in February 1994 as part of the SR58 Route Adoption project. At that time, Caltrans met with the U.S. Army Corps of Engineers (ACOE) and the U.S. Environmental Protection Agency (EPA) to discuss issues concerning jurisdictional wetlands and waters of the U.S. Caltrans participated in a Section 404 permit pre-application meeting on May 5, 1994 with the ACOE, EPA, U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFG), and FHWA. In a letter dated May 23, 1994, FHWA requested that USFWS become a cooperating agency in the development of a Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/DEIR) for the SR58 Route Adoption project and participate in the coordination process as outlined in the Memorandum of Understanding (MOU) among FHWA, Caltrans, and USFWS. On June 28, 1997, USFWS agreed to participate in preparation of the DEIS/DEIR as a cooperating agency and provide comments in accordance with the MOU.

Prior to circulation of the DEIS/DEIR, the ACOE was informed that the preferred alternative for SR58, the Kern River alignment, did not cross any jurisdictional wetlands. The ACOE responded that a Nationwide Permit 14 would likely be required prior to project construction, and the NEPA/404 coordination process would not be applicable. The Department of Interior provided comments on the DEIS/DEIR on February 12, 1998.

FHWA consulted with USFWS about other projects in 1996. The Service suggested that effects on endangered species in the San Joaquin Valley be addressed in a formal programmatic consultation to meet the requirements as described in Conner v. Burford, 949 F. 2d 1441 (9th Circuit, 1988) court ruling. USFWS first recommended the formal programmatic consultation in its Biological Opinion of September 19, 1996 on a proposed project to repave and widen a portion of SR46 between SR33 and Interstate 5 in Kern County.

Endangered species consultation on the SR58 Route Adoption project was finalized and a Section 7 Biological Opinion (#1-1-98-F-139) was issued by the Sacramento Fish and Wildlife Office of USFWS

on March 22, 1999 (see Appendix D). Subsequent to the issuance of the biological opinion, there were additional interactions between FHWA and USFWS regarding study design and scheduling of terms and conditions of the Biological Opinion. Included in the written interactions were letters from FHWA to USFWS dated October 22, 1999 and December 19, 2000, as well as letters from USFWS to FHWA dated December 14, 1999 and August 29, 2000. A March 29, 2004 letter from Raul Rojas, Public Works Director for the City of Bakersfield to Susan Jones, USFWS San Joaquin Valley Branch Chief, summarized the City of Bakersfield's approach to compliance with Terms and Conditions 4d and 4e. The former requires that data be collected on the movement of San Joaquin kit fox along the SR58 alignment, kit fox vehicle strikes on highways, and the effectiveness of culverts for kit fox movement corridors. Term and Condition 4e requires that a study be conducted to evaluate the status of the least Bell's vireo along the Kern River from Lake Isabella to Interstate 5. The letter also explained that the extent of the vireo study area had been reduced to Hart Memorial Park to Interstate 5.

Information about the project was presented in August and September 2003 to Steve Strait, staff member for the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) Implementation Trust Group. The information was used by Mr. Strait to prepare a staff report to the Implementation Trust Group for its September 11, 2003 meeting. Approval was required from the Implementation Trust Group to accept the portion of the Westside Parkway project in the Kern River floodplain for mitigation through the MBHCP. At the September 11, 2003 meeting, the Implementation Trust Group granted approval subject to concurrence by USFWS and CDFG. A September 17, 2003 memo from Tom Olson, wildlife biologist, Garcia and Associates to Susan Jones, USFWS and Michelle Selmon, CDFG Associate Wildlife Biologist, summarized changes in project description between the SR58 Route Adoption project and the Westside Parkway project. Those two individuals are resource agency advisory members of the MBHCP Implementation Trust Group. On February 18, 2005, Mr. Ken Sanchez, Acting Field Supervisor for USFWS, provided a letter to FHWA amending Biological Opinion #1-1-98-F-139 to include the proposed Westside Parkway. This letter states that all terms and conditions of the Biological Opinion apply to the Westside Parkway project. Copies of the biological opinion and subsequent correspondence are included in Appendix D.

4.3.1.1 Environmental Impacts

Westside Parkway Alternatives

Terrestrial Vegetation Types

The proposed Westside Parkway Truxtun Option would result in the removal of the following vegetation:

- 42.7 hectares (105.5 acres) of non-native grassland
- 33.5 hectares (82.8 acres) of agricultural land
- 0.5 hectare (1.3 acres) of Great Valley cottonwood riparian forest near the Kern River

The proposed Westside Parkway Oak Option would result in the removal of the following vegetation:

- 42.8 hectares (105.8 acres) of non-native grassland
- 33.5 hectares (82.8 acres) of agricultural land
- 0.4 hectare (1.0 acre) of Great Valley cottonwood riparian forest near the Kern River

None of the areas support special-status plant species.

Special-status Animal Species

Despite the presence of human-caused disturbance, some of the areas have the potential for use by special-status wildlife species, especially as movement and travel corridors. The Kern River would be crossed at two locations by new bridges. Although the project would result in more human-related disturbance at and near these two crossings, the wildlife movement corridor would be maintained. Wildlife species would be able to cross under the bridges.

The project has the potential to impact kit fox, especially with disruption of east-west and north-south travel corridors near the Kern River in the City of Bakersfield. Much of the information on travel corridor use for the San Joaquin kit fox and methods to lessen impacts to the corridors was obtained from kit fox specialist Brian Cypher, biologist for the Endangered Species Recovery Program. The project area is within a known travel corridor for kit fox. Recommendations were provided by him and incorporated into the project description to reduce potential impacts on kit fox travel corridors.

Potential impacts to special-status species include the loss of individuals and burrows of blunt-nosed leopard lizards, burrowing owls, San Joaquin antelope squirrels, and Tipton kangaroo rats during project construction. The information in the Natural Environment Study for this project will be used by CDFG to issue a Section 2081 Incidental Take Permit for State-listed species. Because the blunt-nosed leopard lizard is a "fully protected species" in California (CDFG Code), no take authorization can be granted by the CDFG. Take-minimization measures for the blunt-nosed leopard lizard specific to the Westside Parkway project would be developed with input from that agency. The conversion of agricultural land and disturbance in the Kern River would affect Swainson's hawk foraging habitat.

No Action Alternative

The No Action Alternative would result in no impacts to vegetation or wildlife.

4.3.1.2 Mitigation Measures

Mitigation measures for the Westside Parkway project include actions to minimize biological impacts and compensation for habitat loss. Mitigation to minimize biological impacts is described in the Terms and Conditions for the SR58 Route Adoption Biological Opinion and include:

- A worker education program to be developed and given by an approved biologist;
- Pre-activity surveys to be conducted for listed species, including blunt-nosed leopard lizard, San Joaquin kit fox, and Tipton kangaroo rat.
- Pre-activity surveys for particular sensitive species that are not Federally-listed, including burrowing owl and Swainson's hawk.
- Avoidance and disturbance-minimization measures for the burrowing owl and Swainson's hawk.
- Exclusion zones around sensitive habitat features, including kit fox dens and burrows occupied by blunt-nosed leopard lizard and Tipton kangaroo rat.
- Biological monitoring of construction work conducted in environmentally sensitive areas.

- Work in blunt-nosed leopard lizard habitat to be conducted between May 1 and September 30, to the extent possible.
- Minimization of habitat disturbance.
- Measures related to restrictions on use of pesticides, vehicle speed limits, control of trash and hazardous materials, and placement of culverts specifically for kit fox.
- A programmatic consultation with USFWS regarding all highway construction and maintenance projects in the San Joaquin Valley. Caltrans submitted input to USFWS on October 16, 2000; the programmatic Biological Opinion has not yet been issued by USFWS. Included as a subpart of this term and condition was the requirement that a study be conducted on kit fox mortality due to roads and traffic. Caltrans is working on the fourth year of a four-year study. The final report is due in 2005.
- A specific study of the effects of highways on kit fox was a term and condition of the Biological Opinion. A study plan was to be submitted to USFWS for review and approval. The plan was to include: (a) examination of the movement of kit fox throughout the length of the project area; (b) a method for collecting data on kit fox strikes by vehicles, as well as how such data will be used to minimize strikes in the project area; and (c) research techniques for evaluating use of culverts by kit fox. This study has not yet been undertaken.
- Construction and maintenance of appropriate barriers and devices to guide kit fox to culverts, as determined by research.
- Prior to construction of Kern River crossings, completion of a study to determine the status of least Bell's vireo in the Kern River between the outlet at Lake Isabella and I-5. This term and condition was subsequently revised to include a reach of the Kern River between the east end of Hart Memorial Park and I-5 (USFWS, 2000).

Compensatory mitigation would be provided for habitat losses associated with the Westside Parkway project. Compensatory mitigation could be provided in one of two ways. The City of Bakersfield could preserve lands in perpetuity near the project at the following replacement ratios: 3:1 for riparian habitat; 3:1 for non-native grassland; and 1:1 for agricultural land. Compensatory mitigation could also be accomplished through the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP).

Mitigation through the MBHCP is on a fee-per-acre basis. The fee covers the cost of offsite acquisition, as well as necessary improvements to, and management of, the acquired land. No additional fees are required. Therefore, the terms and conditions in the Biological Opinion that address acquisition, improvement, enhancement, and management for compensation lands would be satisfied if compensation were completed through the MBHCP. If the MBHCP is not utilized for compensation, then the terms and conditions regarding replacement ratios would apply such that compensation requirements are met preserving lands near the project area as described in the Biological Opinion. Based on the area of disturbance for the Westside Parkway and the replacement ratios defined above, the total compensation amount for the Westside Parkway Truxtun Option would be 163.1 ha (402.9 acres), including 33.5 ha (82.8 acres) of agricultural land, 128.1 ha (316.4 acres) of non-native grassland, and 1.5 ha (3.7 acres) of riparian. The total compensation amount for the Westside Parkway Oak Option would also be 163.1 ha (402.9 acres), including 33.5 ha (82.8 acres) of agricultural land, 128.4 ha (317.1 acres) of non-native grassland, and 1.2 ha (3.0 acres) of riparian.

In addition, projects using the MBHCP, must conduct a field survey for known kit fox dens. The MBHCP program maintains a list and map of all known kit fox dens within the MBHCP boundaries. Each den that could potentially be disturbed by construction activities must be examined to determine occupancy status. If the den is unoccupied, then construction can proceed. If the den is active at the time of construction, take-avoidance measures must be implemented. If it is an active non-natal den, the kit fox must be excluded from it, using agency-approved protocol. If it is an active natal den, construction activities must avoid the den by at least 150 meters (500 feet) until the pups have left the den.

No construction activities that may cause nest abandonment or forced fledging will be initiated within 0.4 kilometer (0.25 mile) of an active Swainson's hawk nest between March 1 and August 15. As indicated above, a pre-construction survey will be conducted for Swainson's hawk. The survey will be conducted in accordance with the methodology developed by the Swainson's Hawk Technical Advisory Committee (SHTAC 2000) within one week from the start of ground-disturbing activities that occur during the nesting season (March 1 – August 15). If an active nest is found prior to construction, the City of Bakersfield will consult with CDFG about appropriate mitigation.

If construction or other project-related activities that may cause nest abandonment or forced fledging of Swainson's hawk were necessary within the buffer zone of 0.4 kilometer (0.25 mile), a qualified wildlife biologist would evaluate existing conditions around the nest site to determine the minimum distance necessary to ensure that "take" of a Swainson's hawk is avoided. The minimum buffer would depend on the level of noise or construction disturbance, line of site between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. These factors would be analyzed in coordination with CDFG to make an appropriate decision on minimum buffer distances. In addition, the biologist would monitor the nest site weekly to ensure that the minimum buffer is maintained until the young are fledged.

As indicated above, pre-construction surveys for burrowing owls will be conducted in suitable habitat within 75 meters (250 feet) of the project footprint. The surveys will be conducted in accordance with the protocol provided in the Staff Report on Burrowing Owl Mitigation (CDFG 1995). Occupied burrows will not be disturbed during the nesting season (February 1 – August 31). When destruction of occupied burrows is unavoidable during the non-nesting season (September 1 – January 31), suitable burrows will be enhanced (enlarged or cleared of debris) or new burrows created (installing artificial burrows) at a ratio of 2:1 on protected lands approved by CDFG. Newly created burrows will follow guidelines established by CDFG. If owls must be moved away from the project area, passive relocation techniques (such as installing one-way doors at burrow entrances) will be used instead of trapping. At least one week will be necessary to accomplish passive relocation and allow owls to acclimate to alternative burrows. If owls must be moved away from the project area, the City of Bakersfield will work with CDFG to find an appropriate permanent relocation site.

4.3.2 Waters of the U.S.

4.3.2.1 Environmental Impacts

Westside Parkway Alternatives

As discussed in Section 3.3.3, the Westside Parkway Truxtun Option would impact 0.24 hectare (0.59 acre) of non-wetland jurisdictional waters of the U.S. where the mainline Westside Parkway would cross the Kern River. The Westside Parkway Oak Option would impact 0.07 hectare (0.18 acre) of non-wetland jurisdictional waters of the U.S. at the mainline crossing of the Kern River. Both options would impact 0.01 hectare (0.02 acre) of non-wetland jurisdictional waters of the U.S. where the proposed Mohawk Street extension crosses the Kern River. These crossings would require a Section 404 permit from the USACOE. Based on correspondence with the USACOE, this permitting would be accomplished through use of Nationwide Permits 14 (linear transportation corridors) and 33 (temporary construction access and dewatering). Correspondence from the USACOE is included in Appendix D. After the locations of construction impacts are marked in the field, the permitting process would begin with a pre-application notice to the Sacramento District of the USACOE. Materials to be submitted as part of the pre-application notice would include a detailed project description, map of the site, and photos. A site visit by the USACOE may also be part of the pre-application process. Such a visit would allow a USACOE representative to discuss measures for avoiding and minimizing disturbance to the waters of the U.S. Ideally, the site visit would also include representatives from CDFG and the RWQCB.

The USACOE would not be able to finalize a permit until the applicant also receives a Section 401 Water Quality Certification from the RWQCB. The process of obtaining a 401 certification would start with notification to the RWQCB. If a site visit is planned with the USACOE, a representative from the RWQCB could also attend. An application form can be obtained at the time of first notification.

Because the crossings of the Kern River are within the bed and banks of a stream, a Section 1602 streambed alteration agreement (agreement) from CDFG would also be required. As with the RWQCB, the CDFG representative with responsibility for agreements would ideally attend the pre-application site visit by the USACOE representative.

No Action Alternative

The No Action Alternative would not result in impacts to jurisdictional wetlands or waters of the U.S.

4.3.2.2 Mitigation Measures

The MBHCP provides one vehicle for non-wetland waters compensatory mitigation for the project. The alignment occurs completely within the boundaries of the MBHCP (except for the Kern River crossings which occur within the primary floodplain of the Kern River) and the project is eligible to be included in the MBHCP mitigation strategy (S. Strait, personal communication, 2003). The MBHCP Implementing Trust Group approved the inclusion of the Westside Parkway project into the MBHCP for purposes of compensating effects to habitats, including non-native grassland and agricultural land. The approval occurred at the September 11, 2003, meeting of the MBHCP Implementing Trust Group and also included acceptance of the project for mitigating effects on habitat within the primary floodplain of the Kern River. A copy of the MBHCP Implementing Trust Group's approval action is included in Appendix D. As such,

a per-acre fee could be paid to the MBHCP Implementing Trust Group. The City of Bakersfield, as project proponent, would not be responsible for acquisition and restoration of replacement habitat. The MBHCP Implementing Trust Group would use the funds provided to acquire habitat in perpetuity and the management entity (likely CDFG) would be responsible for restoring or enhancing the habitat as part of ongoing management.

Mitigation through the MBHCP is on a fee-per-acre basis. The fee collected by the MBHCP program would be used to acquire and preserve in perpetuity nearby natural lands. Although there is no fee specific to wetlands and waters of the U.S., preserved land is likely to be a combination of habitats, which may include small amounts of wetlands (in the form of valley saltbush scrub) or waters of the U.S. (in the form of sandy wash habitat similar to the reach of the Kern River traversed by the Westside Parkway project). The amount of waters of the U.S. habitat to be impacted by the project is small, 0.25 hectare (0.61 acre) and 0.08 hectare (0.20 acre) for the Westside Parkway Truxtun Option and the Westside Parkway Oak Option (including the Mohawk Street extension), respectively.

4.4 SOCIAL AND ECONOMIC ENVIRONMENT

Similar to the physical environment, the social and economic characteristics would generally be impacted equally by the Westside Parkway Truxtun Option and the Westside Parkway Oak Option. Therefore, unless specifically stated otherwise in the text, social and economic impacts described herein apply for both alternative alignments and are described mutually under the heading of "Westside Parkway Alternatives."

4.4.1 Land Use

4.4.1.1 Environmental Impacts

Westside Parkway Alternatives

Construction of a new transportation facility would result in the direct conversion of agricultural land; and conversion of open space, residential, commercial, water storage and public facility uses to transportation facility right of way. These land use impacts would be essentially the same for the Westside Parkway Truxtun Option and the Westside Parkway Oak Option.

The Natural Resources Conservation Service (NRCS) was consulted concerning farmland impacts caused by a transportation facility. It was determined that construction of a potential eight-lane parkway would convert approximately 32 hectares (79 acres) of Prime Farmland to non-agricultural uses. The Williamson Act protects none of the impacted farmland.

As indicated in Section 4.2.6.1, the Westside Parkway would convert 4.5 hectares (11.1 acres) of spreading basins owned and operated by RRBWSD to a transportation facility. These spreading basins have been replaced with new basins east of Allen Road.

The City of Bakersfield owns approximately 50 percent of the Westside Parkway right of way. The remainder is privately owned.

Land Use Plans and Policies

The following land use plans were reviewed for this project:

- Metropolitan Bakersfield General Plan
- Kern County General Plan
- Kern River (Westside) Freeway Limited Specific Plan (Kern County)
- Western Rosedale Specific Plan (Kern County)
- Kern River Plan Element (Kern County)
- Kern River Parkway Plan
- Bikeway Master Plan

Metropolitan Bakersfield General Plan. The current Metropolitan Bakersfield General Plan was adopted in 2003. The Circulation Element of the General Plan calls for construction of the Westside Parkway within the Tier 1 corridor adopted by FHWA, Caltrans and Kern COG for SR58. The Westside Parkway is consistent with the Circulation Element since it uses the transportation Tier 1 corridor.

Kern County General Plan. The Kern County General Plan was updated in 2004. The Circulation Element of the General Plan uses several "Areas of Focus" as a technique to allow a detailed look at certain County locations, one of which is the City of Bakersfield. Kern County and the City of Bakersfield jointly adopted the Metropolitan Bakersfield General Plan and the Circulation Element of the Metropolitan Bakersfield General Plan also serves as the County's Circulation Element for the metropolitan area. Therefore, the Westside Parkway is consistent with the Kern County General Plan.

Kern River (Westside) Freeway Limited Specific Plan. This limited specific plan defines the alignment for a freeway from Mohawk Street to Enos Lane. It was adopted by the County in 1991 to protect a high-capacity transportation corridor in west Bakersfield from other forms of development. The Limited Specific Plan was incorporated into the Circulation Element of the Metropolitan Bakersfield 2010 General Plan. The alignment contained in the Limited Specific Plan follows the adopted alignment for SR58; therefore, the Westside Parkway is consistent with the Kern River (Westside) Freeway Limited Specific Plan.

Western Rosedale Specific Plan. This specific plan extends from 0.8 km (0.5 mile) north of Seventh Standard Road in the north to the Kern River in the south, 0.8 km (0.5 mile) west of Enos Lane in the west to Jewetta Avenue in the east. The plan was approved by Kern County in 1994. It identifies the need for a high-capacity transportation facility in western Bakersfield on the alignment defined in the Kern River (Westside) Freeway Limited Specific Plan. Therefore, the Westside Parkway is consistent with this Specific Plan.

Kern River Plan Element. The Kern River Plan Element covers uses of the primary and secondary floodway of the Kern River from the mouth of Kern Canyon to the Kern River crossing of I-5. The Plan Element was adopted by Kern County in 1985. It recognizes the possible need for the construction of new transportation facilities across the river. It is the policy of the Plan Element that facilities constructed within the primary and secondary floodways be designed so that they do not increase flood risks to

adjacent properties. As discussed in Section 4.2.5, the Westside Parkway would not substantially increase the elevation of flood waters in the Kern River and would not increase flood risks. Therefore, the Westside Parkway is consistent with the Kern River Plan Element.

Kern River Parkway Plan. The Kern River Parkway Plan provides for the development of recreational opportunities and habitat preservation on 583 hectares (1,400 acres) along the Kern River from Manor Street to Stockdale Highway. A small portion of the Kern River Parkway will be developed to intensive recreational uses. Approximately 78 percent (477 hectares [1,145 acres]) of the Kern River Parkway is publicly owned. The Kern River Parkway Plan was adopted by the City and County in 1988.

The Kern River Parkway Plan includes the crossings of the Kern River by the Westside Parkway options and the proposed extension of Mohawk Street. Therefore, the Westside Parkway is consistent with the Kern River Parkway Plan. Appendix F contains correspondence with the Bakersfield Recreation and Parks Department regarding the consistency of the Westside Parkway with this plan.

Bikeway Master Plan. The Circulation Element of the Metropolitan Bakersfield General Plan includes a bikeway system. A Bikeway Master Plan is provided in the Circulation Element identifying bike paths, lanes, and routes for the metropolitan area. One of the centerpieces of the system is the bicycle path along the Kern River. As discussed in Section 4.4.9.1, the Westside Parkway project would not substantially impact that bicycle path during project construction or operation. The Circulation Element includes a policy that bike lanes should be constructed in conjunction with street improvement projects on streets that coincide with the Bikeway Master Plan. Mohawk Street is identified in the Master Plan as a street that should have bike lanes. The extension and improvement of Mohawk Street proposed for the Westside Parkway project includes the addition of bike lanes in accordance with City of Bakersfield design standards.

No Action Alternative

The No Action Alternative would not impact existing land uses. This alternative would not be consistent with, or support the achievement of goals and policies contained in, the Metropolitan Bakersfield General Plan, Land Use or Circulation Elements.

4.4.1.2 Mitigation Measures

Refer to Section 4.4.2 for a discussion of mitigation measures for farmland impacts and residential and commercial relocations.

4.4.2 Socioeconomics and Environmental Justice

4.4.2.1 Environmental Impacts

Westside Parkway Alternatives – Environmental Justice

Pursuant to Executive Order 12898, each Federal agency, whenever practicable and appropriate, shall collect, maintain, and analyze information assessing and comparing environmental and human health risks borne by populations identified by race, national origin, or income. To the extent practicable and appropriate, Federal agencies shall use this information to determine whether their programs, policies, and

activities have disproportionately high and adverse human health or environmental effects on minority populations and low-income populations. No adverse human health risks or environmental effects have been identified for any population in the study area, including minority or low-income populations. No minority or low-income populations have been identified that would be adversely affected by the proposed project as determined above. Based on the above discussion and analysis, the proposed project would not cause disproportionately high and adverse effects on any minority or low-income populations as per Executive Order 12898 regarding environmental justice.

The minority population percentage in the five Census Tracts within the project area is approximately 16.4 percent, which is much lower than the average minority population throughout the City as a whole at 38.0 percent. The average household income of $59,000 in the five Census Tracts within the project area is well above the City average as a whole ($39,982) as well as above household incomes that are considered "Low Income" ($20,151 to $32,240) and "Very Low Income" (less than $20,150) by the U.S. Department of Housing and Urban Development. The Department of Housing and Urban Development has a poverty guideline of $16,090 for 2005 for a family of three, which is similar to the average household size in the study area. No minority or low-income populations have been identified that would be adversely affected by the proposed project as determined above. Therefore, this project is not subject to the provisions of Executive Order 12898.

4.4.2.1.1 Property and Relocation Impacts

Westside Parkway Truxtun Option

There are no residential relocations necessary to implement the Westside Parkway Truxtun Option. There would be one institutional relocation, the Bakersfield City Corporation Yard. Improvements along Mohawk Street are expected to necessitate up to four commercial business relocations. None of the other right of way acquisitions are expected to involve relocations.

If the Westside Parkway Truxtun Option were implemented as the preferred alternative, the City Corporation Yard would be relocated to another site within Bakersfield.

Westside Parkway Oak Option

There are no residential relocations necessary to implement the Westside Parkway Oak Option. There may be two additional commercial relocations associated with this alternative, the Paragon Day Spa and a medical-dental office building east of the location where the alignment crosses the Kern River and Truxtun Avenue, plus up to four commercial business relocations along Mohawk Street. None of the other right of way acquisitions are expected to involve relocations.

East of the Kern River and Truxtun Avenue, the Westside Parkway Oak Option would affect the existing BNSF rail yard south of the mainline BNSF tracks. Rail yard operations would need to be modified if this alternative were implemented as the preferred alternative. Coordination between the BNSF railroad and the City of Bakersfield is ongoing to evaluate right of way options for this property.

4.4.2.1.2 Neighborhood Cohesion Impacts

The Westside Parkway does not alter the physical boundaries of the community. Implementation of the project would not divide the community; rather, the Westside Parkway would result in a more direct and logical east-west connection, which is anticipated to better physically unite the community. West of Mohawk Street, the project alignment avoids existing residential developments and commercial structures by generally following existing and manmade linear barriers such as the Kern River and the CVC, thus minimizing community disruption. East of Mohawk Street, the project follows Truxtun Avenue (Truxtun Option) or the BNSF railroad tracks (Oak Option).

4.4.2.1.3 Economic Impacts

Construction of the Westside Parkway would cost an estimated $150 to $200 million. The expenditure of these funds would generate substantial construction employment benefits in the Bakersfield metropolitan area. In addition, it is likely that many of the materials and supplies that would be needed for construction would be purchased from local suppliers.

A new freeway would provide substantial monetary savings for the region from improvements in operating efficiency, mobility, and safety of vehicular travel. Improvements in operating efficiency include such user benefits as savings in fuel, oil, tires, repairs, and maintenance; mobility improvements that result in time savings; and safety savings that include reduction in property damage and fatal and injury accidents. These savings would benefit commuters, emergency service providers, and businesses. Access to downtown Bakersfield would be improved by shifting traffic from existing east-west arterials, such as Rosedale Highway, onto the Westside Parkway.

Many of the highway-related businesses along Rosedale Highway are located near SR99. It is unlikely that construction of the Westside Parkway would impact these businesses because most of them are located adjacent to SR99. Construction of a freeway would reduce congestion on Rosedale Highway, thus improving the parking and patronage of some local-serving businesses.

No Action Alternative

The No Action alternative would not directly impact any businesses. The Bakersfield metropolitan area west of Route 99 cannot function optimally without a high-capacity east-west transportation facility. Circulation and access constraints would impair the economic potential of the western portion of the metropolitan area. Increasing congestion over time would result in difficulties for potential employers, service vehicles, and customers of the new commercial center at Rosedale Highway and new and existing industrial uses along Rosedale Highway near Route 99. Growth and development of the residential subdivisions in the northwestern sector of the metropolitan area would cause increasing congestion on Rosedale and Stockdale highways and adjoining east-west arterials.

4.4.2.2 Mitigation Measures

Relocation and Property Impact Mitigation

No mitigation would be required because of Caltrans' Relocation Assistance Program. That program is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970,

as amended, and Title 49 Code of Federal Regulations, Part 24. The purpose of the Relocation Assistance Program is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. Please see Appendix G for a summary of the Relocation Assistance Program.

All relocation services and benefits are administered without regard to race, color, national origin, or sex in compliance with Title VI of the Civil Rights Act (42 U.S. Code 2000d, et seq.). Please see Appendix G for a copy of Caltrans' Title VI Policy Statement.

4.4.3 Visual Resources

4.4.3.1 Environmental Impacts

Westside Parkway Alternatives

Temporary (Construction) Visual Impacts

The Westside Parkway project would be constructed in phases that would occur over an estimated four to six years. During each phase of construction, viewers would see materials, equipment, workers, and the operations of construction including trenches, excavations, and structures in the process of being built. The visual impacts of construction are unavoidable and are temporary. Motorists and pedestrians would be exposed to construction activities while passing through the construction zone. Residents of adjacent homes would be exposed to construction activities on a more continuous basis. However, the impact to residents would be reduced by existing screen walls and by the installation of proposed screening elements such as soundwalls or dense plantings during early stages of construction. These project elements could reduce exposure of adjacent residents to noise and views of construction activities. Areas disturbed by construction are recommended for landscaping.

Operational Visual Impacts

The Westside Parkway would not present visual impacts from the viewpoint of sensitive receptors including adjacent single- and multi-family residences, and adjacent schools. The Kern River is the one important scenic visual resource within the viewshed. The project would have an adverse effect on some views of the river. Impacts are described in the following paragraphs. The baseline used for analysis is the existing visual environment within 0.4 km (quarter mile) in all directions of the project limits.

From Adjacent Residences' Point of View:

From the viewpoint of adjacent residential properties, changes in the visual environment would be perceived with the addition of soundwalls, with the elevation of Allen Road 8 meters (25 feet) above the existing terrain at the Westside Parkway interchange, and with the illumination of the night sky from vehicle lights. The required elevation of Allen Road is controlled by engineering constraints including the provision of adequate vertical clearance of the proposed Allen Road bridge over the Westside Parkway and the need for the RRBWSD intake canal box culvert to convey flows under the Westside Parkway/Allen Road interchange. Such impacts would be due to elevating north-south residential streets

at overcrossings which would block long range views through those street corridors and the resident's sense of connection with their visual environment to the north and south.

Visual impacts might also be experienced by residents looking at the night sky immediately adjacent to the corridor. Headlights would light the night sky, especially during foggy conditions where light is refracted in water molecules and concentrated at lower elevations.

Views to the south from Columbia Elementary School and from Liberty High School would not be impacted as a result of the project. The southern property lines have existing fences that obscure views to the south. The project may provide approximately 2.4 to 3.6 meter (8 to 12 feet) high noise abatement (earth berms or soundwalls) south of the existing fences that may block views of the Westside Parkway from the schools. Soundwalls would not result in adverse visual impacts for children playing in the grassy fields that are located to the south of the school buildings.

From the Kern River Parkway Trail User's Point of View:

Users of the Kern River Parkway trail would see the Westside Parkway from two locations – the Mohawk Street extension and the Kern River bridge located west of the existing BNSF railroad bridge. Trail users might experience adverse visual impacts as a result of the Mohawk Street extension that would end at Truxtun Avenue. The trail would be realigned to the north to go under Mohawk Street adjacent to the bridge abutment, which would momentarily interrupt views of the river in this location. The proposed Westside Parkway bridge over the Kern River would be seen elevated approximately 13 meters (42 feet) above the Kern River

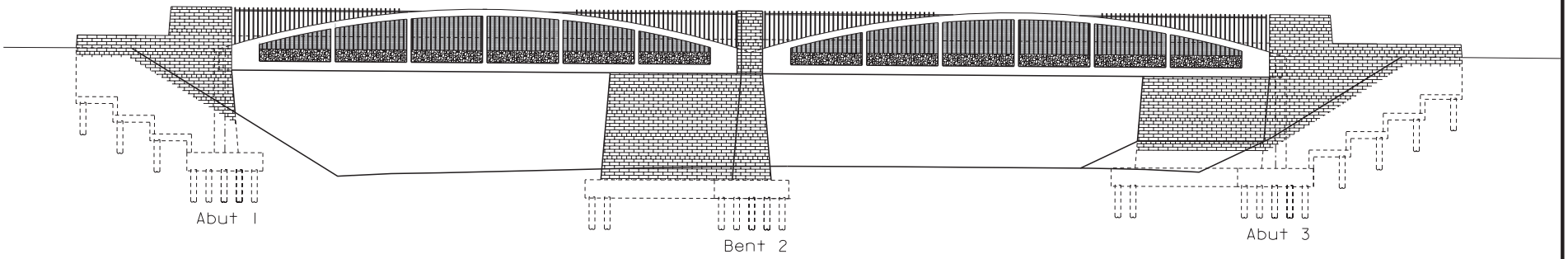
From the Motorist's Point of View:

There is no existing motorist experience within the current Westside Parkway alignment to assess changes to an existing visual environment. Therefore, there are no visual impacts from the motorist's perspective traveling within the Westside Parkway. Motorists on Stockdale Highway would see the Westside Parkway on the north side of the road east of Heath Road. The existing land use is undeveloped agricultural land bordered on the north by single-family homes behind a masonry screen wall. The proposed project would be fully landscaped. No adverse visual impacts would be expected to occur from the perspective of motorists traveling on Stockdale Highway looking toward the Westside Parkway. For motorists traveling on Allen Road, long-range views would be afforded due to the proposed project because Allen Road would be elevated approximately 8 meters (25 feet) above the surrounding terrain to go over the Westside Parkway. Other positive benefits for the motorist would result from elevated vantage points providing views of the Kern River from the proposed Kern River bridge, and the Mohawk Street extension bridge, as well as views of the surrounding terrain from the Coffee Road bridge. Motorists traveling on the Westside Parkway would also pass under proposed bridges, such as at Renfro Road, Allen Road, Jewetta Avenue, Calloway Drive, and Mohawk Street. A conceptual elevation view of a typical bridge overcrossing is shown in Figure 4.4-1.

Slope rounding techniques would be utilized to integrate the structures into the landscape by sculpting the earth so that it would follow the horizontal direction and the gradient of the slopes of the ramps, and by making the transitions from the flat areas to the slopes gradual in appearance.

From Distant Points of View:

Distant views of the project are from non-sensitive receptors, and multi-story office buildings at the east end of the project and to the southeast. Office workers from these vantage points would see the alignment in the straight sections and the overcrossings particularly at the eastern end. Changes in the view from undeveloped open space to a highway might be perceived as adverse by some and not adverse by others.



ELEVATION VIEW OF CONCEPTUAL OVERCROSSING BRIDGE

Project No.: 29866227	Date: MARCH 2005	Project: WESTSIDE PARKWAY PROJECT	Figure: 4.4-1

L/westside pkwy/ProfileofConceptualBridgeX.cdr 12-03

Walls:

Soundwalls and retaining walls would not result in adverse visual impacts from the motorist's point of view or from adjacent residents' points of view. From the motorist's point of view within the Westside Parkway, there is no existing roadway within the project limits where there is a visual experience that might be impacted by the addition of walls. Motorists on Stockdale Highway immediately east of Heath Road would see new soundwalls. However, since existing masonry screen walls are seen in the view, no visual impacts are expected to occur. From the perspective of views from adjacent residences, many of the properties constructed in the last ten years already have masonry screen walls that block views to the south and toward the proposed alignment, or will have new housing blocking views of the Westside Parkway. Residential properties located to the east of Renfro Road and to the north of the proposed alignment have permeable screen barriers at the property line that separate the residential property from the proposed Westside Parkway. No adverse visual impacts would be expected to occur as a result of soundwalls in this location.

To reduce the singular character of walls, screening planting would be installed wherever adequate space is available. The planting design would be determined by the City of Bakersfield. To soften the appearance of soundwalls, aesthetic features are planned for the design of the wall surfaces. Trees, shrubs, and vines would be planted in front of the walls to provide screening as well as color, form and textural variation and interest. Vines would be planted to protect the walls from graffiti.

Landscaping:

The project would include installation of new plants. The locations and types of plantings would be in conformance with City of Bakersfield standards for types of species, set back clearance, and maintenance criteria. Vegetation would not be restored to the original character. The introduced planting would include plants that grow tall and wide to screen the ramps and abutments, a mixture of shrubs and groundcover within the loop ramps, and the plants at the edges of right of way and medians where there are adequate setbacks for planting. The existing landscape is naturalistic in character and consists of naturally-occurring grasses, some riparian vegetation and a few isolated mature Fremont cottonwoods. The landscaping design would be finalized during final engineering. It would not have the same character as the existing landscape but rather would be composed of introduced plant species planted in a refined and urban landscape design. For some viewers, the change in the character of the visual environment might be perceived as adverse. For others, the new landscape design might be perceived as a positive visual experience although different from the original character.

Public Agency Classifications and Policies:

There are no scenic highways that cross the proposed project alignment.

Westside Parkway Oak Option

The view in the vicinity of the Westside Parkway Oak Option east terminus does not contain striking and distinctive visual patterns. Views are of railroad tracks and cars, utility poles in the background, fencing in the foreground and the Boomers Miniature Golf Course features. With the project, some of the rail yard storage tracks would be replaced with a highway. The view would be improved with the removal of the rail yard storage tracks that are complex in line and form and with replacement with the Westside

Parkway Oak Option that would include a road surface that would be more simple in design. Landscaping would be part of the project and would add varied forms, textures, colors, and lines in the view. The changes might be perceived as a positive experience by some viewers.

Users of the Kern River Parkway trail would see a different view of the Westside Parkway Oak Option than of the Westside Parkway Truxtun Option. The proposed Westside Parkway bridge over the Kern River would be seen elevated approximately 8 meters (26 feet) above the surrounding terrain. While both alternative views would be imposing, the Westside Parkway Oak Option would result in reduced visual impacts from the perspective of users of the Kern River Parkway trail due to its lower profile over the Kern River.

No Action Alternative

The No Action Alternative would not impact the visual environment.

4.4.3.2 Mitigation Measures

Replacement Planting:

Replacement planting would be installed as described in the above section titled "Landscaping." As indicated in Section 4.3.1.1, the proposed project would result in the removal of 0.5 hectare (1.3 acres) for the Westside Parkway Truxtun Option and 0.4 hectare (1.0 acre) for the Westside Parkway Oak Option of Great Valley cottonwood riparian forest where the project crosses the Kern River in two locations. The loss of this habitat would be compensated through the MBHCP or by preserving lands (replacement habitat) near the project area, as discussed in Section 4.3.1.2. Mature trees removed by the project would be replaced at the required City of Bakersfield replacement ratios of five trees for every one removed within the Kern River Parkway and at a ratio of one tree for every one removed within the rest of the project right of way.

Safety Lighting:

Where safety lighting is needed on the Westside Parkway, directional lighting and deflector shields would be used where the freeway passes through residential areas. This would mitigate the potential for excessive light and glare in these areas.

4.4.4 Traffic and Transportation

This section describes traffic conditions with implementation of the Westside Parkway project through the year 2030. Conclusions are based on the TIA prepared for the proposed project.

4.4.4.1 Environmental Impacts

Westside Parkway Alternatives

Construction of the Westside Parkway would improve traffic circulation in the western portion of the Bakersfield metropolitan area. During peak hours, the Westside Parkway would draw a large number of commuters away from Rosedale Highway and Stockdale Highway. A highway segment operational analysis was conducted for the proposed Westside Parkway in accordance with the procedures provided

in Chapter 2 of the Highway Capacity Manual. As shown in Table 4.4-1, the Westside Parkway is forecast to operate at acceptable LOS C or better in either direction for both a.m. and p.m. peak hours.

Table 4.4-1. Highway Segment Level Of Service Results - 2030 with Project Conditions

Roadway	Segment	Lanes		ADT	Vehicles per Hour		LOS	
		EB	WB		EB	WB	EB	WB
AM Peak Hour								
Westside Parkway	SR99 to Mohawk Street	3	3	54,200	2511	1442	B	A
Westside Parkway	Mohawk Street to Coffee Road	4	4	96,000	4448	2623	C	B
Westside Parkway	Coffee Road to Calloway Drive	3	3	77,100	3965	2351	C	B
Westside Parkway	Calloway Drive to Allen Road	3	3	50,700	2224	1864	B	B
Westside Parkway	Allen Road to Stockdale Highway	2	2	29,100	1372	1224	B	B
PM Peak Hour								
Westside Parkway	SR99 to Mohawk Street	3	3	54,200	1105	1947	A	B
Westside Parkway	Mohawk Street to Coffee Road	4	4	96,000	2543	3970	B	C
Westside Parkway	Coffee Road to Calloway Drive	3	3	77,100	1882	3443	B	C
Westside Parkway	Calloway Drive to Allen Road	3	3	50,700	1810	2263	B	B
Westside Parkway	Allen Road to Stockdale Highway	2	2	29,100	1178	1440	B	B

There are now 27 intersections along the five key east-west arterials in west Bakersfield (Table 4.4-2)[10]. Traffic modeling was used to evaluate the operation of these existing intersections and new intersections that would be created with the Westside Parkway alternatives in 2030. This was done using the Kern COG traffic model. Forecasts were based on regional population and employment growth developed by the City of Bakersfield and Kern County. The forecast for both the No Action Alternative and the Westside Parkway options assumed that all of the improvements to the local transportation network programmed in the 2001 Regional Transportation Plan would be implemented.

As indicated in Table 4.4-2, 19 of the existing intersections are projected to operate at LOS C or better in 2030 under the No Action Alternative during the a.m. peak hour and 13 are projected to operate at LOS C or better during the p.m. peak. Under the Westside Parkway options, all of the new intersections that would be constructed for the project would operate at LOS C or better during the a.m. and p.m. peaks. Under the Westside Parkway Truxtun Option, 24 of the existing intersections are projected to operate at LOS C or better in the a.m. peak hour and 17 are projected to operate at LOS C or better during the p.m.

[10] There were 26 intersections along the five key east-west arterials in 2000 when traffic counts were done for this project. Since that time, the Jewetta Avenue/Stockdale Highway intersection has been built.

peak hour. Under the Westside Parkway Oak Option, 24 of the existing intersections are projected to operate at LOS C or better in the a.m. peak hour and 18 are projected to operate at LOS C or better during the p.m. peak hour. In addition, the Westside Parkway options would improve the LOS at five intersections projected to operate at E or F during the p.m. peak under the No Action Alternative to an LOS of D or better.

Table 4.4-2. Summary of Intersection Peak Hour Level of Service Results

Intersection	Existing		2030 No Action Alternative		2030 Westside Parkway Project	
	AM	PM	AM	PM	AM	PM
Allen Road / Rosedale Highway	C	C	C	C	C	C
Calloway Drive / Rosedale Highway	C	C	E	D	D	D
Coffee Road / Rosedale Highway	C	C	D	D	C	D
Fruitvale Avenue / Rosedale Highway	B	C	C	F	C	E
Mohawk Street / Rosedale Highway	F	F	C	D	C	D
SR99 SB Ramps / Rosedale Highway	B	B	C	A	A	A
SR99 NB Ramps / Rosedale Highway	C	D	F	F	C	D
Mohawk Street / North Properties	--	--	--	--	A	A
Mohawk Street / South Properties	--	--	--	--	A	A
Allen Road / Brimhall Road	C	C	C	C	C	C
Jewetta Avenue / Brimhall Road	B	B	B	B	B	B
Calloway Drive / Brimhall Road	C	C	C	C	C	C
Coffee Road / Truxtun Avenue	C	C	D	F	C	B
Mohawk Street / Truxtun Avenue	B	C	C	D	B	B
Empire Drive / Truxtun Avenue	A	B	A	B	A	B
Oak Street / Truxtun Avenue [Truxtun Option / Oak Option]	C	C	C	E/E	C/C	D/C
Mohawk Street / California Avenue	C	C	C	E	D	F
SR99 SB Ramps / California Avenue	D	C	E	D	E	D
SR99 NB Ramps / California Avenue	C	C	B	C	B	C
Oak Street / California Avenue [Truxtun and Oak Options]	C	C	C	C	C	C
Nord Avenue / Stockdale Highway [1]	B	B	A	A	A	A
Heath Road / Stockdale Highway [1]	B	B	A	A	A	A
Renfro Road / Stockdale Highway [1]	C	C	A	A	B	B
Allen Road / Stockdale Highway	C	B	C	C	C	C
Jewetta Avenue / Stockdale Highway	--	--	B	D	B	B
Calloway Drive / Stockdale Highway	C	C	C	C	C	C
Coffee Road / Stockdale Highway	C	C	E	F	C	D
California Avenue / Stockdale Highway	C	C	D	F	C	D
Stockdale Highway / Westside Parkway[2]	--	--	--	--	B	B
Allen Road / Westside Parkway WB Ramp[2]	--	--	--	--	B	C
Allen Road / Westside Parkway EB Ramp[2]	--	--	--	--	B	B
Calloway Drive / Westside Parkway WB Ramp[2]	--	--	--	--	A	C
Calloway Drive / Westside Parkway EB Ramp[2]	--	--	--	--	A	A
Coffee Road / Brimhall-Westside Parkway WB Ramp	C	C	D	D	C	C
Coffee Road / Westside Parkway EB Ramp[2]	--	--	--	--	C	A
Mohawk Street / Westside Parkway WB Ramp[2]	--	--	--	--	A	A
Mohawk Street / Westside Parkway EB Ramp[2]	--	--	--	--	C	C
Truxtun Avenue / Westside Parkway [Truxtun Option][2]	--	--	--	--	A	B
Oak Street / Westside Parkway WB Ramp [Oak Option][2]	--	--	--	--	A	A
Oak Street / Westside Parkway EB Ramp [Oak Option][2]	--	--	--	--	A	A

Del/Veh = Average delay per vehicle in seconds.
NB = Northbound
SB = Southbound

[1] Unsignalized (Existing)
[2] New Intersection with Westside Parkway project

Completion of Mohawk Street between Rosedale Highway and Truxtun Avenue as part of the proposed project would provide an important north-south link between major east-west travel corridors into the CBD. With the extension of Mohawk Street and a Mohawk Street / Westside Parkway interchange, traffic on the Parkway could be conveniently distributed to the CBD on Rosedale Highway, Truxtun Avenue, and California Avenue. Conversely, coming out of downtown, each of these three east-west arterials can collect traffic from the CBD street network and funnel it onto the Westside Parkway.

Construction of the proposed project would generally have minimal impacts on existing transportation facilities such as vehicular, bicycle, and pedestrian traffic. All existing transportation routes crossed by the project would be maintained open during construction with the exception of Jewetta Avenue. At Jewetta Avenue all traffic would be detoured to Allen Road and/or Calloway Drive. In other areas, existing traffic would be maintained in place or detoured locally around/through the construction zone.

4.4.4.2 Mitigation Measures

As shown in Table 4.4-2, the Westside Parkway would reduce the p.m. peak hour level of service at the Mohawk Street/California Avenue intersection from LOS E to LOS F relative to the No Action Alternative. To mitigate the level of service impact at this intersection, a grade-separated interchange would be necessary. The right of way footprint and access restrictions necessary to implement an interchange at the location of this existing intersection would require the acquisition and relocation of at least four, and as many as eight, major commercial buildings near the intersection. This is not feasible mitigation. This impact, however, is considered offset by the overall lowering of intersection delays and improved levels of service at a majority of the study intersections, as compared to the year 2030 No Action Alternative.

4.4.5 Noise

4.4.5.1 Environmental Impacts

4.4.5.1.1 Noise Abatement Criteria and Analysis Guidelines

FHWA NAC for various land use ratings (called activity categories) are given in Table 4.4-3. These NAC are assigned to both exterior and interior activities. Noise attenuation provided by most residential structures leads to compliance with the interior design noise level if the exterior criterion is attained (FHWA 1982).

Land uses along the proposed Westside Parkway right of way consist of vacant lands, single-family residential, a senior assisted-living facility, educational, recreational, agricultural, canal, industrial, commercial, railroad transportation, a miniature golf course and several transient residential motels. The motels do not have exterior recreation, rest, or living areas that would have an exposure to the proposed alignments. These land uses correspond to the following FHWA NAC (exterior uses):

- Category B (67 dBA L_{eq} (h)) – Residences, parks, schools, recreation
- Category C (72 dBA L_{eq} (h)) – Agricultural, commercial, industrial

If these criteria sound levels are predicted to be approached or exceeded during the noisiest 1-hour (peak-traffic-noise hour) periods, noise abatement measures are to be considered and, if found to be reasonable and feasible, they must be provided as part of the project.

Table 4.4-3. Federal Noise Abatement Criteria

Hourly A-Weighted Sound Level - Decibels (dBA)

Activity Category	L_{eq}(h)	Description of Activity Category
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (Exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 (Exterior)	Developed lands, properties, or activities not included in Categories A or B above.
D	--	Undeveloped lands.
E	52 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

Source: FHWA, 1982

FHWA stipulates procedures and criteria for noise assessment studies (23 CFR 772). It requires that noise abatement measures be considered on all major transportation projects if the proposed project would cause a substantial increase in noise levels, or if projected noise levels approach or exceed the NAC level for activities occurring on adjacent lands.

Specifically, the following significance criteria are derived from Federal and State criteria. The proposed project would create adverse impacts (unless mitigated) if:

- The predicted worst-case hourly noise level with the project is expected to approach or exceed FHWA NAC (e.g., 67 dBA L_{eq} for residences or other Category B land uses). Under current Caltrans policy, a noise level of 66 dBA is considered to be approaching the NAC of 67 dBA.
- The project would increase ambient noise levels substantially. Caltrans considers an increase of 12 dBA to be substantial.
- Noise barriers must provide a minimum traffic noise reduction of 5 dBA to achieve a noticeable change in noise level to be considered feasible.
- Noise barriers must be cost-effective and should take into consideration the number of residences that would benefit from the barrier(s) to be considered reasonable. In addition to cost of abatement and noise-related factors such as absolute noise levels and change in noise levels, many other factors are considered as part of the comprehensive reasonableness analysis. These factors include: date of development along the highway, impacts of noise abatement on other resources, opinions of impacted residents, safety, social, economic, environmental, legal, and technological factors.
- Noise barriers should interrupt the line-of-sight between the noise source and the receiver [assumed to be 1.5 meters (4.9 feet) high].

Local Noise Standards (Construction)

Loud or unnecessary noises that disturb the peace or quiet of any neighborhood or that cause discomfort or annoyance to persons residing within 300 meters (1,000 feet) of the noise source are prohibited. For construction work within 300 meters (1,000 feet) of residential dwellings, construction work is restricted to the hours of 6 a.m. to 9 p.m. on weekdays, and 8 a.m. to 9 p.m. on weekends. At the discretion of the City Manager, permits may be granted for work to be done beyond these hours.

4.4.5.1.2 Field Noise Measurements

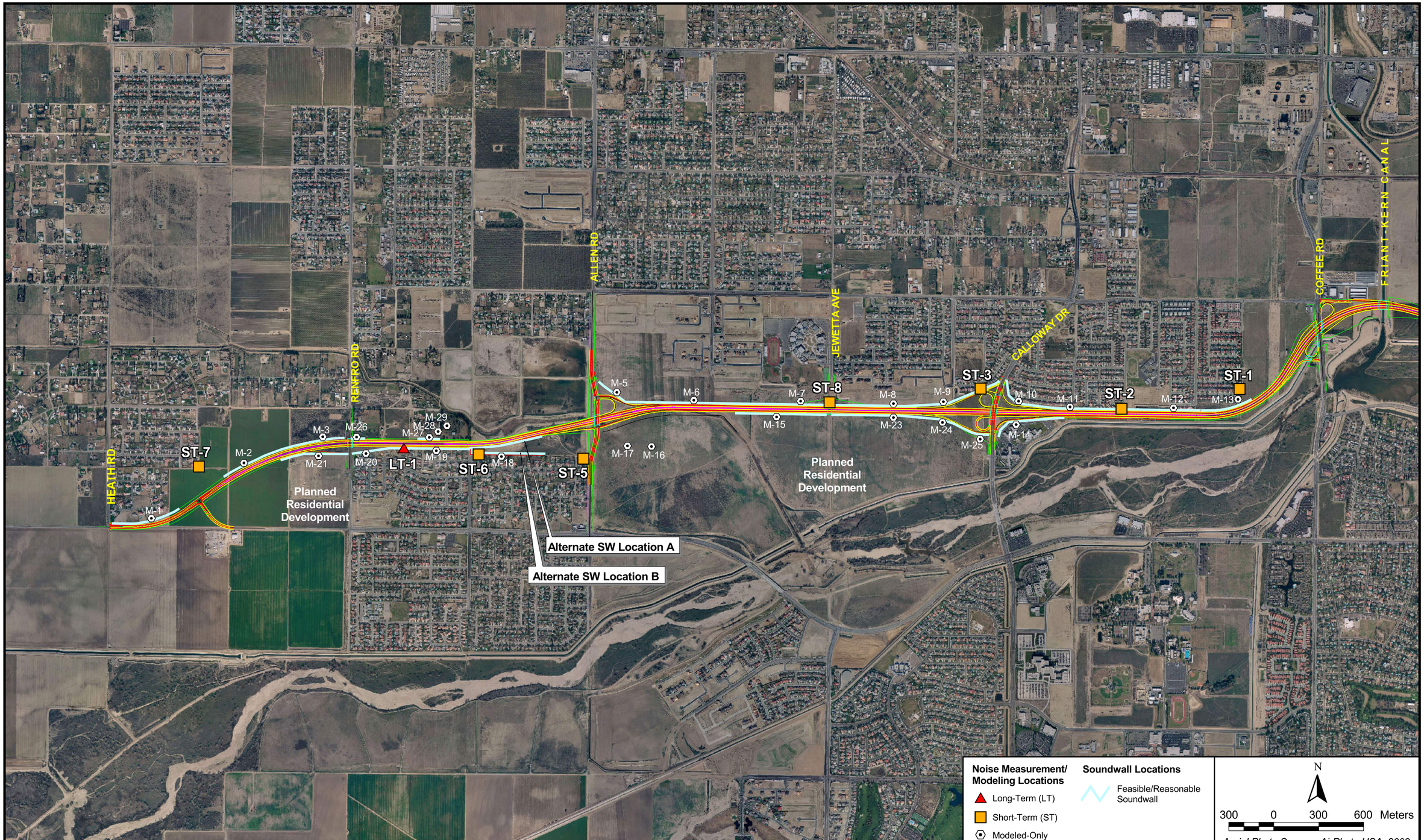
Noise measurements were conducted in the project area on January 15 and 16, 2003. Eight short-term and one long-term noise measurements were conducted. The results of the noise measurements and the measurement locations are discussed in detail in Section 3.4.5.5. The noise measurement locations are also shown graphically on Figure 4.4-2.

4.4.5.1.3 Impact Analysis

Westside Parkway Alternatives

Temporary (Construction) Noise Impacts

Noise produced by construction equipment required to build this project would occur with varying intensity and duration during the various phases of construction. These construction phases are expected to occur over an estimated four to six year period. Because of the different phases of construction, no single location would experience a long-term period of construction noise. Rather, construction activities and associated noise would move along the right of way as construction proceeds. Table 4.4-4 presents typical construction noise levels for various pieces of construction equipment at a distance of 15 meters (50 feet). Noise levels generated by construction equipment (or by any “point source”) decrease at a rate of approximately 6 dBA per doubling of distance away from the source (Diehl, 1973). Therefore, at a distance of 30 meters (100 feet), the noise levels would be about 6 dBA lower than at the 15-meter (50-foot) reference distance. Similarly, at a distance of 60 meters (200 feet) the noise levels would be approximately 12 dBA lower than at the 15-meter (50-foot) reference distance. Typically, construction activities would occur on weekdays between the hours of 6:00 a.m. and 9:00 p.m.



NOISE MEASUREMENT, MODELING AND CONSIDERED SOUNDWALL LOCATIONS

Project No. 29866227	March 2005	Westside Parkway Project	Bakersfield, California	Figure 4.4-2

Table 4.4-4. Noise Level Ranges of Typical Construction Equipment

Equipment	Levels in dBA at 15 meters (50 feet)[1]
Front Loader	73-86
Trucks	82-95
Cranes (moveable)	75-88
Cranes (derrick)	86-89
Vibrator	68-82
Saws	72-82
Pneumatic Impact Equipment	83-88
Jackhammer	81-98
Pumps	68-72
Generators	71-83
Compressors	75-87
Concrete Mixers	75-88
Concrete Pumps	81-85
Back Hoe	73-95
Pile Driving (peaks)	95-107
Tractor	77-98
Scraper/Grader	80-93
Paver	85-88

[1] Machinery equipped with noise control devices or other noise-reducing design features may generate lower noise levels than shown in this table.

Source: EPA, Noise from Construction Equipment and Operations, Building Equipment and Home Appliances, PB 206717, 1971.

Operational (Traffic) Noise Impacts

Predicted exterior noise levels for the Westside Parkway are shown in Table 4.4-5. Sound32, the Caltrans computer-based noise prediction model with California vehicle noise emission level (Calveno) curves, was utilized to estimate future traffic noise levels at existing and planned future noise-sensitive sites. Using traffic volumes, speeds, roadway alignments and cross-sections for the project, the resultant predicted project noise levels were summed with the ambient noise levels (where appropriate) and compared to existing ambient noise levels to assess the project's effects. Noise levels were modeled at representative existing and future noise-sensitive land uses. A receiver is modeled to be 1.5 meters (4.9 feet) above the ground. The Sound32 model uses the hourly traffic condition that results in the highest hourly noise level. The loudest traffic condition occurs when traffic is very heavy but remains relatively free flowing. This condition is referred to as LOS C. Traffic congestion results in lower speeds, which results in lower noise levels. The peak-noise-hour levels were predicted and used to assess the magnitude of noise impacts. Future predicted noise levels were computed for the nine sites at which noise was measured, as well as 27 supplementary "modeled-only" sites.

Traffic noise impacts, evaluated against Caltrans/FHWA noise impact criteria, were estimated for 36 representative noise-sensitive receivers. Based upon Caltrans/FHWA criteria, substantial noise increases (i.e., an increase of 12 dBA or more above existing noise levels) would occur at 20 of the 36 representative noise-sensitive receivers unless noise abatement measures are implemented. Additionally,

Caltrans/FHWA NAC levels would be approached or exceeded at 29 of the 36 representative noise-sensitive receivers without noise abatement. Estimated unabated future peak-noise-hour noise levels with the proposed project (including ambient levels) range from 61 dBA L_{eq} (at locations ST-4 and ST-7) to 74 dBA L_{eq} (at location M-27). The detailed results of the noise impact assessment using Caltrans/FHWA criteria are presented in the Table 4.4-5.

Table 4.4-5. Predicted Exterior Noise Levels

Receptor #	Receptor Location	Existing Ambient Level (based upon Noise Measurements) (dBA L_{eq})	Time of Measurement (Hour Beginning)	Simultaneous LT-1 Noise Level	LT-1 Peak-Noise-Hour	LT-1 Peak-Noise-Hour-Level	Estimated Existing Ambient Peak-Noise-Hour (dBA L_{eq})	Estimated[1] Future Peak-Noise-Hour Noise Level (from Westside Parkway) (dBA L_{eq})	Combined Future Noise Level (Ambient plus Project) (dBA L_{eq})	Estimated Increase Over Existing Noise Level (dBA)	Criterion Noise Level[2] (dBA L_{eq})	Future Noise Level Exceeds Criterion Noise Level ?	Substantial Increase Criterion (Greater than 12 dBA) Exceeded ?
M-1	W. of Renfro Road - North side of Westside Parkway	n/a			9:00	53.6	52	67	67	15	66	Yes	Yes
ST-7	W. of Renfro Road - North side of Westside Parkway	43	12:00	45.3	9:00	53.6	52	60	61	9	66	No	No
M-2	W. of Renfro Road - North side of Westside Parkway	n/a					52	67	67	15	66	Yes	Yes
M-3	W. of Renfro Road - North side of Westside Parkway	n/a					52	66	66	14	66	Yes	Yes
M-21	W. of Renfro Road - South side of Westside Parkway	n/a			9:00	53.6	52	65	66	14	66	Yes	Yes
M-26	Renfro Road to Allen Road - North side of Westside Parkway	n/a			9:00	53.6	54	73	73	19	66	Yes	Yes
M-27	Renfro Road to Allen Road - North side of Westside Parkway	n/a			10:00	54.6	54	74	74	20	66	Yes	Yes
M-28	Renfro Road to Allen Road - North side of Westside Parkway	n/a			11:00	55.6	54	67	68	14	66	Yes	Yes
M-29	Renfro Road to Allen Road - North side of Westside Parkway	n/a			12:00	56.6	54	65	65	11	66	No	No
ST-5	Renfro Road to Allen Road - South side of Westside Parkway	61	11:00	43.1	9:00	53.6	61	62	65	4	66	No	No
M-18	Renfro Road to Allen Road - South side of Westside Parkway	n/a			9:00	53.6	54	66	66	12	66	Yes	Yes
ST-6	Renfro Road to Allen Road - South side of Westside Parkway	46	12:00	45.3	9:00	53.6	54	68	68	14	66	Yes	Yes
M-19	Renfro Road to Allen Road - South side of Westside Parkway	n/a			9:00	53.6	54	71	71	17	66	Yes	Yes
LT-1	Renfro Road to Allen Road - South side of Westside Parkway	varies	varies		9:00	53.6	54	72	72	18	66	Yes	Yes
M-20	Renfro Road to Allen Road - South side of Westside Parkway	n/a			9:00	53.6	54	71	71	17	66	Yes	Yes
M-5	Allen Road to Jewetta Avenue - North side of Westside Parkway	n/a			9:00	53.6	59	69	70	11	66	Yes	No
M-6	Allen Road to Jewetta Avenue - North side of Westside Parkway	n/a			9:00	53.6	59	66	67	8	66	Yes	No
M-7	Allen Road to Jewetta Avenue - North side of Westside Parkway	n/a			9:00	53.6	59	70	70	11	66	Yes	No
ST-8	Allen Road to Jewetta Avenue - North side of Westside Parkway	48	13:00	43.0	9:00	53.6	59	70	70	11	66	Yes	No
M-15	Allen Road to Jewetta Avenue - South side of Westside Parkway	n/a			9:00	53.6	59	68	69	10	66	Yes	No
M-16	Allen Road to Jewetta Avenue - South side of Westside Parkway	n/a			9:00	53.6	59	64	65	6	66	No	No
M-17	Allen Road to Jewetta Avenue - South side of Westside Parkway	n/a			9:00	53.6	59	64	65	6	66	No	No
M-8	Jewetta Avenue to Calloway Drive - North side of Westside Parkway	n/a			9:00	53.6	59	72	72	13	66	Yes	Yes
M-9	Jewetta Avenue to Calloway Drive - North side of Westside Parkway	n/a			9:00	53.6	57	67	68	12	66	Yes	No
ST-3	Jewetta Avenue to Calloway Drive - North side of Westside Parkway	49	16:00	46.4	9:00	53.6	57	65	66	11	66	Yes	No
M-23	Allen Road to Jewetta Avenue - South side of Westside Parkway	n/a			9:00	53.6	59	72	72	13	66	Yes	Yes
M-24	Allen Road to Jewetta Avenue - South side of Westside Parkway	n/a			9:00	53.6	59	69	69	10	66	Yes	No
M-25	Allen Road to Jewetta Avenue - South side of Westside Parkway	n/a			9:00	53.6	59	69	69	10	66	Yes	No
M-10	Calloway Drive to Coffee Road - North side of Westside Parkway	n/a			9:00	53.6	51	70	70	19	66	Yes	Yes
M-11	Calloway Drive to Coffee Road - North side of Westside Parkway	n/a			9:00	53.6	51	71	71	20	66	Yes	Yes
ST-2	Calloway Drive to Coffee Road - North side of Westside Parkway	43	16:00	46.4	9:00	53.6	51	71	71	20	66	Yes	Yes
M-12	Calloway Drive to Coffee Road - North side of Westside Parkway	n/a			9:00	53.6	50	71	71	21	66	Yes	Yes
M-13	Calloway Drive to Coffee Road - North side of Westside Parkway	n/a			9:00	53.6	50	71	71	21	66	Yes	Yes
ST-1	Calloway Drive to Coffee Road - North side of Westside Parkway	42	15:00	45.0	9:00	53.6	50	65	65	15	66	No	Yes
M-14	Calloway Drive to Coffee Road - South side of Westside Parkway	n/a			9:00	53.6	59	67	68	9	66	Yes	No
ST-4	Coffee Road to Mohawk Street - South side of Westside Parkway	59	9:00	53.6	9:00	53.6	59	57	61	2	66	No	No

[1] Future (year 2030) noise level from proposed project, derived from Caltrans' Sound32 noise model, using Level-of-Service C/D traffic volumes of 1700 vehicles per hour per lane.
[2] Criterion noise levels based upon Caltrans / FHWA exterior "approach or exceed" Noise Abatement Criteria for Activity Category B (which includes residential and recreational land uses)
LT = long-term
ST = short-term
M = modeled

No Action Alternative

Under the No Action Alternative, no noise impacts at noise-sensitive land uses adjacent to the project alignment would result.

4.4.5.2 Mitigation Measures

4.4.5.2.1 Construction Noise

Construction noise is to some extent unavoidable and could adversely affect some nearby residents during daytime hours. However, the impact would be temporary and limited to the time of the construction in any one location. The following mitigation measures would be incorporated into the project contract specifications to minimize construction noise impacts:

- Comply with City of Bakersfield Municipal Code Chapter 9, Section 9.22.050. Construction activities taking place within 300 meters (1,000 feet) of residential dwellings shall be limited to between the hours of 6 a.m. to 9 p.m. on weekdays, and 8 a.m. to 9 p.m. on weekends.
- Place maintenance yards, batch plants, haul roads, and other construction-oriented operations in locations that would be the least disruptive to the community.
- Prior to the start of construction activities, one community meeting should be held to explain the following to area residents: the purpose and nature of the construction work; the duration of the construction activities; and the control measures that would be taken to reduce the impact of the construction work.
- Avoid pile driving at night and on weekends.
- Use portable noise screens to provide shielding for jack hammering or other similar type activities when work is close to noise-sensitive areas.
- Comply with the Caltrans Standard Specifications 7-1.011 (July 1999) "Sound Control Requirements - The contractor shall comply with all local sound control and noise level rules, regulations and ordinances which apply to any work performed pursuant to the contract. Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without said muffler".

4.4.5.2.2 Operational Noise

Caltrans considers noise abatement to attenuate noise impacts when the predicted worst hourly noise level approaches or exceeds Caltrans/FHWA noise abatement criteria for appropriate land use categories. Noise levels that approached or exceeded 67 dBA at Category B land uses were considered for noise abatement or mitigation. Mitigation measures were considered for the noise-sensitive land use areas (existing and planned future residential, educational and recreation) predicted to experience project-related impacts under the project alternatives.

The Sound32 noise model was used to predict the performance of soundwalls ranging in height from 1.8 to 4.9 meters (6 to 16 feet). Table 4.4-6 presents the results of the soundwall analysis using Caltrans/FHWA criteria, including the amount of noise reduction provided by the soundwall. It was assumed that the soundwalls would be constructed along the right of way when the Westside Parkway

and/or interchange ramps are at or below grade, and along the edge of shoulder when the Westside Parkway and/or interchange ramps are above grade.

Caltrans/FHWA policy requires a soundwall to reduce traffic noise by at least 5 dBA to be considered effective ("feasible"). Table 4.4-7 and Figure 4.4-2 present those soundwalls that meet this criterion. Calculations based on preliminary design data indicate that the barriers would reduce noise levels by 5 to 7 dBA for 281 residences at an estimated cost of $6,559,000. The number of receptors and cost evaluations for each wall are summarized in Table 4.4-7. If pertinent parameters change substantially during the final project design, the preliminary noise mitigation design may be changed or eliminated from the final project design. A final decision of the construction of the noise mitigation will be made upon completion of the project design.

As an alternative to the construction of the soundwalls shown on Figure 4.4-2, the City has evaluated alternative approaches to provide the required noise abatement. One such alternative approach is the use of "low-noise pavement" such as open graded asphalt concrete (OGAC) or rubberized asphalt concrete (RAC). Based upon Caltrans' Technical Advisory, Noise, TAN-03-01, Additional Calibration of Traffic Noise Prediction Models dated August 27, 2003; studies have found that OGAC and RAC reduce traffic noise relative to asphalt concrete pavement by 4 to 6 dBA and 4 to 5 dBA, respectively. Using these reductions in traffic noise, it was determined that effective noise reduction could be achieved by using OGAC or RAC pavement in combination with Soundwalls SW-2A/2B, SW-5 and SW-10. SW-2A would be 2.4 meters in height, while SW-2B, SW-5 and SW-10 would be 3.0 meters in height.

Final decisions with regard to noise barriers and pavement type would be made upon completion of the project design and the public involvement process. With the incorporation of feasible mitigation measures described, noise impacts would be reduced to a level below the NAC.

Table 4.4-6. Soundwall Analysis Results

Receptor #	Receptor Location	Combined Future Noise Level (Ambient plus Project) (dBA L_{eq})	Soundwall Height											
			1.8 meters (6.0 feet)		2.4 meters (8.0 feet)		3.0 meters (10.0 feet)		3.6 meters (12.0 feet)		4.2 meters (14.0 feet)		4.8 meters (16.0 feet)	
			L_{eq} (h)	I.L.[1]	L_{eq} (h)	I.L.[1]	L_{eq} (h)	I.L.[1]	L_{eq} (h)	I.L.[1]	L_{eq} (h)	I.L.[1]	L_{eq} (h)	I.L.[1]
M-1	W. of Renfro Road - North side of Westside Parkway	67	64	3	64	3	63	4	61	6	60	7	59	8
ST-7	W. of Renfro Road - North side of Westside Parkway	61	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
M-2	W. of Renfro Road - North side of Westside Parkway	67	66	1	65	2	63	4	62	5	61	6	60	7
M-3	W. of Renfro Road - North side of Westside Parkway	66	65	1	64	4	62	4	61	5	60	6	60	6
M-21	W. of Renfro Road - South side of Westside Parkway	66	64	2	63	3	62	4	61	5	61	5	60	6
M-26	Renfro Road to Allen Road - North side of Westside Parkway	73	69	4	67	6	65	8	63	10	62	11	61	12
M-27	Renfro Road to Allen Road - North side of Westside Parkway	74	71	3	69	5	67	7	66	8	64	10	63	11
M-28	Renfro Road to Allen Road - North side of Westside Parkway	68	67	1	66	2	65	3	64	4	63	5	62	6
M-29	Renfro Road to Allen Road - North side of Westside Parkway	65	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
ST-5	Renfro Road to Allen Road - South side of Westside Parkway	65	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
M-18	Renfro Road to Allen Road - South side of Westside Parkway	66	66	0	64	2	62	4	61	5	59	7	58	8
ST-6	Renfro Road to Allen Road - South side of Westside Parkway	68	66	2	64	4	63	5	62	6	61	7	60	8
M-19	Renfro Road to Allen Road - South side of Westside Parkway	71	69	2	67	4	66	5	64	7	63	8	62	9
LT-1	Renfro Road to Allen Road - South side of Westside Parkway	72	71	1	69	3	67	5	65	7	64	8	63	9
M-20	Renfro Road to Allen Road - South side of Westside Parkway	71	69	2	67	4	65	6	64	7	63	8	62	9
M-5	Allen Road to Jewetta Avenue - North side of Westside Parkway	70	67	3	65	5	64	6	62	8	61	9	60	10
M-6	Allen Road to Jewetta Avenue - North side of Westside Parkway	67	65	2	63	4	62	5	62	5	61	6	61	6
M-7	Allen Road to Jewetta Avenue - North side of Westside Parkway	70	68	2	66	4	65	5	64	6	63	7	62	8
ST-8	Allen Road to Jewetta Avenue - North side of Westside Parkway	70	69	1	67	3	65	5	64	6	63	7	62	8
M-15	Allen Road to Jewetta Avenue - South side of Westside Parkway	69	67	2	65	4	64	5	63	6	62	7	61	8
M-16	Allen Road to Jewetta Avenue - South side of Westside Parkway	65	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
M-17	Allen Road to Jewetta Avenue - South side of Westside Parkway	65	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
M-8	Jewetta Avenue to Calloway Drive - North side of Westside Parkway	72	71	1	69	3	67	5	66	6	64	8	63	9
M-9	Jewetta Avenue to Calloway Drive - North side of Westside Parkway	68	67	1	66	2	64	4	62	7	61	8	60	10
ST-3	Jewetta Avenue to Calloway Drive - North side of Westside Parkway	66	65	1	63	3	61	5	59	7	58	8	57	9
M-23	Jewetta Avenue to Calloway Drive - South side of Westside Parkway	72	71	1	69	3	68	4	66	6	65	7	63	9
M-24	Jewetta Avenue to Calloway Drive - South side of Westside Parkway	69	67	2	66	3	64	5	62	7	61	8	60	9
M-25	Jewetta Avenue to Calloway Drive - South side of Westside Parkway	69	65	4	64	5	62	7	60	9	59	10	58	11
M-10	Calloway Drive to Coffee Road - North side of Westside Parkway	70	70	0	67	3	65	5	63	7	61	9	60	10
M-11	Calloway Drive to Coffee Road - North side of Westside Parkway	71	69	2	67	4	66	5	65	6	64	7	63	8
ST-2	Calloway Drive to Coffee Road - North side of Westside Parkway	71	69	2	67	4	66	5	65	6	63	8	63	8
M-12	Calloway Drive to Coffee Road - North side of Westside Parkway	71	69	2	67	4	66	5	65	6	64	7	63	8
M-13	Calloway Drive to Coffee Road - North side of Westside Parkway	71	69	2	68	3	67	4	65	6	64	7	64	7
ST-1	Calloway Drive to Coffee Road - North side of Westside Parkway	65	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
M-14	Calloway Drive to Coffee Road - South side of Westside Parkway	68	68	0	66	2	65	3	63	5	62	6	61	7
ST-4	Coffee Road to Mohawk Street - South side of Westside Parkway	61	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Notes:
[1] I.L. = Insertion Loss, the noise reduction provided by insertion of the barrier between the noise source (i.e., the traffic) and the receiver.
Shaded areas indicate the soundwall heights that would achieve a minimum 5 dBA insertion loss, and break the line-of-sight between a 3.5 meter high noise source and the receiver (minimum break line-of-sight height was typically less than 2.4 meters for all receptors except M-14 and M-18, for which the break line-of-sight height was 3.0 meters).

Table 4.4-7. Preliminary Noise Abatement Benefit/Cost Summary

Noise Barrier No.	No. of Benefited Residences Ni	Barrier Height (m)	Modified Reasonable Allowance per Benefited Residence[1]	Cost of Noise Abatement per Benefited Residence
SW1A & SW1B	30	3.6	$37,000	$30,233
SW2A & SW2B[2]	2	3.0 & 3.6	$39,000	$81,000
SW3	36	3.0	$35,000	$25,667
SW4	36	3.6	$39,000	$21,389
SW5	63	3.0 & 3.6	$39,000	$19,429
SW6	16	3.0 & 3.6	$33,000	$17,250
SW7	36	3.6	$39,000	$21,611
SW8	16	3.0	$35,000	$22,875
SW10	39	3.0 & 3.6	$39,000	$24,000
SW11	7	3.6	$35,000	$30,857
Total	281			

[1] Reasonable allowance per benefited residence based upon methodology outlined in Caltrans' *Traffic Noise Analysis Protocol*, October 1998.
[2] The cost of noise abatement associated with SW2A and SW2B would exceed the modified reasonable allowance, as shown above. If pertinent parameters change substantially during the final project design, this may change. A final decision of the construction of the noise mitigation will be made upon completion of the project design.

4.4.6 Cultural Resources

4.4.6.1 Environmental Impacts

The NRHP criteria for evaluation considers the quality of significance in American history, architecture, archaeology, engineering, and culture present in districts, sites, buildings, structures, and objects:

- That are associated with events that have made a significant contribution to the broad patterns of our history; or
- That are associated with the lives of significant persons in our past; or
- That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- That has yielded, or may be likely to yield, information important in history or prehistory.

Westside Parkway Alternatives

Archaeological Resources

As indicated in Table 3.4-10, there are four archaeological sites in the vicinity of the Westside Parkway right of way: CA-KER-167, CA-KER-3072, IF-KER-675 and IF-KER-676. CA-KER-167 is not located within the Area of Potential Effect (APE) of the project. Based on preliminary design, construction of the Westside Parkway would not impact CA-KER-3072. For this reason, CA-KER-3072 was not tested to determine if it is potentially eligible for inclusion in the National Register of Historic Places (NRHP). In the unlikely event that the final alignment of the Westside Parkway would impact the site, eligibility testing would take place prior to construction. Sites IF-KER-675 and IF-KER-676 were determined not to

be eligible for the National Register and do not meet criteria for inclusion in the California Register of Historic Resources.

Historical Resources

A Historic Property Survey Report (HPSR) was submitted to the State Historic Preservation Office (SHPO) on March 9, 2004, pursuant to the cultural Programmatic Agreement (PA) between FHWA, Caltrans, SHPO, and the Advisory Council on Historic Preservation (ACHP). The Friant-kern Canal is the only property within the APE that has been determined to be eligible for the NRHP. The other historic canals, railroad properties, and oil wells in the APE were determined not to be eligible for the NRHP. The SHPO concurred with this determination (Appendix E). There has been no correspondence between the SHPO and BNSF.

The HPSR concluded that the Westside Parkway project would have No Adverse Affect on the Friant-Kern Canal due to proposed design and construction provisions included in the project. The present Westside Parkway design concept includes construction of a three-span bridge over the canal, repaving access roads along both sides of the canal, relocating a stilling well antenna (not historic), and relining the segment of the canal under the bridge. Construction elements are discussed below, with recommendations for ensuring that the project would have no effect on the resource:

1. The design plans show no impacts to the canal during bridge construction since the bridge abutments would be placed at the top, and outside of the historic property boundaries. Dirt ramps to elevate the roadway would begin immediately adjacent to, but outside, the proposed boundaries of the historic property, and adjacent to the access roads on either side of the canal.
2. The plans include repaving the maintenance roads within the historic property boundaries; however, avoidance is recommended. If the project cannot proceed without repaving the maintenance roads, then it is recommended that a method be used that would minimize ground disturbance. It is not clear if the roads would be used only as temporary easements during construction, or for more permanent access.
3. The engineering plans include moving the stilling well antennae. The stilling well and antennae are both recent additions to the canal in this location; both were constructed 10 to 12 years ago. Removal and relocation of the antennae would have impacts on the canal. These impacts can be minimized if the antenna is re-anchored in an area where other recent impacts have occurred within the canal.
4. The preferred course of action for the proposed canal relining would be to carefully remove the intact historic concrete-lined panels while the walls of the canal are re-compacted, and then replace them with a concrete lining that matches the original in texture, color, and appearance; it shall retain its as-built contour. The Secretary of Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings would be used to ensure that the replacement concrete panels conform to the original lining. The new lining would be identical except it would be much stronger, thus preventing the walls from needing to be replaced for an extended period of time.

The segment of the Friant-Kern Canal within the APE has already been affected by a previous project and the proposed project would not diminish effects to the entire historic property any further than activities that have previously taken place. The significance of the canal would not be impaired by spanning it with a transportation facility. Appendix E contains concurrence from the SHPO with this finding.

No Action Alternative

The No Action Alternative would not result in construction of a transportation facility within the proposed project APE. Therefore, impacts to cultural resources would not occur.

4.4.6.2 Mitigation Measures

Archaeological Resources

Following SHPO policy, avoidance of cultural resources must take place whenever possible. The following specific archaeological mitigation measures for the Westside Parkway project are recommended:

1. Once the project area has been staked, and prior to any excavation, the project contractor should request a qualified archaeologist to relocate CA-KER-3072 to determine whether the site would be directly impacted by construction. Should the retained archaeologist find that this site would be directly impacted by construction, Caltrans policy should be followed with the purpose of determining significance of the site. Should testing take place and should the site be found to be significant, the site shall either be avoided or excavated.
2. The evidence suggests that cultural resources would not be uncovered during construction, and it is not recommended that archaeological monitoring take place during construction. However, should cultural resources be encountered during construction, the project contractor should contract with a qualified archaeologist to determine if the find is potentially significant. Under this condition, monitoring should then take place until the project archaeologist determines that monitoring can be discontinued.
3. If sensitive cultural resources are encountered during excavations associated with this project, all work shall halt and the county coroner shall be notified (Section 5097.98 of the Public Resources Code). The county coroner would determine whether the remains are of forensic interest. If the county coroner, with the aid of the City-approved archaeologist, determines that the remains are prehistoric, he/she would contact the NAHC. The NAHC would be responsible for designating the most likely descendant (MLD), who would be responsible for the ultimate disposition of the remains as required by Section 7050.5 of the California Health and Safety Code. The MLD would make his/her recommendations within 24 hours of their notification by the NAHC. This recommendation may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials (Section 7050.5 of the Health and Safety Code).

4.4.7 Public Services and Utilities

4.4.7.1 Environmental Impacts

Westside Parkway Alternatives

Public Services

No community facilities or public services would be adversely impacted by the project. Emergency medical and police service response times along and near the proposed alignment would be faster than current response times. Local access routes to schools would not be impacted since the Westside Parkway would not terminate local streets. No churches or other community facilities would be displaced by the project. Refer to Section 4.4.9 for a discussion of potential project-related impacts to parks.

Roadway closures and detours related to project construction are not expected to impair emergency service response. All roads, except Jewetta Avenue, would be kept open during construction.

Utilities

The Westside Parkway would result in the relocation of a minimal amount of utilities in the project area. Figure 2.3-7 shows the approximate locations and types of utilities that could potentially be in conflict with construction of the Westside Parkway project. Depending on the level of impact, these facilities would need to be protected, adjusted/modified, or relocated. The affected utilities would be relocated in accordance with State law and regulations and City policies. There would be ongoing coordination between Caltrans, FHWA, affected agencies, and utility companies in order to minimize potential disruption of utility services. No impacts are anticipated.

The City of Bakersfield would continue ongoing discussions and coordination with the KCWA in maintaining appropriate established access rights along the CVC. The Westside Parkway would be an access-controlled facility and would therefore have fencing and other barriers to restrict access by the general public into the roadway right of way. The City would work with the KCWA to ensure that access for maintenance, operation and other legal purposes is maintained along the CVC. During construction of the Westside Parkway, access to the CVC would be coordinated with the KCWA to the satisfaction of the KCWA to meet the maintenance and operational needs related to the CVC.

No Action Alternative

No impacts are anticipated.

4.4.7.2 Mitigation Measures

No mitigation is required.

4.4.8 Energy

The objective of the energy analysis is to identify differences in energy consumption between the alternative alignments and the No Action Alternative. Energy consumption was assessed for construction of an eight-lane freeway using the Caltrans Highway Energy Analysis Program (HEAP).

4.4.8.1 Environmental Impacts

Westside Parkway Alternatives

Traffic data used for the HEAP model included ADT volumes, types of vehicles, percentage of trucks, roadway configuration, traffic flow characteristics, project size, and cost developed for an eight-lane freeway. The model was run for 1990 and 2020. Energy studies usually span the expected life of a project, which is generally 20 years. However, Federal fuel consumption rates, which are used in the HEAP model, were only available through the year 2015. By using 2015 consumption rates for the year 2020, the analysis conducted for the project is conservative. Also, while the design year for the project is 2030, energy consumption comparisons for year 2020 conditions adequately identify differences in energy consumption between the alternatives.

The HEAP analysis indicated that vehicles operating on an eight-lane freeway would consume 1,022 million liters (270 million gallons) of gasoline, and construction and maintenance of the freeway would consume 863 million liters (228 million gallons) of gasoline, for a total energy consumption of 1,885 million liters (498 million gallons) of gasoline. The average direct efficiency in kilometers per liter (km/l) [miles per gallon (mpg)] is 8.9 km/l (21.0 mpg).

No Action Alternative

The HEAP analysis conducted for the No Action Alternative resulted in an estimated consumption of 1,026 million liters (271 million gallons) of gasoline by vehicles operating on the local transportation network and 394 million liters (104 million gallons) of gasoline to maintain the network, for a total energy consumption of 1,420 million liters (375 million gallons) of gasoline over the study period. The average direct efficiency for the No Action Alternative is 8.1 km/l (19.0 mpg).

4.4.8.2 Mitigation Measures

Since the proposed project results in a more efficient use of energy, no mitigation measures are required. However, further improvements in energy efficiency could potentially include the future use of HOV lanes and bus ridership.

4.4.9 Park, Recreational Facilities, Wildlife Refuges, and Historic Properties Evaluated for Proximity Effects

4.4.9.1 Environmental Impacts

Section 4(f) of the Department of Transportation Act of 1966, codified in Federal law at 49 U.S.C. §303, states that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites. The Secretary of Transportation oversees the preservation of 4(f) resources. Section 4(f) resources include all historic sites having national, State, or local significance; but only applies to publicly owned parks, recreational areas, and wildlife and waterfowl refuges. The Secretary shall not approve any transportation program or project which requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance or any land from an historic site of national, State, or local significance unless one of the following applies.

1. There is no prudent and feasible alternative to using that land; and
2. The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

In general, a Section 4(f) "use" occurs with a Department of Transportation-approved project or program when: 1) Section 4(f) land is permanently incorporated into a transportation facility; 2) there is a temporary occupancy of Section 4(f) land that is adverse in terms of the Section 4(f) preservationist purposes as determined by specified criteria (23 CFR §771.135[p][7]); or 3) Section 4(f) land is not incorporated into the transportation project, but the project's proximity impacts are so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired (constructive use) [23 CFR §§771.135(p)(1) and (2)].

Westside Parkway Alternatives

Parks and Recreational Areas

Mondavi Park

The Westside Parkway is located south of the partially completed Mondavi Park, which was approved in May 1998 by the North Bakersfield Recreation and Park District. Based on a review of the master plan for the park, the District anticipated the future construction of a transportation facility adjacent and south of the proposed park. The park is approximately 3.8 hectares (9.3 acres) and is located at 503 Mondavi Way in the City of Bakersfield, just south of Columbia Elementary School. Currently the park has installed turf, trees, and underground utilities. The park is open for recreational use; however, there are currently no permanent facilities or structures at the park site. The second phase of construction would include parking, lighting, restrooms, multi-use playfields, and picnic facilities and is expected to be completed by Summer 2005.

The Westside Parkway would be directly south of this public park. Access to the park would continue to be provided via Mondavi Way and the adjacent Columbia Elementary School. The proposed project would include noise abatement at various locations along the alignment to reduce potential future noise levels adjacent to sensitive receptors. A 3.6 meter (12 foot) high soundwall may be constructed within the right of way of the Westside Parkway, just south of Mondavi Park. This would reduce predicted future noise levels to 65 dBA, which is below the minimum standard set forth by the FHWA and the City for outdoor recreational areas (the City's General Plan sets a maximum of 70 dBA as "normally acceptable" for such land uses). No other potential impacts have been identified. Therefore, since the Westside Parkway would not encroach into the park nor cause proximity impacts, it would not result in an adverse impact on this existing 4(f) resource.

Kern River Parkway

The Kern River Parkway Plan includes a plan to provide recreational opportunities and habitat restoration, as well as retaining primary floodways. The Kern River Parkway Plan was approved in 1988 and is approximately 13 km (8.1 miles) long and ranges in width between 90 meters (300 feet) and 670 meters (2,200 feet). It consists of about 570 hectares (1,400 acres) and is bounded by Manor Street on the east and the Stockdale Highway bridge on the west. The Kern River Parkway Plan is an extension of the Kern River Plan Element (adopted 1985), which is the primary policy document for the Kern River Parkway. The Kern River Parkway Plan is consistent with the policies and allowable land uses in the Kern River Plan Element.

The Westside Parkway project includes an extension of Mohawk Street south to Truxtun Avenue. The Kern River Parkway Plan includes this extension of Mohawk Street on the proposed alignment.

The bike path that runs through the Kern River Parkway would be maintained open during construction of the Mohawk Street extension through phasing of the project elements. The bike path would be permanently re-routed to the north at this location to avoid proposed bridge support structures needed for the Mohawk Street extension. The roadway would be elevated above the realigned bike path and would not interfere with its function, purpose, or continuity. The road extension would have a temporary effect on views and increased noise for bike path users. However, this is not expected to be perceived as an

impact due to its short-term nature in the span of the path, and since the trail is currently in an urban area. As a result, the implementation of the extension of Mohawk Street would not impair the activities, features, or attributes that qualify the Kern River Parkway for protection under Section 4(f) of the Transportation Act.

Depending on the selected alignment, the Westside Parkway would cross the Kern River Parkway near the BNSF railroad bridge over the Kern River. Land use designations of the Kern River Parkway in the vicinity of this portion of the Westside Parkway alignment include resource management, flood hazard overlay, and public/private recreation area. Current uses within the Kern River Parkway at this location include the bike trail on top of the existing levee and vacant area between the levee and Truxtun Avenue. Similar to the Mohawk Street extension, the bike path would be maintained open during construction of the Westside Parkway. Although there would be some alteration in views and an increase in noise levels at one or more locations within the Kern River Parkway, such changes are not expected to be adverse due to the location of the Kern River Parkway in an urban setting. Furthermore, the Westside Parkway would be elevated. The specific locations of support columns for the bridges are not known at this time; however, if the design of the support columns impacts the existing bike path, the bike path would be relocated around the support columns. The purpose and function of the bike path would be maintained. As a result, construction and implementation of the Westside Parkway across the Kern River Parkway would not impair the activities, features or attributes that qualify the Kern River Parkway for protection under Section 4(f).

The alignment of the Westside Parkway extends over a portion of the Kern River Parkway that is primarily privately owned (Truxtun Option) or entirely privately owned (Oak Option). A small portion of the Westside Parkway Truxtun Option extends into a parcel that is currently owned by the City; however, according to the City of Bakersfield (Don Anderson, Real Property Manager, Property Management Division of the Financial Services Department), this parcel was purchased by the City approximately 25 years ago for water rights. The City has leased the surface rights for oil production since the purchase of the parcel. Therefore, portions of the Westside Parkway that extend through the Kern River Parkway near Truxtun Avenue would not impair the activities, features, or attributes that qualify this portion of the Kern River Parkway for protection under Section 4(f).

The Bakersfield Recreation and Parks Department has jurisdiction over the Kern River Parkway. The Recreation and Parks Department has concurred that the Westside Parkway would not impair the activities, features, or attributes of the park (Appendix F).

Historic Resources

The Friant-Kern Canal is the only historic resource in the APE that is listed on the NRHP. No other historic resource in the APE is eligible for the NRHP (see Section 4.4.6).

The Westside Parkway would cross the Friant-Kern Canal east of Coffee Road. Project construction at this location would not directly affect this historic resource because of planned design and construction procedures. The SHPO has concurred with this finding of no adverse effect (Appendix E). The proposed Westside Parkway would be elevated approximately 4.6 meters (15 feet) above the canal maintenance roads and concrete support structures would be located 4.6 meters (15 feet) on either side of the canal

lining. Therefore, the proximity of the proposed transportation facility would not impair the activities, features, or attributes that qualify the canal for protection under the National Historic Preservation Act and Section 4(f) of the Transportation Act.

No Action Alternative

The No Action Alternative would not result in 4(f) impacts.

4.4.9.2 Mitigation Measures

Since the proposed project would not result in adverse impacts on existing 4(f) resources, no mitigation measures are required.

5.0 SUMMARY OF IMPACTS AND MITIGATION MEASURES

5.1 UNAVOIDABLE ADVERSE EFFECTS OF THE PROJECT

Implementation of either the Westside Parkway Truxtun Option or Westside Parkway Oak Option would result in the loss of 32 hectares (79 acres) of Prime Farmland. The conversion of these lands is consistent with the Metropolitan Bakersfield General Plan and zoning land use designations and ongoing urbanization and residential development in the project vicinity.

The Noise Study Report evaluated the effectiveness of noise barriers along the Westside Parkway Truxtun Option and the Westside Parkway Oak Option. Noise barriers are considered to be effective if the noise reduction provided is at least 5 dBA. Along the proposed right of way, noise barriers that could reduce noise by at least 5 dBA were identified to protect 285 residences. All of these noise barriers have been recommended for the project. If during final design, conditions have substantially changed, some of these barriers might not be required. In addition, the City of Bakersfield would evaluate alternative approaches to provide the required noise abatement such as a combination of noise barriers and "low-noise pavement". Even with the construction of noise barriers, some residential areas along the Westside Parkway right of way are projected to experience a 12 dBA increase in noise over existing conditions and some areas (for example, modeled points M-27 and M-23 on Figure 4.4-2) are projected to experience a peak-noise-hour level of 66 dBA.

5.2 THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND MAINTENANCE OF LONG-TERM PRODUCTIVITY

Long-term effects of the Westside Parkway options would be the removal of agricultural land from production. The overall loss of farmland would represent less than one one-hundredth of one percent of the total farmland in Kern County. The land to be converted is in the urban sphere of influence and local plans call for the ultimate urban development of this land regardless of whether the Westside Parkway is built or not.

The long-term productivity of metropolitan Bakersfield would be enhanced by an improved transportation system to move goods, services, and people. The addition of a new high-capacity east-west transportation facility in west Bakersfield would reduce projected congestion on other existing east-west roads in this area, thus improving traffic flow between the expanding residential areas of west Bakersfield and the commercial center of the metropolitan area. The extension of Mohawk Street south to Truxtun Avenue would improve local traffic circulation by providing a new north-south connection across the Kern River near the urban center of the metropolitan area that can be used by motorists to connect to other major north-south and east-west arterials, as well as SR99.

The long-term environmental productivity of metropolitan Bakersfield would be both enhanced and adversely affected by the project. There would be some reduction in visual quality, localized noise quality, and agricultural productivity. Regional air quality, energy efficiency, and travel times would be improved.

5.3 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

A total of approximately 120 hectares (300 acres) of land would be committed to the proposed project. Of this total, approximately 76 hectares (188 acres) is agricultural or undeveloped non-native grassland.

Construction of the project would result in a permanent commitment of energy, portland cement concrete, aggregate, and steel. Water would be required to produce construction materials, water down construction sites, and irrigate landscaping.

5.4 GROWTH-INDUCING EFFECTS

The proposed project would take a step toward implementing the Metropolitan Bakersfield General Plan by constructing an east-west transportation corridor consistent with that plan. Since the proposed project is included in the General Plan, it is accommodating planned growth; therefore, it would not be growth inducing. The Westside Parkway project would be consistent with the growth set forth in the Metropolitan Bakersfield General Plan.

6.0 CUMULATIVE IMPACTS

The proposed project would take a step toward accommodating the growth projected in the Metropolitan Bakersfield General Plan. The Metropolitan Bakersfield General Plan includes the following regional transportation plans: 2000 Regional Transportation Plan, Congestion Management Program, Transportation Impact Fee Program, and the 1991 San Joaquin Valley Air Basin Air Quality Management Program. Impacts resulting from that growth are discussed in the EIR prepared for the Metropolitan Bakersfield General Plan update and incorporated here by reference (City of Bakersfield et al., 2002). The significant, unavoidable cumulative impacts associated with planned growth that are identified in the Metropolitan Bakersfield General Plan update EIR include:

- Based upon the Kern COG horizon year model for 2020, significant and unavoidable level of service impacts would occur to various roadway segments throughout the metropolitan area.
- Development of the Metropolitan Bakersfield General Plan would create unavoidable significant air quality impacts related to construction, mobile and stationary sources, and inconsistency with the Air Quality Attainment Plan (AQAP).
- Development between the years 2000 and 2020 would exacerbate a current exceedence of Community Noise Equivalent Level (CNEL) noise standards along several roadways.
- Projected growth would result in the conversion of Prime Farmland to non-agricultural use and may conflict with Williamson Act contracts.

This Environmental Assessment/Draft Environmental Impact Report (EA/DEIR) includes a cumulative analysis of the proposed Regional Transportation Impact Fee Facilities List which identifies a variety of transportation projects in the City and County to be implemented through 2005. The list contains items like the construction or expansion of bridges and culverts, grade separations, railroad crossings, traffic signals and roadwork. Only those facilities required by new development allowed by the Metropolitan Bakersfield General Plan in effect on December 4, 1997 are covered by the Transportation Impact Fee Program. Cumulative impacts associated with the project, future transportation projects, and the Metropolitan Bakersfield General Plan growth are described below.

6.1 GEOLOGY AND SEISMICITY

Development of the Westside Parkway, in conjunction with proposed development associated with the Metropolitan Bakersfield General Plan and Transportation Impact Fee Program, would increase the number of people and structures exposed to potential adverse impacts associated with rupture of known earthquake faults and severe ground shaking. Future development would be regulated under requirements of the California Building Code, Alquist Priolo Special Studies Zone Act, City/County land use policies and zoning, and plan-specific mitigation measures. The project would not result in any additional geologic and seismic impacts beyond those anticipated with development proposed in the Metropolitan Bakersfield General Plan and future transportation improvements. If subsequent new development is properly designed, projects would have a minor cumulative risk of exposing people to seismic hazards.

No known geologic hazards are present in the project area that would be expected to substantially damage the proposed Westside Parkway. Additional geotechnical studies would be performed to develop final seismic design recommendations. The project components would be designed and constructed to the seismic design requirements for ground shaking specified in the project design documents. Proper design and construction of the project components would reduce impacts from ground shaking.

6.2 MINERAL RESOURCES

Future growth in the planning area and Kern County would result in both direct and indirect impacts upon mineral resources. Construction of the project, in addition to development identified in the Metropolitan Bakersfield General Plan would commit portions of the County to urbanization and would result in the loss of access to oil/gas fields and sand and gravel extraction areas. Future development projects within the study area would be required to evaluate their respective impacts to mineral resources on a project-by-project basis. The project would not result in any impacts to mineral resources beyond those anticipated from development proposed in the Metropolitan Bakersfield General Plan and local transportation plans.

6.3 AGRICULTURAL SOILS AND FARMLANDS

Future growth in the planning area and Kern County would result in both direct and secondary impacts upon agricultural resources. The project, in addition to development identified in the Metropolitan Bakersfield General Plan and Transportation Impact Fee Program, would result in the conversion of Prime Farmland to non-agricultural uses. This loss of farmland is anticipated to result in secondary impacts upon agricultural operations. This trend is consistent with the Metropolitan Bakersfield General Plan and zoning land use designations identified by the City of Bakersfield. There are no lands under Williamson Act Contract within the project alignment; therefore, the project would not contribute to the cumulative loss of lands under Williamson Act Contract.

6.4 WATER RESOURCES

Development of the Westside Parkway, in conjunction with proposed development identified in the Metropolitan Bakersfield General Plan and Transportation Impact Fee Program would not result in water quality impacts. Any future development within the study area would be required to mitigate specific water quality impacts on a project-by-project basis. Implementation of Best Management Practices (BMPs) would assure that the project would not add to the cumulative addition of roadway contaminants impacting water quality. Erosion control plans implemented during project construction, and permanent drainage features that would contain runoff within the right of way would prevent impacts associated with erosion and storm water runoff from the project. No cumulative water quality impacts are anticipated to occur as a result of the proposed project.

6.5 AIR QUALITY

Construction of the Westside Parkway and development identified in the Metropolitan Bakersfield General Plan would result in new residential, commercial, industrial, and transportation projects in nearby areas. A number of individual projects in the City of Bakersfield may be under construction

simultaneously with the proposed project. Depending upon the construction schedules for other projects in the area, generation of fugitive dust and pollutant emissions during the Westside Parkway construction may result in short-term increases in air pollutants. This would contribute to short-term cumulative air quality impacts. However, implementation of construction Best Available Control Measures (BACMs) as prescribed in the San Joaquin Valley Air Pollution Control District's (SJVAPCD) Regulation VIII during site grading activities would reduce fugitive dust emissions.

On a regional basis, the implementation of any proposed development such as transportation, residential, commercial, and industrial projects identified in the Metropolitan Bakersfield General Plan would potentially result in an increase of air pollutant emissions; however, the strategies of the Metropolitan Bakersfield General Plan also address the potential increase in air pollutants through zoning and circulation strategies. The zoning and circulation strategies are also intended to minimize air quality impacts to the public from stationary source emissions and to minimize the necessity and length of vehicular trips. Furthermore, the SJVAPCD has promulgated rules and regulations within its region to address air quality impacts at a cumulative level, which is how the SJVAPCD intends to comply with the National Ambient Air Quality Standards (NAAQS).

As previously mentioned in Section 3.2.7, the region is in non-attainment for ozone and PM_{10}; therefore, any increase in air pollutants such as ozone and PM_{10} from new projects would have a cumulative impact on the regional air quality. Similarly, projects with the potential to emit a substantial amount of ozone and PM_{10} in the region would exacerbate existing air quality problems and therefore are required to implement mitigation measures to reduce air quality impacts to a less than significant level. The Westside Parkway would serve as a major thoroughfare used widely by existing and new developments in nearby areas, reducing the time and length of vehicular trips, which would result in improved air quality. Cumulative air quality impacts from potential growth identified in the Metropolitan Bakersfield General Plan would remain adverse and unavoidable; however, these impacts would not be a result of the Westside Parkway project.

6.6 HAZARDOUS WASTE

The proposed project would mitigate all impacts due to potential hazards within the project corridor. Cumulative development associated with the Metropolitan Bakersfield General Plan and transportation projects identified in the Transportation Impact Fee Program have the potential to increase human exposure to hazardous areas; however, the magnitude of hazards for individual projects depends upon the location, type, and magnitude of development as well as the location of individual projects relative to identified hazardous areas. Therefore, hazard evaluations and any necessary remediation would need to be completed on a case-by-case basis. It is anticipated that any necessary remediation would be completed prior to development of sites determined to have hazardous conditions. Therefore, cumulative impacts can be minimized through mitigation on a project-by-project basis or avoidance of potentially hazardous areas.

6.7 NATURAL ENVIRONMENT

6.7.1 Terrestrial Vegetation Types and Special-status Plant and Animal Species

Compensation for habitat replacement in the Biological Opinion was based on ratios of replacement habitat to habitat disturbed due to project construction. Compensation would be based on those ratios from the Biological Opinion. Habitat disturbance would be mitigated either through the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) or by preserving lands near the project area as described in the Biological Opinion. Mitigation through the MBHCP is on a fee-per-acre basis. The fee covers the cost of offsite acquisition, as well as necessary improvements to, and management of, the acquired land. The mitigation amounts for the Westside Parkway project would be 76.2 total hectares (188.3 acres) [33.5 hectares (82.8 acres) of agricultural land, 42.7 hectares (105.5 acres) of non-native grassland for the Westside Parkway Truxtun Option and 42.8 hectares (105.8 acres) for the Westside Parkway Oak Option, 0.5 hectare (1.3 acres) of riparian habitat for the Westside Parkway Truxtun Option and 0.4 hectare (1.0 acre) for the Westside Parkway Oak Option.

Projects using the MBHCP, also must conduct a field survey for known kit fox dens. The MBHCP program maintains a list and map of all known kit fox dens within the program boundaries. Each den that could potentially be disturbed by construction activities must be examined to determine occupancy status. If the den is unoccupied, then construction can proceed. If the den is active at the time of construction, take-avoidance measures must be implemented. If it is an active non-natal den, the kit fox must be excluded from it, using agency-approved protocol. If it is an active natal den, construction activities must avoid the den by at least 150 meters (500 feet) until the pups have left the den.

The Natural Environment Study (NES) includes a discussion of cumulative impacts of the projects being addressed by the Metropolitan Bakersfield General Plan, as well as by three habitat conservations plans (HCPs), including the MBHCP (City of Bakersfield and Kern County 1993), Kern Water Bank Authority HCP (California Department of Water Resources 1992), and the Kern County Valley Floor HCP (Garcia and Associates 2005, in preparation).

The Kern County Valley Floor HCP does not address impacts to riparian or wetland habitats. The MBHCP does not address areas within the primary floodplain of the Kern River. Despite the lack of coverage, the three HCPs address most habitats utilized by listed and sensitive species of plants and wildlife.

Implementation of the three HCPs provides a means by which impacts to sensitive habitats and species can be mitigated. As noted above, the impacts caused by the Westside Parkway project would be mitigated through the MBHCP. The effects to sensitive habitats and species due to implementation of the Westside Parkway project would be an incremental increase in impacts to such habitats in a regional setting. Because projects permitted and mitigated through the three HCPs will result in preservation of large amounts of natural lands, including wetlands and waters of the U.S., the cumulative impacts would not be substantial.

6.7.2 Waters of the U.S.

The MBHCP and Kern County Valley Floor HCP do not specifically address wetlands and waters of the U.S. However, both provide a means for mitigating impacts to habitats that are sometimes delineated as wetlands, such as valley saltbush sink scrub. In addition, the MBHCP has (through special approval by the MBHCP Implementation Trust Group) addressed some projects with impacts to lands within the primary floodplain of the Kern River. The Westside Parkway project was approved for inclusion into the MBHCP program (for purposes of mitigating project effects) at the September 11, 2003, meeting of the MBHCP Implementation Trust Group. The Kern Water Bank Authority HCP addresses impacts to wetlands and waters of the U.S. in specific areas. The three HCPs provide a means by which impacts can be mitigated. The additional effects to wetlands and Waters of the U.S. due to implementation of the Westside Parkway project would be an incremental increase in impacts to habitats in a regional setting. Because projects permitted and mitigated through the three HCPs will result in preservation of large amounts of natural habitats, including wetlands and waters of the U.S., the cumulative impacts would be not be substantial.

6.8 LAND USE

The Westside Parkway project would facilitate the movement of vehicles on the City's circulation system. This expansion in infrastructure capacity would make it easier to travel around and through the City for both residents and visitors. Since the project represents an incremental increase in transportation capacity and serves the City's land use patterns, this impact would be minor.

6.9 SOCIOECONOMICS

The project would facilitate the movement of vehicles on the City's circulation system. This expansion in infrastructure capacity would make it easier to travel around and through the City for both residents and visitors. No cumulative socioeconomic impacts are anticipated.

6.10 VISUAL RESOURCES

The proposed project, in conjunction with development proposed in the Metropolitan Bakersfield General Plan would result in the intensification of land uses resulting in the alteration of landforms and scenic resources. However, many of the protected scenic resources are set aside for the preservation of open space and would not be adversely affected by future development. No visual impacts from the proposed project have been identified. In order to ensure visual compatibility and the enhancement of the surrounding environment, all new development projects within the City and County would be subject to environmental review and design on a project-by-project basis.

6.11 TRAFFIC AND TRANSPORTATION

The proposed project, in conjunction with regional buildout analyzed in the Kern COG 2000 Regional Transportation Plan would result in the implementation of regional transportation goals, objectives, policies, and actions necessary for development of a planned multimodal transportation system in Kern

County over the next 20 years. The analysis contained Circulation Element of the Metropolitan Bakersfield General Plan, has been incorporated as baseline data in the Kern COG model.

Development under the Metropolitan Bakersfield General Plan, pursuant to the Kern COG traffic model (year 2020), would result in several roadway segments exceeding the level of service performance criteria established by the City of Bakersfield. Additionally, numerous roadway segments would have average daily traffic volumes that would exceed roadway capacity. With implementation of the goals and policies identified in the Metropolitan Bakersfield General Plan, all roadway segments, would achieve levels of service that would meet or exceed the performance criteria established by the City. Where street/intersection levels of service are below LOS C, mitigation programs have been identified involving adjacent right of way dedication, access improvements and/or an area-wide impact fee.

The Metropolitan Bakersfield General Plan acknowledges that the projected future growth at 2020 within Kern County would result in an increase in vehicle trips and traffic congestion. However, the proposed project would improve LOS at local roadways and intersections when compared to the analysis under the Metropolitan Bakersfield General Plan update EIR. Therefore, the proposed project, in combination with expected buildout identified in the Kern COG traffic model, would not result in cumulatively adverse impacts.

6.12 NOISE

The Westside Parkway, in conjunction with regional development, could result in exposure of people to adverse noise levels from motor vehicle traffic. The noise analysis conducted for the project anticipates, and thus largely accounts for, such regional development. Implementation of feasible mitigation measures described previously would reduce these cumulative impacts.

There are no anticipated cumulative noise impacts from aircraft, railroad, or non-transportation noise sources. No mitigation measures are required.

The proposed project, in conjunction with regional development, could result in a cumulative increase in the number of persons exposed to temporary construction related noise. Application of the recommended best management practices for control of construction noise, the typical situation whereby construction activity on different projects is separated by distance and/or in time, and the temporary nature of construction noise would result in minor cumulative construction noise impact. No additional mitigation is required.

6.13 CULTURAL RESOURCES

As previously mentioned, the proposed project would have the potential to impact archaeological resources. However, these resources are planned to be avoided during project construction, or mitigated prior to completion of the proposed project. Consequently, the proposed project would not have adverse effects on cultural resources. Cumulative effects to such inadvertently exposed resources would not occur with implementation of the mitigation measures identified in Section 4.4.6.2.

The Westside Parkway project, in combination with other planned projects within the study area could potentially result in the degradation or the loss of cultural resource. Impacts resulting from new development would depend on whether the development occurs in areas of high, moderate, or low cultural sensitivities. Future development would be required to undergo site-specific cultural evaluations and comply with all applicable State and Federal regulations concerning preservation, salvaging or handling of cultural resources.

6.14 PUBLIC SERVICES AND UTILITIES

Demand for public services would increase with implementation of cumulative projects. New development, such as residential, commercial, industrial, and park facilities would all require increased sewer, water, police protection and fire and emergency services to the project area and adjacent municipalities. As the providers of these services regularly review the growth in population and new projects to identify any resultant need for additional staffing or facilities, cumulative effects related to these services would be reduced.

6.15 ENERGY

Although feasible energy saving policies are incorporated into the Metropolitan Bakersfield General Plan, implementation of the project, in addition to development proposed in the Metropolitan Bakersfield General Plan and Transportation Impact Fee Program, will result in a substantial increase in demand for natural gas, fuel, water, and electricity resulting in an unavoidable impact on non-renewable energy resources.

7.0 COMMENTS AND COORDINATION

7.1 OVERVIEW

Early coordination with the general public and appropriate public agencies is encouraged in the environmental review process in order to determine the scope of the environmental document, the level of analysis, and related environmental requirements. Agency consultation and public participation for this study have been accomplished through a variety of formal and informal methods including a scoping meeting and a planned public hearing.

7.2 CONSULTATION AND COORDINATION WITH PUBLIC AGENCIES

The Westside Parkway project is subject to both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The Federal Highway Administration (FHWA) and the City of Bakersfield are serving as joint lead agencies to prepare a combined Environmental Assessment/Environmental Impact Report (EA/EIR) for the project to meet both NEPA and CEQA requirements. Caltrans is assisting in the environmental review process by providing technical oversight of the environmental document.

As part of CEQA requirements, a Notice of Preparation (NOP) was published by the City of Bakersfield on November 27, 2002, to announce the intent to prepare an EA/EIR for the project (Appendix B). The notice briefly described the proposed project, identified probable environmental effects, and announced the scoping process for the environmental document. The NOP was mailed to responsible agencies, trustee agencies, and other Federal, State, and local agencies having jurisdiction over, or information and expertise relevant to, the content of the environmental studies. Agencies submitted comments on the scope of the environmental document and provided information pertaining to the agencies' statutory responsibilities.

Opportunities for agency involvement continued throughout the preparation of the environmental document. Public agencies responded through a variety of methods including written responses to the NOP letters and ongoing individual contacts. The issues raised included the evaluation of noise, air quality, hazardous materials, biological resources, 4(f) resources, cultural resources, water quality and hydrology, and traffic circulation. Copies of the agency letters received by the City of Bakersfield in response to the NOP are provided in Appendix B.

7.2.1 Federal Agencies

The following Federal agencies, who requested that specific issues be addressed in the environmental document, were consulted:

- U.S. Army Corps of Engineers
  Wetlands
- U.S. Fish and Wildlife Service
  Special-status Species

7.2.2 State, Regional, and Local Agencies

A Notice of Preparation (NOP) of an EA/DEIR together with an Initial Study and CEQA Checklist was sent to the California Office of Planning and Research (State Clearinghouse) for distribution to interested State, regional, and local agencies (Appendix B) in November, 2002. The following agencies submitted written comments in response to the NOP:

- State of California Reclamation Board indicated that the proposed project would be within the Kern River Designated Floodway, and provided information on permitting requirements for this encroachment.
- California Department of Toxic Substances Control provided a list of known hazardous substances sites in the project area and recommended that the environmental document discuss all hazardous substances release sites that may affect the project.
- Central Valley Regional Water Quality Control Board provided information on compliance with NPDES General Permit No. CAS000002 for Discharges of Storm Water Associated With Construction Activity, the City/County Storm Water Management Plan, and Sections 404 and 401 of the Clean Water Act.
- Native American Heritage Commission provided a list of local Native American contacts for consultation.
- North Bakersfield Recreation and Park District requested evaluation of project impacts on Mondavi Park.

Copies of the correspondence from these agencies is provided in Appendix B. Information provided in this correspondence was taken into consideration in preparing the EA/DEIR.

7.2.3 Permits and Consultation

Public agencies require coordination for projects involved in the environmental process as noted above. The degree of participation of these agencies depends on project-specific issues or impacts and their legal authority and responsibilities to review projects. The crossing of the Kern River would require a U.S. Army Corps of Engineers Section 404 permit and California Department of Fish and Game Section 1602 streambed alteration agreement to ensure maximum protection for potential wetland resources. The Regional Water Quality Control Board would have jurisdiction over construction activities adjacent to waterways under the Clean Water Act (401). Coordination is necessary with the U.S. Fish and Wildlife Service under the Endangered Species Act to identify mitigation measures for potential impacts to special-status species protected by that act.

Other agencies require mandatory consultation. For the Westside Parkway project, these include:

Agency	Jurisdiction	Requirement
Natural Resources Conservation Service	Prime Farmland	Form AD-1006
U.S. Environmental Protection Agency	Air quality	Consultation
California Department of Conservation	Farmland	Notification
California State Lands Commission Permit	State Lands	101.5 Permit
California Reclamation Board	Designated Floodway	Permit
California Historic Preservation Officer	Cultural resources	Consultation

San Joaquin Valley APCD	Construction emissions	Air Impact Assessment

7.3 PUBLIC PARTICIPATION PROGRAM

A public scoping meeting was held for the project on December 17, 2002, in Bakersfield to inform the public about the proposed project and to solicit comments and concerns to be addressed in the environmental review process. The public was also afforded an opportunity to provide written comments on the scope of the environmental document. Written comments received from the public during the scoping period are provided in Appendix B. A summary of the concerns raised by the public during the scoping process is also provided in Appendix B.

An EA/DEIR was prepared for the Westside Parkway project and circulated to the public and interested government agencies on March 16, 2006. The public review period for this document ended on May 6, 2006.

Caltrans held a public hearing to gain input on the adequacy of the EA/DEIR on Wednesday, April 19, 2006, from 4:00 to 8:00 p.m., at the Kern County Superintendent of Schools building located at 1300 17th Street, Bakersfield. Caltrans announced the hearing by publishing a Public Notice in the Bakersfield Californian on March 31, 2006.

The hearing was held in an informal, open house format where the public was invited to attend at any time during the four-hour period. Each attendee received an information sheet and was encourage to visit the information stations located around the room and to view project maps, graphics, and display boards. Caltrans and City of Bakersfield project team staff were available at various information stations to explain the displays and answer questions. Attendees were encouraged to submit written comments on forms provided at public comment stations or to mail them to Caltrans at a later date. A court reporter was available to record verbal comments from the public. A total of 15 people filled in the sign-in sheet to the public hearing. Copies of the Public Notice and the information sheet provided to attendees, as well as the transcript of the court reporter, are provided in Appendix I.

The City of Bakersfield held a public hearing on the adequacy of the EA/DEIR as part of a regularly scheduled City of Bakersfield Planning Commission meeting on Thursday, April 20, 2006, from 5:30 to 7:00 p.m. at the City Council chambers at 1501 Truxtun Avenue, Bakersfield. This hearing was announced by publishing a Public Notice in the Bakersfield Californian on March 13, 2006. In addition, notice of the hearing was mailed to approximately 700 property and local business owners, and approximately 180 federal, state and local elected officials, relevant resource agencies and citizens that had expressed an interest in the project at the public scoping meeting held on December 17, 2002, or throughout the project's development. The Public Notice was also displayed at the City of Bakersfield Development Services Department, Planning Division, and was posted with the Kern County Clerk in accordance with CEQA Guidelines.

At the Planning Commission meeting, an overview presentation of the EA/DEIR was made for the Planning Commissioners and the public. Following the presentation, members of the public were invited to speak about the adequacy of the environmental document and to comment on the project in general.

Following the close of the public hearing, each Planning Commissioner provided comments on the environmental document and made statements regarding the proposed Westside Parkway. Copies of the Public Notice and sample announcements to property owners, elected officials, resource agencies and stakeholders, as well as the transcript of the public hearing are provided in Appendix I.

Three people spoke to the court reporter at the Caltrans public hearing and one person filled out a comment card. Two members of the public provided comments at the City of Bakersfield Planning Commission hearing. During the public review period for the EA/DEIR, letters were received from the following government agencies and interest groups:

- California Department of Conservation, Division of Oil, Gas, and Geothermal Resources
- California Department of Fish and Game
- North of the River Recreation and Park District
- Golden Empire Transit District
- Kern County Water Agency
- Kern River Parkway Committee
- Kern River Bikepath Committee
- Automobile Club of Southern California
- Sierra Club Kern-Kaweah Chapter
- Clean Water & Air Matter

In addition, letters and e-mails were received from four individuals.

Principal issues raised by agencies and the public regarding the environmental effects of the proposed Westside Parkway were as follows.

- Biological Resources. Concerns were raised about project impacts and mitigation for the San Joaquin kit fox, Swainson's hawk and burrowing owl. For the kit fox, the principal concern was to protect the urban kit fox population by providing adequate passage for foxes across the Westside Parkway right of way and accommodate kit fox dens in detention basins. Other comments wished to ensure that appropriate measures were taken to avoid impacts to Swainson's hawk and burrowing owls from project construction.
- Other Transportation Modes. Some comments related to the incorporation of other modes of travel into the Westside Parkway project, and in some cases, in lieu of the project. Other modes that were suggested included light rail transit, enhanced bus systems, bicycle travel and walking.
- "Westside" Parkway Name. Several organizations were concerned about the potential confusion for emergency response agencies between the name Westside Parkway and the Kern River Parkway that is south of the proposed highway project.

Responses to all comments received on the EA/DEIR are provided in Appendix I.

8.0 LIST OF PREPARERS

The following persons prepared technical reports or major sections of this document:

URS Corporation

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Appendix A
CEQA Checklist

Appendix A Environmental Checklist

One of the basic purposes of the California Environmental Quality Act (CEQA) is to inform state, regional and local governmental decision-makers and the public of impacts of proposed activities, and in particular, those impacts that are either significant or potentially significant.

Determining and documenting whether an activity may have a significant effect on the environment plays a critical role in the CEQA process. The following CEQA Environmental Significant Checklist is a device that was used to identify and evaluate any impacts from the proposed activity in a physical, biological, social, and economic resources.

Differences do exist in the way impacts are addressed in CEQA environmental documents as compared to NEPA documents. While CEQA requires that environmental documents state a determination of significant or potentially significant impacts, as has been done in the following CEQA checklist, NEPA does not. It can be seen that having to address significant or potentially significant impacts in joint CEQA and NEPA environmental documents can be confusing, especially in those instances where the two laws and implementing regulations have different thresholds of significance.

Under NEPA, the degree to which a resource is affected is only used to determine whether a NEPA Environmental Impact Statement (EIS) or some lower level of NEPA document would be required. Under NEPA, once the federal agency has determined the magnitude of the project's impacts and the level of environmental documentation required, it is the magnitude of the impact that is evaluated in the environmental document and no judgment of its degree of significance is deemed important in the document text. For the purpose of the impact discussion in this document, determination of significant or potentially significant impacts is made only in the context of CEQA. Although not explicitly identified in this document, impacts in the context of NEPA can be assumed to be minimal or non-existent.

Based on the results of the technical studies, it has been determined that the appropriate level of CEQA environmental document for this project is an Environmental Impact Report.

ENVIRONMENTAL SIGNIFICANCE CHECKLIST

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included in Section VI following the checklist. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	✔	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	✔
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	✔	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	✔	☐	☐
II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	✔	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	✔	☐
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	✔	☐
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	✔	☐	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	✔	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	✔	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	✔	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	✔
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	✔	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	✔	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	✔	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	✔	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	✔	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	✔	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	✔	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	✔	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	✔	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	✔	☐
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	✔	☐	☐
ii) Strong seismic ground shaking?	☐	✔	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	✔	☐
iv) Landslides?	☐	☐	✔	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	✔	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	✔	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	✔	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	✔

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
VII. HAZARDS AND HAZARDOUS MATERIALS –				
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	✔	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	✔	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	✔	☐	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	✔	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	✔
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	✔
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	✔	☐
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	✔
VIII. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	✔	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	✔	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	✔	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	✔	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	✔	☐
f) Otherwise substantially degrade water quality?	☐	☐	✔	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	✔
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	✔	☐	☐
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	✔	☐
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	✔
IX. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?	☐	✔	☐	☐
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	✔	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	✔	☐
X. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	✔	☐
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	✔	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XI. NOISE –				
Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☑	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☑	☐	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☑	☐	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☑	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑
XII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☑	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XIII. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☑	☐
Police protection?	☐	☐	☑	☐
Schools?	☐	☐	☑	☐
Parks?	☐	☐	☑	☐
Other public facilities?	☐	☐	☑	☐
XIV. RECREATION –				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☑	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☑	☐
XV. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☑	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☑	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☑
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☑	☐
e) Result in inadequate emergency access?	☐	☐	☐	☑
f) Result in inadequate parking capacity?	☐	☐	☑	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	✔	☐
XVI. UTILITIES AND SERVICE SYSTEMS –				
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	✔	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	✔
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	✔	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	✔
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	✔	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	✔
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	✔
XVII. MANDATORY FINDINGS OF SIGNIFICANCE –				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	✔	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	✔	☐	☐
c) Does the project have environmental effects which	☐	✔	☐	☐

will cause substantial adverse effects on human beings, either directly or indirectly?

Appendix B
NOP, Distribution List, Scoping Period and Comment Letters

NOTICE OF PREPARATION

TO: _____
(Responsible/Cooperating Agency)

FROM: City of Bakersfield
Planning Department
1715 Chester Avenue
Bakersfield, CA 93301

SUBJECT: Notice of Preparation of an Environmental Assessment/Environmental Impact Report

This notice is to inform your agency that the City of Bakersfield (City) will be the Lead Agency and will prepare a joint Tier II Environmental Assessment/Environmental Impact Report (EA/EIR) for the project described below. The Tier II EA/EIR is an environmental document that satisfies California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) requirements to evaluate the potential environmental impacts of the project.

We need to know the views of your agency with respect to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project, and the applicable permit and environmental review requirements of your agency. Your agency will need to use the EA/EIR prepared by our agency when considering your permit or other approval for the project.

A Tier I EIS/EIR was adopted by the FHWA in May 2001 and the Record of Decision in February 2002 for environmental evaluation of the route corridor. The State CEQA Guidelines Environmental Checklist and supporting discussion have been completed for the Tier II documentation and a copy is attached herewith.

PROJECT DESCRIPTION

The proposed project involves the construction of a new east-west transportation facility between Heath Road and State Route 99 (SR-99), for a distance of approximately 13.0 kilometers, in Bakersfield and Kern County, California. Future studies will be conducted to determine the location of interchanges at key intersecting arterials. The purpose of the project is to improve connectivity, support economic development, and enhance east-west traffic movements. The purpose of the EA/EIR is to address social, economic, and environmental concerns. Figure 1 shows the project study area.

In addition to the proposed action, the EA/EIR will consider the No Project Alternative. Under this alternative, no new parkway would be constructed and the highway system would primarily exist as it does today, augmented by those additional projects which a funding commitment has been made or which are reasonably expected to be in place without completion of the Westside Parkway project.

BACKGROUND

The proposed project was initially conceived in the Route 58 Route Adoption Project, which proposed a State freeway facility linking SR-99 to Interstate 5. In 1991, a Route Adoption Project Tier I EIS/EIR was initiated for environmental evaluation of route location and right of way acquisition for corridor protection. The Tier I EIS/EIR was certified by FHWA in May 2001 and Record of Decision adopted in February 2002, recommending a preferred alternative.

Regional planning studies conducted in 2001 included a modified version of the Tier I preferred corridor in the recommended regional plan. The transportation improvement plan was unanimously endorsed by the City of Bakersfield, County of Kern, and Kern Council of Governments. The footprint of the Westside Parkway project is the same as the eastern segment of the Tier I alignment analyzed in the Route Adoption Project, with refinements to reduce environmental impacts.

PROBABLE ENVIRONMENTAL EFFECTS

1. There is potential for the displacement and relocation of business properties within the project vicinity.

2. Critical habitat, wetlands, and sensitive species exist within the project vicinity.

3. Portions of the Westside Parkway may encroach on floodplain areas.

4. Oil fields, refineries, abandoned oil wells, and other potential hazardous material sources exist within the project vicinity.

5. The proposed project could have the potential to affect noise levels.

The City of Bakersfield will evaluate potential environmental, social, and economic impacts of the project and alternatives in the Draft Tier II EA/EIR. Environmental disciplines that will be evaluated include: Land Use and Development; Visual and Aesthetic Impacts; Air Quality; Noise and Vibration; Energy; Geotechnical Considerations; Water Resources; Biological Resources; Cultural Resources; Community Facilities; and Parklands. The impacts will be evaluated both for project construction and operation. Measures to mitigate significant adverse impacts will be addressed.

SCOPING PROCESS

The scoping process for the project will include a public scoping meeting to consult with public agencies and interested individuals and organizations. The scoping meeting will be held at 6:00 p.m. on Tuesday, December 17, 2002 in the Potato Room, Bakersfield Centennial Garden and Convention Center, 1001 Truxtun Avenue in the City of Bakersfield, for appropriate Federal, State, local agencies, and interested individuals and organizations.

RESPONSES

Due to time limits mandated by State Law, your response must be sent at the earliest possible date but *no later than 30 days* after receipt of this notice. Please send your responses to Marc Gauthier at the City of Bakersfield address on Page One. We will need the name of a contact person in your agency or organization.

We will be pleased to answer questions you may have in regard to this project. Please contact Marc Gauthier at (661) 326-3733 if you need more information.

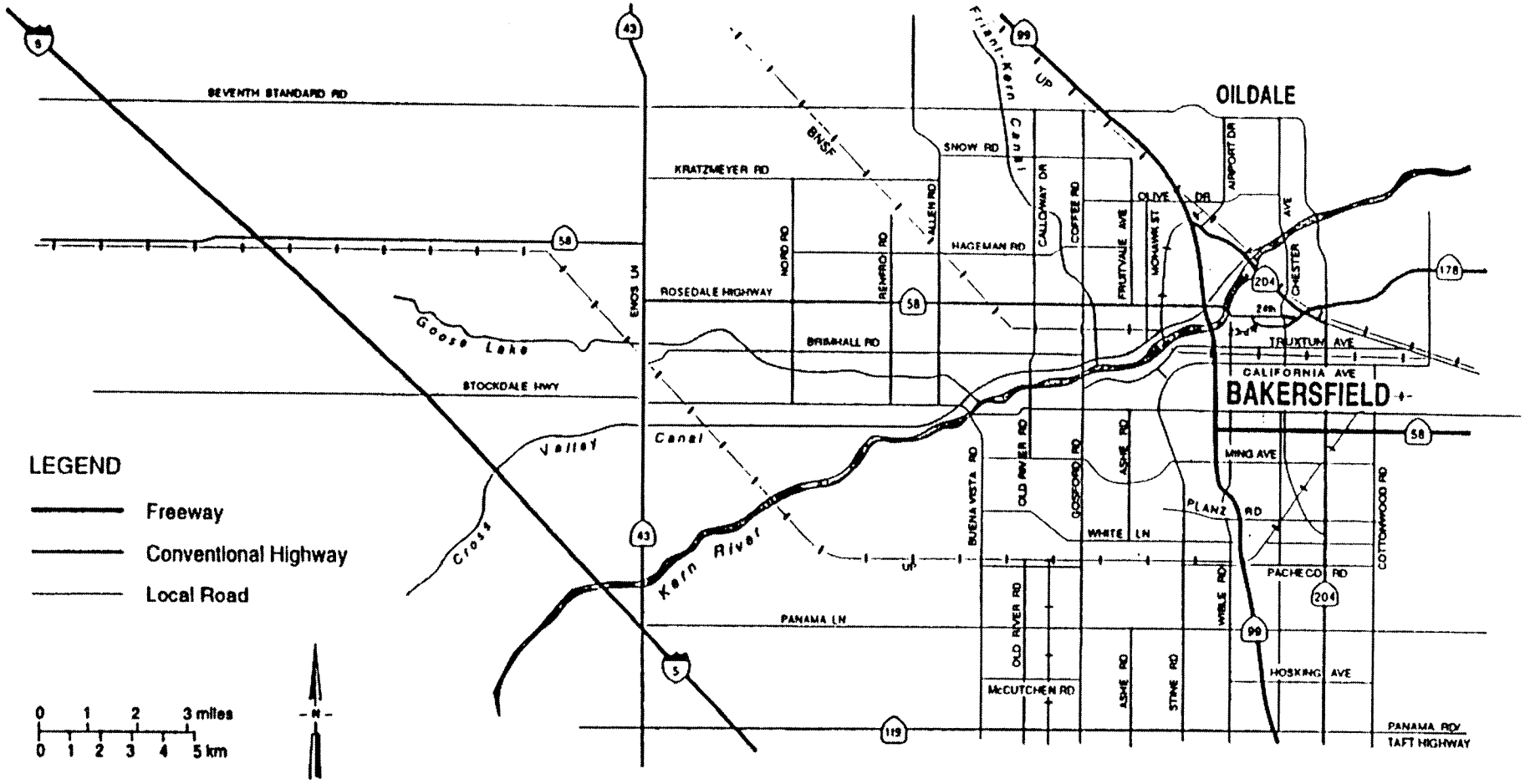
Project Title: Tier II EA/EIR for the Westside Parkway Project

Project Applicant: The City of Bakersfield

Date: 11/27/02

Signature: _____

for Marc Gauthier,
Principal Planner
City of Bakersfield

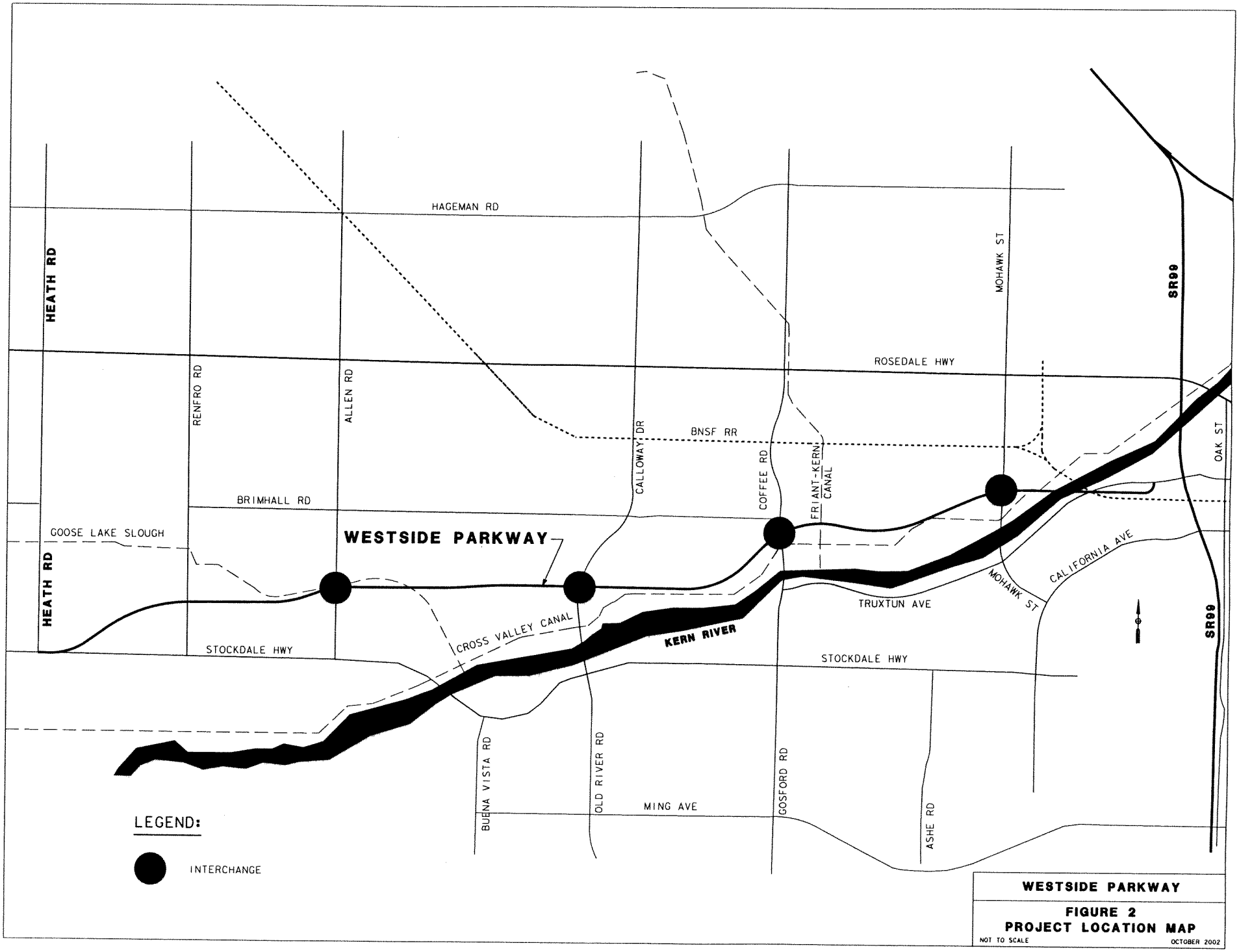


PROJECT AREA

Project No.: 29866227	Date: OCTOBER 2002	Project: WESTSIDE PARKWAY	Figure 1

URS

L:/westside pkwy/project area map.fh10 10/02



WESTSIDE PARKWAY

FIGURE 2
PROJECT LOCATION MAP

NOT TO SCALE

OCTOBER 2002

Initial Study and CEQA Checklist

1. **Project title:** Westside Parkway Project

2. **Lead agency name and address:** City of Bakersfield
   Planning Department
   1715 Chester Avenue
   Bakersfield, CA 93301

3. **Contact person and phone number:** Marc Gauthier
   Principal Planner, City of Bakersfield
   (661) 326-3733

4. **Project location:** The project would be located between Heath Road and State Route 99 (SR-99), for a distance of 13.0 kilometers, in Bakersfield and Kern County, California.

5. **Project sponsor's name and address:** City of Bakersfield
   Public Works Department
   1501 Truxtun Avenue
   Bakersfield, CA 93301

7. **General plan designation:** Residential, Industrial, Retail/Commercial, and some Agricultural

8. **Zoning:** Residential, Industrial, Retail/Commercial, and some Agricultural

9. **Description of Project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)** The proposed project involves the construction of a new east-west transportation facility between Heath Road and Route 99, for a distance of approximately 13.0 kilometers, in Bakersfield and Kern County, California. Interchanges would be constructed at Allen Road, Calloway Drive, Coffee Road, and Mohawk Street. At its westerly terminus, the Westside Parkway would tie into Stockdale Highway near Heath Road. At its easterly terminus, the Westside Parkway would tie into Truxtun Avenue west of SR-99 near the existing City of Bakersfield Corporation Yard. The purpose of the project is to reduce congestion, reduce mobile source air emissions, support economic development, improve east-west traffic movements, and address social, economic, and environmental concerns.

   In addition to the proposed action, the EA/EIR will consider the No Project Alternative. Under this alternative, no new parkway would be constructed and the highway system would primarily exist as it does today, augmented by those additional projects which a funding commitment has been made or which are reasonably expected to be in place without completion of the Westside Parkway project.

10. **Surrounding Land Uses and Setting:** The predominant land uses within the proposed right-of-way are residential, commercial, industrial, public facility (Bakersfield Corporation Yard), open space, and some agricultural.

11. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)**

California Department of Fish and Game (CDFG)
California Department of Transportation (Caltrans)
Central Valley Regional Water Quality Control Board (CVRWQCB)
City of Bakersfield
Department of Toxic Substances Control (DTSC)
Federal Highway Administration, DOT (FHWA)
Kern County
State Historic Preservation Office (SHPO)
United States Army Corps of Engineers (ACOE)
United States Fish and Wildlife Service (USFWS)
San Joaquin Valley Air Pollution Control District (SJVAPCD)

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

■ Aesthetics	■ Agriculture Resources	■ Air Quality
☐ Biological Resources	■ Cultural Resources	☐ Geology /Soils
■ Hazards & Hazardous Materials	■ Hydrology / Water Quality	■ Land Use / Planning
☐ Mineral Resources	■ Noise	☐ Population / Housing
☐ Public Services	☐ Recreation	■ Transportation/Traffic
☐ Utilities / Service Systems	■ Mandatory Findings of Significance	

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ■ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	11/27/02 Date
CHARLES E. SMITH, AICP, URS CORP. Printed Name	CITY OF BAKERSFIELD For

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	■
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	■
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	■	☐	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	■	☐	☐

Explanation

a) The project would create a new roadway in areas where such a facility does not currently exist, altering visual conditions along the alignment. The project would result in changes to existing topography, relief, and vegetation found within the project right-of-way. However, the project would not have an adverse effect on a scenic vista. The area is not regarded or designated within the Metropolitan Bakersfield 2010 General Plan as visually important or "scenic".

b) The project is not adjacent to a state highway which is designated as "scenic".

c) Development of a new transportation facility would result in visual impacts. The project would introduce man-made lines, forms, colors, and textures that are in contrast to the existing landscape. The height and mass of the freeway would dominate views in the area. The visual impact from the project on views would vary depending on the location and sensitivity of the viewer. Design features, landscaping, and other strategies would be employed as appropriate to address project aesthetics. The significance of potential aesthetic impacts of the project would be addressed in the EA/EIR.

d) The project involves incremental growth of urban development typical of the area. The proposed parkway would introduce new sources of light and glare during operation; however, the light generated is typical of urban development. In addition, temporary lighting would be required if construction activities were to occur at night. Typical development standards as required by the City zoning ordinance would address the issue of light and glare.

II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:	**Potentially Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	■	❐	❐	❐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	■	❐	❐	❐
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	❐	❐	❐	■

Explanation

a) The project would potentially impact agricultural land, including grazing and prime farmland. The number and type of acres impacted will be refined from the analysis conducted for the Tier I EIS/EIR; however, the total is expected to be less than 100 acres. See Department of Conservation Kern County Interim – Farmland 1996, sheet 2 of 3. Large parcel size is, in general, an important indicator of potential agricultural suitability and productivity. There are currently more than 1.6 million acres under Williamson Act Contract in Kern County (1999), the loss of more than 100 acres is considered a significant change to this resource. State CEQA Guidelines, Section 15206, regards the cancellation of more than 100 acres of land from the Williamson Act to be of statewide, regional, or area wide significance. The potential significance of the loss of agricultural land will be evaluated in the EA/EIR. If applicable, mitigation concepts, such as purchase and lease-back prior to construction and compensation strategies, will be developed as appropriate.

b) Refer to Response II a. Potentially-impacted farmlands will be reviewed to determine if they are under Williamson Act contract. Limited displacement of agricultural production would occur. The potential significance of the loss of agricultural land will be evaluated in the EA/EIR.

c) The project would not involve other changes in the existing environment that would result in the conversion of farmland to non-agricultural use.

III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	**Potentially Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	■	☐	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	■	☐	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	■	☐	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	■	☐	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	■

Explanation

a) The San Joaquin Valley Unified Air Pollution Control District (SJVAPCD) encourages local jurisdictions to design all developments in ways that reduce air pollution from vehicles, which are the largest single category of air pollution in the San Joaquin Valley. The Guide to Assessing and Reducing Air Quality Impacts promulgated by the SJVAPCD, (page 16 and Section 6) lists various land uses and design strategies that reduce air quality impacts of new development. Local ordinance and general plan requirements related to landscaping, sidewalks, street improvements, and level of traffic service, are consistent with the listed strategies. This project is subject to local ordinances that ensure compliance with these air quality strategies. The project could affect the quantity and distribution of regional and local mobile source emissions, but is not anticipated to conflict or obstruct with applicable air quality plans. The Westside Parkway is already included in the Kern County Regional Transportation Plan that is used in air conformity planning. An air quality assessment including a conformity analysis would be prepared to confirm that the project conforms to the State Implementation Plan (SIP).

b) The project would be located within a non-attainment area for ozone and particulate matter. Operation of the parkway could affect the quantity and distribution of regional and local mobile source emissions. This impact is anticipated to be beneficial in that the project would improve mobility. Construction activities associated with the proposed project would result in temporary, short-term impacts associated with emissions of CO, SO, VOCs, and PM_{10} from construction vehicles and equipment. An air quality assessment would be conducted for the project, and would evaluate conformity for emissions of PM_{10} and CO.

c) Refer to Response III a.

d) The project has the potential to expose sensitive receptors along the project right-of-way to increases in pollutant concentrations. The potential significance of these increases will be evaluated in the EA/EIR.

e) The project does not have the potential to create objectionable odors. Roadways are not on the list of those land uses generally regarded as the type to have site odor problems, according to the San Joaquin Valley Air Pollution Control District's Guide for Assessing and Mitigating Air Quality Impacts.

IV. BIOLOGICAL RESOURCES -- Would the project:	**Potentially Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	■	☐	☐
b) Have a substantial adverse effect on any				

riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	❒	■	❒	❒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	❒	❒	❒	■
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	❒	■	❒	❒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	❒	■	❒	❒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	❒	■	❒	❒

Explanation

a) A Biological Opinion, dated March 22, 1999, was issued by the US Fish and Wildlife Service (USFWS) as part of the Tier 1 environmental review. The project area contains federal and state threatened species and federal candidate species, including: Hoover's eriastrum, Recurved larkspur, San Joaquin kit fox, Burrowing owl, Tipton kangaroo rat, Blunt-nosed leopard lizard, Swainson's hawk, Tricolored blackbird, Golden eagle, and Prairie Falcon. Mitigation measures from the USFWS Biological Opinion would be incorporated into the project as applicable. Additional studies would be conducted to confirm no new significant biological impacts.

   The project is subject to the terms of the Metropolitan Bakersfield Habitat Conservation Plan and associated Section 10(a)(1)(b) and Section 2081 permits issued to the City of Bakersfield by the United States Fish and Wildlife Services (USFWS) and California Department of Fish and Game (CDFG), respectively. Terms of the permit require applicants for all development projects within the plan area to pay habitat mitigation fees, excavate known kit fox dens, and notify agencies prior to grading.

b) The project has the potential to impact terrestrial and riparian habitat where it would cross the Kern River south and east of Mohawk Street. The project would require a Nationwide Permit (NWP) #14 from the US Army Corps of Engineers (USACOE), and a Section 1601 Streambed Alteration Agreement from the CDFG. The project is within the Metropolitan Bakersfield Habitat Conservation Plan area. This plan, in agreement with the USFWS and CDFG, mandates certain requirements that by ordinance all development projects must comply.

c) Construction of the project would not impact jurisdictional wetlands.

d) The alignment could impact areas that are used by kit foxes for movement. The project would result in the removal of some of the habitat of this endangered species. Potential impacts include higher incidence of road kill, loss of foraging, breeding, or denning habitat, and potential barriers to movement. Refer to Response IV a.

e) Refer to Response IV a. The Metropolitan Bakersfield Habitat Conservation Plan has been adopted as policy and is implemented by ordinance. The plan addresses biological impacts within the Metropolitan Bakersfield General Plan Area. The development entitled by this proposal would be required to comply with this plan and therefore will not be in conflict with either local biological policy or ordinance. Impacts to biological resources would be mitigated through the incorporation of policies identified in the Metropolitan Bakersfield Habitat Conservation Plan.

f) Refer to Response IV a. The project is within the Metropolitan Bakersfield Habitat Conservation Plan area. This plan, in agreement with the USFWS and CDFG, mandates certain requirements that by ordinance all development projects must comply. A mitigation plan would be prepared to address construction- and operation-related impacts to special status species. Additional studies would be conducted to confirm no new significant biological impacts. In addition, impacts to biological resources would be mitigated through the incorporation of policies identified in the Metropolitan Bakersfield Habitat Conservation Plan. There are no other adopted plans that are applicable to this area which relate to biological resources.

V. CULTURAL RESOURCES -- Would the project:	**Potentially Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	■	❒	❒	❒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	■	❒	❒	❒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	❒	❒	■	❒
d) Disturb any human remains, including those interred outside of formal cemeteries?	❒	❒	❒	■

Explanation

a) A Historic Property Survey Report (HPSR) was prepared for the Tier I EIR/EIS. The HPSR identified the Friant-Kern Canal, located within the project Area of Potential Effect (APE), as being eligible to the National Register of Historic Places (NRHP). Although the project would span the Friant-Kern Canal, the HPSR concluded that the historic significance of the canal would not be impaired, and would not be regarded as a project impact. The project may include construction in areas not previously surveyed for historical resources. Additional studies would be conducted to confirm no new significant historical impacts.

b) The Archaeological Survey Report (ASR) prepared for the Tier I EIS/EIR identified no archaeological sites along the proposed Tier II project area. The project may include construction in areas not previously surveyed for archaeological resources. Additional studies would be conducted to confirm no new significant archaeological impacts. The ASR will be updated as necessary for the Tier II analysis.

c) The Tier I analysis identified no known paleontological resources in the vicinity of the project. The topography of the site is relatively flat and there is no evidence that construction of the project would destroy any unique geologic structure.

d) There is no evidence that the project is located within an area likely to produce human remains. If any human remains are discovered during construction, all grading and excavation in the vicinity of the discovery shall stop until the Kern County Coroner has been notified and has evaluated the remains. If other archaeological artifacts are discovered during site development, all grading and excavation in the vicinity of the discovery shall stop until the find has been evaluated by a qualified archaeologist or historian.

VI. GEOLOGY AND SOILS -- Would the project:	**Potentially Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	■	☐	☐
ii) Strong seismic ground shaking?	☐	■	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	■	☐
iv) Landslides?	☐	☐	☐	■
b) Result in substantial soil erosion or the loss of topsoil?	☐	■	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	■	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	■	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	■

Explanation

a) Bakersfield, located in the San Joaquin Valley, has been a seismically active area. According to the Metropolitan Bakersfield General Plan, major active fault systems border the southern portion of the San Joaquin Valley. Among these fault systems are the San Andreas, Breckenridge-Kern County, Garlock, Pond Poso, and White Wolf. There are numerous additional faults suspected to occur within the Bakersfield area that may or may not be active. The active faults have a mazimum credible Richter magnitude that ranges from 6.0 (Breckenridge-Kern Canyon) to 8.3 (San Andreas). Potential seismic hazards in the project area involve strong ground shaking, fault rupture, and liquefaction.

   Structures proposed on the project site will be constructed in accordance with the Uniform Building Code and Uniform Seismic Code, and will adhere to all modern earthquake standards, including those relating to soil characteristics. This will ensure that all seismically-related hazards remain less than significant. In addition, because of the relatively flat topography of the project site, landslides are not considered to be a potentially significant geologic hazard.

   The potential for liquefaction at the site is low. Additional geologic studies will be required to determine any site-specific problems.

b) The project would require varying amounts of cut and fill work. Construction grading would expose large quantities of soil to hazards of erosion by wind and water run-off. The potential erosion could result in siltation to lower-lying areas such as the Kern River. Site erosion and siltation control measures would be incorporated into the project design to prevent runoff generated during construction from entering offsite areas.

c) There is no evidence of landslides or slumps in the project area. No impacts to slope stability are anticipated.

d) Some localized clay soils found in the project site are likely to be moderately to highly expansive. Transportation facilities built on these expansive soils could be subject to some differential settlement, which could cause cracking of pavement. Site specific geotechnical investigations would be conducted during final engineering design to determine the presence of expansive soils and to determine appropriate engineering treatment of those soils to prevent impacts to the facility.

e) The proposed project does not involve the installation or use of septic tanks or alternative disposal systems.

VII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:	**Potentially Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	■	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	■	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	■	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	■	☐	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	■
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	■
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	■	☐
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	■

Explanation

a) Operation of the parkway would accommodate local and regional traffic, including vehicles potentially transporting hazardous wastes and materials. The project would not increase the number of such vehicles, but would redistribute vehicles from existing routes they would otherwise use. Aerially-deposited lead generated by traffic is not expected to be a significant adverse impact.

b) Oil fields, refineries, abandoned oil wells, pipelines, service stations, and repair shops are located in the project vicinity. Hazardous wastes are likely to consist of ground and water contamination from oil production activities, leaking underground storage tanks, and ground storage of chemicals. Construction workers may be exposed to hazardous wastes during grading and soil excavation activities. A project health and safety plan would be implemented during construction to minimize potential hazards to construction workers.

c) During project operation, hazardous wastes and materials may be transported on the highway in proximity to existing or proposed schools. In the event of a spill, the California Highway Patrol would be the command agency responsible for isolating the spill and coordinating the response team. The Kern County Environmental Health Department is responsible for technical oversight of cleanup activities.

d) Various parcels found within and in proximity to the project right-of-way are located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. These sites include the Shell Bakersfield Refinery, Lion Oil Company (Tosco Corporation), and Red Ribbon Ranch. The Tier II analysis will identify the extent of contamination at sites within the right-of-way.

e) The project is not located within any area subject to the land use restrictions within the adopted Comprehensive Airport Land Use Plan which covers all of Kern County. No significant impacts are anticipated.

f) The project site is not located within 5,000 feet of the runway of any private strip and it is therefore presumed not to have any land use impacts at this distance. The Comprehensive Airport Land Use Plan (1993) uses this 5,000 foot distance as the maximum for land use considerations. No significant impacts are anticipated.

g) The project would improve traffic circulation and emergency response in the project vicinity. The. proposed project, is consistent with the adopted City of Bakersfield Hazardous Materials Area Plan. This Plan identifies responsibilities and provides coordination of emergency response at the local level in response to a hazardous materials incident. The Plan would be updated to include the project.

h) The project is not located adjacent to a wildland area or it is within the area covered by the Hillside Development Ordinance (HD) which has standards required by the Kern County Fire Department which addresses the issue of wildland fires and urban development. No significant impacts are anticipated.

VIII. HYDROLOGY AND WATER QUALITY -- Would the project:	**Potentially Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Violate any water quality standards or waste discharge requirements?	☐	■	☐	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	■	☐	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	■	☐	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	■	☐	☐	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	■	☐	☐
f) Otherwise substantially degrade water quality?	☐	■	☐	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	■
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	■	☐
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	■	☐

j) Inundation by seiche, tsunami, or mudflow?	❒	❒	❒	■

Explanation

a) The project would create a new roadway and other impervious surfaces that would increase runoff. Pollutants in the runoff would potentially exceed water quality standards. Appropriate stormwater facilities would be included in the project design to mitigate potential impacts. Best Management Practices would be used during construction and operation of the project.

b) The Tier I analysis concluded that the project would result in the loss of a groundwater recharge area operated by the Rosedale-Rio Bravo Water Storage District, as well as recharge associated with the Kern River Channel. Funds would be provided to the Rosedale-Rio Bravo Water Storage District to purchase and develop land for replacement of the area lost. The Kern Water Bank Authority would be compensated for its property and any groundwater recharge facilities used by the proposed highway.

c,d) The project would cross the Kern River south and east of Mohawk Street. Construction grading would expose soil to erosion by wind and water run-off. The potential erosion could result in siltation to lower-lying areas of the Kern River. Site erosion and siltation control measures would be incorporated into the project design to prevent runoff generated during construction from entering offsite areas. The significance of potential impacts would be evaluated in the EA/EIR.

e) Refer to Response VIII a.

f) Refer to Response VIII a.

g) The project would not involve the construction of housing.

h) The project would have a longitudinal encroachment to the 100-year floodplain of the Kern River between Fruitvale Avenue and Coffee Road, as well as two crossings south and east of Mohawk Street. The river crossings would affect flood flows, but would not significantly increase the risk of flood-related loss, injury, or death.

i) The proposed project is within the Lake Isabella failure inundation area. If an earthquake were to occur in the vicinity, it could result in a break in the dam. This could under certain conditions, cause the entire lake storage to be released, which would result in flooding 60 square miles of the Metropolitan Bakersfield and the surrounding areas of Oildale and Greenacres. Due to the distance from the dam, the amount of time it would take to reach the site, and the low probability of dam failure (worst case scenario, one event in more than 10,000 years), the risk involved is regarded as insignificant (Metropolitan Bakersfield 2010 General Plan). Therefore impacts would be less than significant.

j) The project site is not located near any significantly sized enclosed body of water or coastal area and is, therefore, not susceptible to a seiche or tsunami. The site is not located at the foot of any significant topographical feature with the potential to be subject to a mudflow. No significant impact is noted.

IX. LAND USE AND PLANNING -- Would the project:	**Potentially Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Physically divide an established community?	■	❐	❐	❐
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	❐	■	❐	❐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	❐	❐	■	❐

Explanation

a) The project would provide a needed transportation link to a growing part of west Bakersfield. The project would be located on existing right-of-way adjacent to the Kern River, and would result in the conversion of agricultural land, open space, commercial, residential, and public facility uses to a new highway. Multiple split parcels may also be created.

The project would influence decisions related to land use because it would affect future land use options. The new highway may indirectly result in the change of existing and surrounding land use patterns as a result of the capacity of the future freeway to support the planned growth projected to occur on the area. An evaluation of these new land use impacts and the determination of the proposed alignment's consistency with existing plans, goals, and policies would be provided in the EA/EIR.

In addition, construction activities would potentially impact local roadways, temporarily increasing congestion along access routes to existing residences and businesses within the area. Construction activities would also increase the likelihood of additional noise, dust, and emissions from grading equipment and other construction vehicles.

b) The project is generally consistent with the Metropolitan Bakersfield 2010 General Plan, Kern River Parkway Plan and Kern River Plan Element, which depicts the Westside Highway Project. Refer to Response IX a.

c) The Metropolitan Bakersfield Habitat Conservation Plan has been adopted as policy and is implemented by ordinance. The plan addresses biological impacts within the Metropolitan Bakersfield General Plan Area. The development entitled by this proposal would be required to comply with this plan and therefore will not be in conflict with either local biological policy or ordinance.

X. MINERAL RESOURCES -- Would the project:	**Potentially Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	■	☐
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	■	☐

Explanation

a,b) The development of a transportation facility would require the consumption of sand and gravel. These materials are anticipated to be obtained from local sources in the Kern River fan. Because of the large amount of sand and aggregate present in the region, the project is not expected to substantially deplete the resource. According to the Conservation Element of the Metropolitan Bakersfield 2010 General Plan, the project is located in the Fruitvale Oil Field. However, the project is not anticipated to affect existing oil production in the area.

XI. NOISE -- Would the project result in:	**Potentially Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	■	☐	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	■	☐	☐	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	■	☐	☐	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	■	☐	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use	☐	☐	☐	■

airport, would the project expose people residing or working in the project area to excessive noise levels?				
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	❒	❒	❒	■

Explanation

a) Project construction would temporarily increase existing noise levels in areas near the project site. Traffic from project operation would also affect noise levels in adjoining areas. Noise levels may approach or exceed local noise standards and Federal Highway Administration (FHWA) federal noise abatement criteria. A noise study for the project that conforms to the requirements of the FHWA and Caltrans would be conducted for the EA/EIR in order to evaluate potential noise impacts, and the appropriateness and effectiveness of noise barriers as a means of noise attenuation. Existing or approved development affected by the project would be subject to protection in accordance with FHWA and California Department of Transportation (Caltrans) noise abatement criteria.

b) The proposed parkway may generate groundborne vibration or noise. Existing or approved development affected by the project would be subject to protection in accordance with FHWA and Caltrans noise abatement criteria. Refer to Response XI a.

c) The project has the potential to permanently change the local noise environment during operation. Refer to Response XI a.

d) The project has the potential to temporarily change the local noise environment during construction Refer to Response XI a.

e) The project is not located within an area subject to the land use restrictions of the adopted Comprehensive Airport Land Use Plan which covers all of Kern County. No impacts are identified.

f) The project is not located within the vicinity (5,000 feet) of any private airstrip and therefore does not have the potential to cause significant noise impacts.

XII. POPULATION AND HOUSING -- Would the project:	**Potentially Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	❒	❒	■	❒
b) Displace substantial numbers of existing housing, necessitating the construction of	❒	❒	❒	■

replacement housing elsewhere?				
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■

Explanation

a) The proposed project would provide needed access and roadway capacity for anticipated growth in west Bakersfield. No new areas would be opened to development by the highway project that are not already designated for growth by local planning authorities.

b) The project does not propose the displacement of any existing housing. Therefore, no replacement housing would be needed. Relocation impacts, if any, would be limited to a few commercial properties.

c) Refer to Response XII b.

XIII. PUBLIC SERVICES	**Potentially Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	■
Police protection?	☐	☐	☐	■
Schools?	☐	☐	☐	■
Parks?	☐	☐	■	☐
Other public facilities?	☐	☐	☐	■

Explanation

(a) *Fire Protection* - Fire service to the project site would be provided by the City of Bakersfield and Kern County Fire Department. Emergency access would be provided per the requirements of the Uniform Fire Code and applicable City fire regulations.

Construction materials, including waste, would be handled in accordance with Uniform Fire Codes and applicable City fire-regulations. The project would not result in the need for new or altered facilities or services related to fire protection.

Police Protection - Police protection would be provided by the City of Bakersfield Police Department and Kern County Sheriff Department. The project would not affect the potential for crimes or accidents, nor require increased levels of police protection.

Schools - The project would not generate an increased demand for school facilities.

Parks – The project proposes no increase in population for the area and would not result in an impact upon the quality or quantity of existing recreational opportunities or create a substantial need for new parks or recreational facilities. Potential proximity effects on parks and bicycle paths near the Kern River would be evaluated in the EA/EIR.

Other public facilities – No impacts to other public facilities are anticipated.

XIV. RECREATION –	**Potentially Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	■	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	■

Explanation

a,b) The project proposes no increase in population for the area and would not result in a significant impact upon the quality or quantity of existing recreational opportunities or create a substantial need for new parks or recreational facilities. Potential proximity effects on parks and bicycle paths near the Kern River would be evaluated in the EA/EIR.

XV. TRANSPORTATION/TRAFFIC -- Would the project:	**Potentially Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	■	❒	❒	❒
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	❒	❒	■	❒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	❒	❒	❒	■
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	❒	❒	■	❒
e) Result in inadequate emergency access?	❒	❒	■	❒
f) Result in inadequate parking capacity?	❒	❒	❒	■
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	❒	❒	❒	■

Explanation

a) Temporary traffic impacts during construction could result from construction worker commute trips, as well as from the delivery of construction materials, supplies, and equipment. The potential significance of these impacts would be evaluated in the EA/EIR. Operation of the project would improve east-west traffic circulation in the western portion of the Bakersfield. The parkway would draw some commuters away from Rosedale Highway and Stockdale Highway, improving traffic flow and circulation on those facilities.

b) The proposed parkway is anticipated to operate at a level of service (LOS) C or better in the future. LOS on nearby east-west roadways is also anticipated to improve upon operation of the new parkway.

c) The project would not have direct access to or use of any air transportation facilities, and would not affect air traffic patterns.

d) The project would be designed to minimize traffic hazards. All road improvements are subject to compliance with accepted traffic engineering standards that are intended to reduce traffic hazards. There are no incompatible uses that have been identified with this project.

e) All projects are subject by ordinance to the access requirements of the City of Bakersfield Fire Department, which includes an evaluation of adequate emergency access.

f) The project would not generate parking demand nor affect parking capacity.

g) The project would not conflict with adopted policies, plans or programs supporting alternative transportation. The project would provide needed access and roadway capacity to communities in west Bakersfield.

XVI. UTILITIES AND SERVICE SYSTEMS -- Would the project:	**Potentially Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	■
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	■
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	■	☐	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements	☐	☐	■	☐

needed?				
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the providers existing commitments?	❒	❒	■	❒
f) Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs?	❒	❒	■	❒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	❒	❒	■	❒

Explanation

a) The project would not generate new sources of wastewater.

b) The project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities.

c) The project would create a new roadway and other impervious surfaces that would increase stormwater runoff. Pollutants in the runoff would potentially exceed water quality standards. Appropriate stormwater facilities would be included in the project design to mitigate potential impacts. Best Management Practices would be used during construction and operation of the project.

d) Local water supplies are sufficient to serve construction needs (e.g., dust suppression). Project operation would not require the use of water. Should utility relocations be necessary during construction, interruptions in domestic water service to surrounding properties would be short-term and temporary.

e) The project would not generate new sources of wastewater. Should utility relocations be necessary during construction, interruptions in wastewater service to surrounding properties would be short-term and temporary.

f) Solid waste generated during project construction would be transported to an appropriate waste disposal facility, such as the Bena Landfill that serves the Metropolitan Bakersfield area.

g) The project would comply with all federal, state, and local statutes and regulations related to solid wastes. Therefore, no impacts are identified.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE –	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	■	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	■	☐	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	■	☐	☐	☐

Explanation

a) A Biological Opinion, dated March 22, 1999, was issued by the US Fish and Wildlife Service (USFWS) as part of the Tier 1 environmental review. The project is subject to the terms of the Metropolitan Bakersfield Habitat Conservation Plan and associated Section 10(a)(1)(b) and Section 2081 permits issued to the City of Bakersfield by the USFWS and CDFG, respectively. Terms of the permit require applicants for all development projects within the plan area to pay habitat mitigation fees, excavate known kit fox dens, and notify agencies prior to grading. Compliance with the plan mitigates biological impacts to a level that is less than significant. In addition, pursuant to Section 15064(h) of the CEQA Guidelines, a change in the environment is not a significant effect if the change complies with a standard that meets the definition of Section 15064(h)(3). The Metropolitan Bakersfield Habitat Conservation Plan as adopted, is an enforceable standard that meets the definition of Section 15064(h)(3).

b) The project would potentially generate impacts that are individually limited, but cumulatively considerable. Cumulative impacts will be evaluated in the EA/EIR.

c) The project may have potentially significant impacts to air quality, and hazards and hazardous materials, which could result in adverse impacts on human beings, either directly or indirectly. The potential significance of these impacts will be evaluated in the EA/EIR.

References

City of Bakersfield, 1990. Metropolitan Bakersfield 2010 General Plan.

San Joaquin Valley Air Pollution Control District. 2002. Guide to Assessing and Mitigating Air Quality Impacts.

United States Department of Transportation, Federal Highway Administration. 2001. Final Tier I Environmental Impact Statement/Environmental Impact Report for the Adoption of Alignment State Highway Route 58 – Interstate 5 to State Route 99, Kern County, California.

Letter 1

Shell Oil Products US
Shell Bakersfield Refinery
P.O. Box 1476
Bakersfield, CA 93302

RECEIVED
JAN 03 2003
CITY OF BAKERSFIELD
PLANNING DEPARTMENT

Hand Delivered

January 2, 2003

Mr. Marc Gauthier, Principal Planner
City of Bakersfield Development Services Dept.
1715 Chester Avenue
Bakersfield, CA 93301

Subject: **City of Bakersfield Westside Parkway Project**

Dear Mr. Gauthier:

We have received your November 15, 2002 notice requesting comments on the subject project. Equilon Enterprises LLC dba Shell Oil Products US (SOPUS) currently owns property and a petroleum refining complex, the Shell Bakersfield Refinery, in sections 14, 15, 22, 23, 27, 28 and 33 of Township 29S, Range 27E. The proposed project will impact SOPUS property and refinery operations in sections 27, 28 and 33.

Shell Bakersfield Refinery staff has worked with CalTrans and City of Bakersfield Planning and Public Works staff for several years regarding the proposed alignment of this project through SOPUS property. SOPUS appreciates recent work by City of Bakersfield staff and consultants to consider previous comments and concerns about the proposed project and redesign the project, to the extent possible, in the vicinity of the Shell Bakersfield Refinery. The Tier II phase of the environmental study for the proposed project will need to more substantially consider the remaining potential impacts of the proposed expressway on SOPUS property and refinery operations than the previous Tier I phase environmental study and report.

By letter dated January 29, 1998, Texaco (former operator of the Shell Bakersfield Refinery) provided comments on the original project proposed by CalTrans for the Tier I study. By the attached copy of this letter, SOPUS staff would like to incorporate these comments into this letter for consideration as part of the Tier II study. While some of the concerns expressed by this letter have been mitigated by the recent redesign of the proposed project, others have not. The following comments provide an updated list of concerns and requests for consideration as part of the Tier II study.

Project Alignment and Refinery Operations

CalTrans previously proposed to construct the 58 Freeway through the refinery's southern tank farm. This would have required the relocation of a substantial number of petroleum storage tanks, a railroad tank car loading and unloading rack, and several truck loading and unloading racks. The City's current alignment for the proposed project places the roadbed as far south and away from these facilities as possible, given other concerns and definitions for the land along the Kern River. SOPUS staff appreciates this change in the alignment of the proposed project.

Although the proposed project through the Shell Bakersfield Refinery has been redesigned, the potential consequences of a petroleum product release in the vicinity of the proposed project will need further evaluation by City of Bakersfield and SOPUS consultants as part of the Tier II study. In March 1995, an unfortunate accident involving another nearby refining facility demonstrated that vehicular traffic provides a source of ignition for petroleum vapors. After further analysis, if SOPUS staff believe the proposed distance between the roadbed and the nearest refinery operations that store and transfer light petroleum products and gases is not sufficient, the project may need to include the relocation of some or all of these refinery storage and transfer operations and associated equipment or other appropriate mitigation measures.

Project Severance Considerations

The proposed project will sever a portion of SOPUS property in Section 33 along the Kern River. This area includes one of the refinery's groundwater production wells and associated piping, instrumentation, and electrical systems. The proposed project will need to provide vehicle access to this area within SOPUS property or relocate this water production well and associated systems. If the water production well is relocated and vehicle access is not provided, the proposed project will need to include compensation for the remaining SOPUS land on the south side of the project right-of-way.

The proposed project will also sever a portion of SOPUS property in Section 27 near the southern end of Mohawk Street to accommodate an interchange between the proposed expressway and Mohawk Street. SOPUS staff is currently working with City of Bakersfield staff to develop a more detailed road alignment and project plan for this area and will initiate further discussion about severance considerations for both areas in the near future.

Project Construction Considerations

Petroleum refining operations have existed in the referenced sections since the mid-thirties. Previous refinery operators used current refinery property for the storage and disposal of refinery wastes and other residual materials. All known areas of such storage and disposal practices have been assessed and remediated as required. However, unknown areas of such practices may still exist within the right-of-way of the proposed project. The Tier II study will need to consider the possible existence of such materials within the right-of-way of the proposed project. The project will need to include contingencies for the handling and disposal of such materials and affected soil if they are encountered during the construction of the proposed project.

The referenced sections also include extensive crude oil production operations, crude oil gathering and transportation pipelines, petroleum product pipelines, and natural gas pipelines. Both active and inactive pipelines exist in these areas. SOPUS or associated companies own and operate some, but not all of the pipeline facilities that may be affected by the proposed project. The Tier II study will need to consider the existence of these pipelines and further work to identify and provide appropriate mitigation measures for these pipelines during the construction of the proposed project.

The proposed alignment for the subject project will destroy several groundwater monitoring wells within SOPUS property. These monitoring wells will need to be replaced at appropriate nearby locations in order to provide adequate groundwater monitoring data for the southern portion of the Shell Bakersfield Refinery.

Shell Oil Products US appreciates this opportunity to participate in the development of this project. If you have any questions, please call me at 661-326-4476 or call Mr. Steven Overman at 661-326-4351.

Sincerely,

Glenn E. Cain

Glenn E. Cain
Site Manager

Attachments: January 29, 1998 Letter from TRMI to Caltrans

C: Shell Legal Services – Nora Brooks
Shell Public Affairs – Cameron Smyth
Klein deNatale and Goldner – Tom Fallgatter
Project Design Consultants – Dave Dmohowski
Kern County Supervisor Barbara Patrick

SDO/

Armand S Abay
Plant Manager
Bakersfield Plant

Texaco Refining &
Marketing Inc

Post Office Box 1476
Bakersfield CA 93302
805 326 4232

January 29, 1998

Michael Donahue
Office of Environmental Management
California Department of Transportation
4545 North West Avenue
Fresno, CA 93705

Subject: **Proposed State Highway 58, Kern River Alignment;**
Draft Environmental Impact Report Comments

Dear Mr. Donahue:

The following is a preliminary set of comments regarding some of the issues that the proposed Highway 58 route generates for Texaco Refining and Marketing Inc., Bakersfield Refinery. Historically, we had met with CalTrans representatives and expressed our desire to work openly and collectively regarding land, environmental, and safety issues associated with the proposed route. We highly encourage CalTrans to integrate the refinery into the process more directly as the issues are potentially significant and could require negotiating additional mitigations that may add to the design and/or cost of the proposed project.

The following comments are not intended to be inclusive. Further, we respectfully request involvement in this process of finalizing the EIR.

1. The proposed freeway would bisect the Bakersfield Refinery in an East/West direction between the tank farm and the Kern River. This would isolate Texaco's property on the South side of the freeway without any consideration for access or existing utilities. One of the Bakersfield Refinery's groundwater production wells, Water Well No. 8, is located near the Southern edge of Texaco property along the Kern River. This well is the Refinery's primary potable water supply well and one of several utility water supply wells; it is also the Refinery's most productive groundwater well. The freeway would isolate this well and destroy the existing water delivery line to the Refinery. As mitigation measures, the freeway project must provide an access road for refinery staff to the remaining southern property and the production well. The freeway project must also provide a conduit and a new water delivery line beneath the freeway.

Alternatively, additional mitigation measures may include the abandonment of the existing well and drill a new well accessing the existing aquifer. Additionally, the relocation of the well will require removing and replacing sections of the water transfer pipe.

2. Several crude oil pipelines and natural gas lines enter the Bakersfield Refinery from the East and the West. The proposed freeway route and nearby interchanges may interfere with the operation of these pipelines. As mitigation measures, the freeway project must relocate any pipeline that may be affected by the freeway construction project and the Mohawk interchange and Coffee Road interchange.

3. The southern portion of Texaco's property between the tank farm and the Kern River offers the necessary real estate and several opportunities for future wastewater treatment and disposal mechanisms. Texaco would like to maintain these options to support future expansion, wastewater quality improvements, and ecological improvements. The freeway project would eliminate these options from further consideration without providing any effective mitigation measures.

4. The proposed freeway project includes the construction of a large storm water retention and percolation basin in an area North of the freeway and located in an area currently occupied by Tosco's former wastewater percolation ponds. The proposed storm water retention basin would collect all storm water from all freeway property from the Mohawk interchange to the Coffee Road interchange. The EIR does not consider the estimated storm water quantity produced by a 25-year storm event or the estimated size of the required retention basin. Further, the EIR does not mention the consequences of such a retention and recharge basin on the local groundwater gradient and its potential effects on the Bakersfield Refinery's existing contaminant and remediation efforts. In general, the hydrogeologic effect of this basin would have negative consequences for any existing subsurface contamination that is not directly North of the proposed basin location. Infiltration in this area would potentially mobilize any subsurface contamination that may exist on the East, South, and West sides of the basin to off-site locations, including areas beneath the Kern River.

5. Waste Pile, Landfill

The proposed Kern River alignment crosses Tosco's former waste pile at the Southeastern boundary of the Area 2 refinery. This was a storage area for coke. The characteristics and ultimate disposition of the waste pile has not been determined. The depth to water in this area is approximately 40 feet below ground surface. The ground water flow direction varies in this area from Southwest to Northwest to North depending upon the status of the Kern River. Chromium has been detected at a level slightly above background levels in one near-surface sample. The potential exists for exposure of previously undetected metals contamination, TPH, or BTEX contamination if this soil is disturbed significantly as it would be in a freeway construction effort. The highest risk with metal contamination in the soil is the potential for it to become airborne from events such as construction dust and wind storms. Additionally, use of this area for a water collection basin is inadvisable due to the potential for promotion of contaminant migration into the shallow aquifer.

6. Harvest Ponds/Emergency Ponds

The proposed Kern River alignment crosses Tosco's former Harvest/Emergency Ponds, which are located in the Southwest corner of the Area 2 refinery. It would also cross a former drainage ditch that once drained storm water and wastewater from the refinery. After purchasing the former Tosco refinery in 1986, Texaco removed and cleaned these ponds under the direction of the RWQCB and DTSC to acceptable closure standards. The harvest ponds consist of double lined chlorinated polyethylene (CPE) liners with a concrete base and were constructed in 1980. The ponds had a leachate recovery system (LCRS). The emergency pond was constructed with a single 30 mil CPE liner and a LCRS constructed in the soil below. Waste stream for the Harvest Ponds included Coke Scrubber, SO2, caustic scrubber wastewater, side stream softener wastewater (designated waste). The Harvest/emergency pond had a waste stream of storm water, surface runoff, and possible overflow from Harvest ponds.

Several groundwater monitoring wells still exist in this area. The ground water flow in the area ranges from West to Northwest and varies in depths at around 40 to 60 feet. Analyses indicate that no soil impact has occurred in this area. Groundwater analyses has indicated some low concentrations (just below state MCLs) of volatiles such as benzene and toluene. Some metals have been detected at concentrations just above state MCL's. Freeway construction in this area would potentially disturb any undetected contamination that might exist from refinery or other oil field operations. The most potentially mobile contamination in this area would be residual metals that could become airborne and be ingested by construction workers during construction and/or passing motorists during a wind storm.

7. The proposed freeway would interfere with the refinery's future options for groundwater monitoring, groundwater barriers, or groundwater recovery and treatment efforts that may be necessary to remediate subsurface contamination or prevent off-site migration. So far, Texaco's proactive monitoring and remediation efforts have contained contamination on-site and prevented its migration to the South and Southwest toward the Kern River, generally in the downgradient direction from the refinery. The proposed freeway would place a barrier to potential remediation or groundwater control actions that may be necessary in the future. As mitigation, the freeway project should include the installation of several additional and nested groundwater monitoring wells in the remaining portions of Texaco property South of the proposed freeway, one or more groundwater recovery wells, and evaluate and consider the potential installation of biological or physical groundwater barriers to prevent the potential Southward or Southeastward migration of contamination in the future.

8. CalTrans is encouraged to review and integrate an analysis of TRMI Bakersfield Refinery's publicly available RMPP. The EIR does not appear to address the potential risk issues and offer proposed mitigations. Additionally, the TRMI Bakersfield Refinery is initiating the Federally mandated Risk Management Plan and requests ongoing dialogue, with the potential purview of confidential business information privileges, to discuss emerging modeling results and the potential for consideration of additional mitigation measures as a result of these efforts.

9. Affected Environment; Section 3.2.7 Air Quality

In July, 1997, EPA revised the national air quality standards for ozone and particulate matter. No mention of the revised standards are mentioned in the report. A brief summary is listed below:

EPA is phasing out and replacing the previous 1-hour primary ozone standard (health-based) with a new 8-hour standard. In establishing the 8-hour standard, EPA is setting the standard at 0.08 parts per million (ppm) and defines the new standard as a "concentration-based" form, specifically the 3-year average of the annual 4th-highest daily maximum 8-hour ozone concentration.

EPA also revised the primary (health-based) PM standards by adding a new annual PM2.5 standard set at 15 micrograms per cubic meter (µg/m3) and a new 24-hour PM2.5 standard set at 65 µg/m3. EPA is retaining the annual PM10 standard of 50 µg/m3 and adjusting the PM10 24-hour standard of 150 µg/m3 by changing the form of the standard.

Construction of the Route 58 Freeway project is estimated to occur between 2009 and 2014. Attainment of the new ambient air quality standards is expected to be attained in this time

period. Areas would be designated as nonattainment for the 8-hour standard by 2000 and would submit their nonattainment SIPs by 2003, have up to 10 years plus two 1-year extensions from the date of designation for areas to attain the revised NAAQS.

The EIR report should incorporate into this section a discussion of the revised NAAQS standards and a timeline for implementation of these standards.

10. Environmental Consequences and Mitigation Measures; Section 4.2.7 Air Quality

Although local carbon monoxide air quality impacts were estimated using the CALINE4 model, similar analysis were not conducted for ozone and particulate matter. Although the project area is a non-attainment area for carbon monoxide, re-designation to an attainment area is imminent. The report over-simplifies the impact of the air emissions by stating that the proposed emissions are simply in the SIP budgets. The established SIP budgets do not account for the revised national ambient ozone and particulate matter standards. Further, to ensure future attainment of the air quality standards, analysis of the projected increase of emissions due to the Route 58 Project with existing stationary sources emissions must be conducted to determine if attainment of the ozone and particulate matter standards will be impacted.

It is recommended that the EIR conduct modeling studies on the potential impact of the proposed project on attainment of both the existing and revised NAAQS. The EIR should also recognize that the impact of this assessment should be on-going due to the uncertainties of the Ozone and PM SIP, uncertainties in the project emission inventories, and the advancement of modeling technology. The detailed modeling protocol should be available for public comment before the modeling is conducted. Finally, attempting to resolve and conclude this matter with the future regulatory, technological and actual air quality status at the time of construction seems to be beyond current available technical information and technologies. It is recommended that the final determinations regarding these environmental impacts and any potential mitigation's be reserved until much closer to actual construction of the proposed freeway.

TRMI Bakersfield Refinery appreciates the opportunity to participate in this effort. If you would like additional information or can provide us further opportunities for dialog on these important matters, please contact Anita M. Burke, Manager of EH&S at (805) 326-4265.

Sincerely,

Armand S. Abay

AMB/cb

cc: Bakersfield City Planning Commission
Public Works Director Rojas - City of Bakersfield
Supervisor Barbara Patrick
Senator Ken Maddy
Assemblyman Roy Ashburn
Mary C. Frederick, Department of Transportation
Greg Hardy, PGA

STATE OF CALIFORNIA -- THE RESOURCES AGENCY

GRAY DAVIS, *Governor*

THE RECLAMATION BOARD
1416 NINTH STREET, ROOM 1601
SACRAMENTO, CA 95814
(916) 653-5434 FAX: (916) 653-5805
Permits: (916) 653-5726 FAX: (916) 653-5805

December 4, 2002

Mark Gauthier
City of Bakersfield
1715 Chester Avenue
Bakersfield, California 93301

RECEIVED
DEC 05 2002
CITY OF BAKERSFIELD
PLANNING DEPARTMENT

Staff for The Department of Water Resources has reviewed State Clearinghouse Document 2002121014, Westside Parkway Project and provides the following comments:

Portions of your project encroach within Kern River Designated Floodway, over which The Reclamation Board has jurisdiction and exercises authority. The California Code of Regulations, Title 23, Waters, Article 3, require that a Board permit be obtained before the start of any work including excavation and construction activities where The Reclamation Board has jurisdiction.

Section 8(b)(2) of the Regulations states that applications for permits submitted to the Board must include a completed environmental questionnaire that accompanies the application and a copy of any environmental documents if they are prepared for the project. For any foreseeable significant environmental impacts, mitigation for such impacts shall be proposed. Applications are reviewed for compliance with the California Environmental Quality Act.

Section 8(b)(4) of the Regulations states that additional information, such as geotechnical exploration, soil testing, hydraulic or sediment transport studies, biological surveys, environmental surveys and other analyses may be required at any time prior to Board action on the application.

If you have any questions, please contact me at (916) 653-0402, or Steve Dawson at (916) 653-9898.

Sincerely,

Sterling Sorenson
Water Resources Engineering Associate
Floodway Protection Section

cc: Richard Marshall, Chief
Flood Project Inspection Section
3310 El Camino Avenue, Room B-20
Sacramento CA 95821

California Regional Water Quality Control Board

Central Valley Region

Robert Schneider, Chair

Winston H. Hickox
Secretary for Environmental Protection

Gray Davis
Governor

Fresno Branch Office
Internet Address: http://www.swrcb.ca.gov/~rwqcb5
1685 E Street, Fresno, California 93706-2020
Phone (559) 445-5116 • FAX (559) 445-5910

24 December 2002

Marc Gauthier, Principal Planner
Planning Department
City of Bakersfield
1715 Chester Avenue
Bakersfield, CA 93301

REQUEST FOR COMMENTS ON NOTICE OF PREPARATION OF DRAFT ENVIRONMENTAL IMPACT REPORT, WESTSIDE PARKWAY PROJECT, KERN COUNTY, SCH NO. 2002121014

Your request for comments on the Notice of Preparation for the subject project was received on 3 December 2002. The City is preparing a draft environmental impact report for the proposed Westside Parkway Project, which includes constructing a 13.0-kilometer east-west transportation facility between Heath Road and State Route 99 in the City of Bakersfield.

As construction associated with the project will disturb more than five acres, compliance with the National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002 for Discharges of Storm Water Associated With Construction Activity will be required. Before construction begins, the City must submit an NOI to comply with the permit to the State Water Resources Control Board and prepare a SWPPP. The SWPPP must contain at a minimum all elements listed in section A of the General Permit, including descriptions of measures taken to prevent or eliminate unauthorized non-storm water discharges and both temporary and permanent best management practices (BMPs) that will be implemented to prevent construction-related pollutants from discharging with storm water into waters of the United States.

Additionally, as storm water discharges from the proposed project may be conveyed through the City of Bakersfield and County of Kern municipal separate storm sewer system (MS4), compliance with the City/ County Storm Water Management Plan (SWMP) is required. The SWMP requires implementation of temporary and permanent BMPs during activities such as significant redevelopment projects, and maintenance of roads, streets and highways.

If the project will involve the discharge of dredged or fill material into navigable waters or wetlands (jurisdictional waters), the City must obtain a permit pursuant to Section 404 of the Clean Water Act from the US Army Corps of Engineers and 401 Water Quality Certification (Certification) from this office. The Regional Board will review your Certification application to ensure the discharge will not violate water quality standards. If aspects of the project will result in a discharge of dredged or fill material into waters, including

wetlands, that are determined by the Corps to be non-jurisdictional, the City will not be required to obtain a Certification, but may be required to submit a report of waste discharge (ROWD) pursuant to California Water Code, Section 13260. The Regional Board will then either prescribe waste discharge requirements (WDRs) or issue a waiver of waste discharge requirements. If WDRs are adopted, they will incorporate measures to mitigate potentially significant impacts to water quality and potential public nuisances.

Thank you for the opportunity to comment on this Notice of Preparation. If you have any questions regarding our comments, please call me at (559) 445-6071.

BRIAN ERLANDSEN
Environmental Scientist

cc: State Clearinghouse

STATE OF CALIFORNIA Gray Davis, Governor

NATIVE AMERICAN HERITAGE
COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
Fax (916) 657-5390

December 20, 2002

Marc Gauthier
City of Bakersfield
1715 Chester Avenue
Bakersfield, CA 93301

RE: SCH # 2002121014 – Westside Parkway Project, Bakersfield, Kern

Dear Mr. Gauthier:

I recommend that you consult with the local Native Americans contacts on the attached list for this project. They may be able to provide input concerning the project site. It is with the understanding that the list is to be used only to determine possible areas of cultural sensitivity. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. If a response has not been received within two weeks of notification, the Commission requests that you follow up with a telephone call to ensure that the project information has been received. If you receive notification of change of addresses and phone numbers from any these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information.

Lack of surface evidence of archeological resources does not preclude the existence of archeological resources. Lead agencies should include provisions for accidentally discovered archeological resources during construction per California Environmental Quality Act (CEQA) §15064.5 (f). Health and Safety Code §7050.5 and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery and should be included in all environmental documents.

If you have any questions, please contact me at (916) 653-4040.

Sincerely,

Rob Wood

Rob Wood
Environmental Specialist III

CC: State Clearinghouse

NATIVE AMERICAN CONTACTS
Kern County
December 20, 2002

Santa Rosa Rancheria
Mike Sisco, Chairperson
P.O. Box 8
Lemoore , CA 93245
(559) 924-1278
(559) 924-3583 Fax

Tache
Tachi
Yokut

Eugene Albitre
3401 Aslin Street
Bakerfield , CA 93312
(805) 589-3181

Diegueno

Tule River Indian Tribe
Duane Garfield, Chairperson
P.O. Box 589
Porterville , CA 93258
(559) 781-4271
(559) 781-4610 FAX

Yokut

Tejon Indian Tribe
Kathy Morgan
2234 4th Street
Wasco , CA 93280
(661) 868-6434 (Work)

Yowlumne
Kitanemuk

Kern Valley Indian Council
Ron Wermuth
P.O. Box 168
Kernville , CA 93238
(760) 376-4240 - Home
(916) 802-4720- Cell Work
(916) 717-1176 - Cell
(916) 445-7243 -Office
Email: rwermuth@water.ca.gov

Tubatulabal
Kawaiisu
Koso
Yokut

Kern Valley Indian Council
Robert Robinson, Chairperson
P.O. 401
Weldon , CA 93283
(760) 873-7493

Tubatulabal
Kawaiisu
Koso
Yokut

Tinoqui-Chalola Council of Kitanemuk & Yowlumne
Delia Dominguez
981 N. Virginia
Covina , CA 91722
(626) 339-6785

Yowlumne
Kitanemuk

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regards to the cultural assessmet for the proposed SCH# 2002121014 - Westside Parkway Project, Bakersfield, Kern County.

WESTSIDE PARKWAY

A NOTE FROM...

Hi Marc.
Hope your holidays were wonderful
Barbara

Please use this sheet to provide ... Parkway project.

- Do you know of environmental ... ed by implementation of the project?
- What specific environmental st... conduct to support the environmental document?
- Are you aware of any issues that could impact the scope or schedule of the environmental studies?

Your input is important and will be considered as the environmental documentation is developed for the project.

Tier I did not address vehicle containment and fog through the Goose Lake Slough. Tule fog is at its worse through moist areas like agriculture. Dense fog conditions will always be a problem through this area. Since the road curves to the south, how vehicles stay on the road must be addressed. A contained system for run off is important. Lighting that also works in foggy conditions should be developed. Depending on the elevation of the road through the Slough, sound walls might be needed. Again is there a way to keep trucks off this roadway? Especially those contain. toxic materials. A spill would be derasting

(If necessary, please continue your input on the reverse side of this paper.)

To be added to the Westside Parkway project mailing list, please fill out your name and address.

Name Barbara Lomas Phone/Fax (661) 589 8554 - fax-5881921

Organization/Company DRACC Del Rio Area Concerned Citizens

Address 14309 Tierra Blanca Ave

City/State/Zip Bakersfield Ca 93312 BarbaraLomas@bak.rr.com

Mail or e-mail your input by 3 January 2003 to:
Marc Gauthier, Principal Planner, City of Bakersfield Development Services Department
1715 Chester Avenue, Bakersfield, CA 93301
Mgauthie@ci.bakersfield.ca.us

Department of Toxic Substances Control

Edwin F. Lowry, Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Winston H. Hickox
Agency Secretary
California Environmental
Protection Agency

Gray Davis
Governor

RECEIVED
DEC 2 2 2002
CITY OF BAKERSFIELD
PLANNING DEPARTMENT

December 17, 2002

Mr. Mark Gauthier
City of Bakersfield
1715 Chester Avenue
Bakersfield, California 93301

NOTICE OF PREPARATION FOR THE WESTSIDE PARKWAY PROJECT DRAFT ENVIRONMENTAL IMPACT REPORT (SCH# 2002121014)

Dear Mr. Gauthier:

The Department of Toxic Substances Control (DTSC) has reviewed the document referenced above and has the following comment. After reviewing our hazardous substances site data base (Calsites), we have identified sites in the Bakersfield area (list enclosed). DTSC has not done an evaluation to determine whether any of these sites could impact the subject project. DTSC recommends that the draft Environmental Impact Report (EIR) include a discussion of all hazardous substances release sites that may affect the project.

If you have any questions, please contact me by email at tmiles@dtsc.ca.gov or telephone at (916) 255-3710.

Sincerely,

Tim Miles

Tim Miles
Hazardous Substances Scientist

Enclosure

cc: See next page.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at www.dtsc.ca.gov.

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cc: Planning & Environmental Analysis Section (PEAS)
CEQA Tracking Center
1001 "I" Street, Floor 22
P.O. Box 806
Sacramento, California 95812-0806

State Clearinghouse (SCH)
Office of Planning and Research
1400 10th Street, Room 121
Sacramento, California 95814-0613

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXICS SUBSTANCES CONTROL
CALSITES

SHORT SUMMARY REPORT

R	CO	SITE NAME	SITE ADDRESS	SITE CITY	ZIP CODE	IDNUM	STATUS
1	15	GARRIOTT CROP DUSTERS	2010 SOUTH UNION AVENUE	BAKERSFIELD	93307	15070007	REFRW
1	15	VENTURA WEST INCORPORATED	TANK FARM AND BEECH ROAD	BAKERSFIELD	93309	15130018	REFOA
1	15	GOLDEN STATE METALS	2000 EAST BRUNDAGE LANE	BAKERSFIELD	93304	15170001	REFRC
1	15	MAGNA CORPORATION	PACHECO RD APPROX 2000FT E OF GOSFORD RD	BAKERSFIELD	93308	15280004	REFRC
1	15	NALCO CHEMICAL CO AG PRODUCTS DEPT	4851 STINE RD	BAKERSFIELD	93309	15280012	REFRW
1	15	BC CHEMICALS	1511 SOUTH UNION AVENUE	BAKERSFIELD	93307	15280041	REFOA
1	15	KEV-KEM, INC	2001 WEDDING LANE	BAKERSFIELD	93308	15280055	REFOA
1	15	BAKERSFIELD AG-CHEM	GOLDEN STATE HWY & SEVENTH STANDARD RD	BAKERSFIELD	93312	15280064	BKLG
1	15	LYCO CHEMICAL COMPANY	1301 BERNARD STREET	BAKERSFIELD	93305	15280165	NFA
1	15	SILVERTON SCIENTIFIC CO	210 23RD ST	BAKERSFIELD	93301	15280180	REFOA
1	15	SUNLAND IND INC #1	EDISON HWY	BAKERSFIELD	93307	15280186	NFA
1	15	CONTINENTAL CARBON CO	STOCKDALE HIGHWAY	BAKERSFIELD	93307	15280242	PEAR
1	15	DOWELL DIV OF DOW CHEMICALS	6120 SNOW RD	BAKERSFIELD	93308	15280249	REFOA
1	15	PUREGRO COMPANY	KIMBERLINA ROAD AND HWY 99	BAKERSFIELD	93308	15280251	VCP
1	15	TOSCO CORPORATION - BAKERSFIELD REFINERY	6500 REFINERY AVENUE	BAKERSFIELD	93308	15290005	REFRW
1	15	KERN OIL & REFINING COMPANY	7724 PANAMA LANE	BAKERSFIELD	93301	15290007	REFRW
1	15	SUNLAND REFINING CORPORATION	2152 COFFEE ROAD	BAKERSFIELD	93308	15290009	REFRW
1	15	CHEVRON USA, INC BAKERSFIELD REFINERY	E OF XING OF CHINA GRADE LOOP & MANOR DR	BAKERSFIELD	93308	15290010	REFOA
1	15	TEXACO INC	6451 ROSEDALE HIGHWAY	BAKERSFIELD	93308	15290031	REFRW
1	15	PHILLIPS PETROLEUM CO	3120 CHESTER AVE	BAKERSFIELD	93301	15290035	REFRW
1	15	KERN BLUFF OIL FIELD	TOWNSHIP 29 SOUTH, RANGE 28 & 29 EAST	BAKERSFIELD	93303	15290059	REFRW
1	15	PLEITO OIL FIELD	TOWNSHIP 11 NORTH, RANGE 21 WEST, SEC 35	BAKERSFIELD	93303	15290060	REFRW
1	15	LOS LOBOS OIL FIELD	TOWNSHIP 11 N, RANGE 22 W, SECT 19,20,21	BAKERSFIELD	93303	15290066	REFRW
1	15	PIONEER OIL FIELD	TOWNSHIP 11 NORTH, RANGE 22 WEST, SEC 32	BAKERSFIELD	93303	15290067	REFRW
1	15	BAKERSFIELD PLATING WORKS	527 EAST 19TH	BAKERSFIELD	93305	15340012	REFOA
1	15	MONGER WELDING AND MANUFACTURING, INC	234 MOUNT VERNON AVENUE	BAKERSFIELD	93307	15340021	REFOA
1	15	SAN JOAQUIN DRUM COMPANY	3930 GILMORE AVENUE	BAKERSFIELD	93308	15340023	AWP
1	15	KERN BATTERY MANUFACTURING	731 21ST	BAKERSFIELD	93301	15360005	REFOA
1	15	VALLEY PROPELLER SERVICE	300 WATTS DRIVE	BAKERSFIELD	93307	15370001	PEAR
1	15	ASSURED TRANSPORTATION SITE	3228 GIBSON ST	BAKERSFIELD	93308	15420001	AWP
1	15	PG&E BAKERSFIELD SERVICE CENTER	4101 WIBLE ROAD	BAKERSFIELD	93309	15490002	NFA
1	15	ROUND MOUNTAIN DISPOSAL	ROUND MOUNTAIN ROAD	BAKERSFIELD	93308	15490003	REFRW
1	15	WITCO ACID SLUDGE DISPOSAL SITE	CORNER OF PETROL ROAD AND AIRPORT DRIVE	BAKERSFIELD	93308	15490008	REFRC
1	15	KERN COUNTY LANDFILL	ALFRED HARELL HIGHWAY, MCMINNIS EXIT	BAKERSFIELD	93306	15490013	REFOA
1	15	PG&E MANUFACTURED GAS PLANT SQ-FK-BAK	20TH STREET BETWEEN P & Q STREETS	BAKERSFIELD	93301	15490018	PEAR
1	15	ENVIRONMENTAL PROTECTION CORP-EASTSIDE D	ROUND MOUNTAIN ROAD	BAKERSFIELD	93301	15490019	AWP
1	15	KEYSTONE RESOURCES, INC.	201 INDUSTRIAL STREET	BAKERSFIELD	93307	15490020	REFOA
1	15	K & D SALVAGE	600 SOUTH UNION AVENUE	BAKERSFIELD	93307	15500001	AWP
1	15	BAKERSFIELD REGIONAL GROUNDWATER SITE	BAKERSFIELD AREA	BAKERSFIELD	93302	15990001	REFRW
1	16	CHINA GRADE SANITARY LANDFILL	CHINA GRADE LOOP	BAKERSFIELD	93301	16490006	REFRW
1	15	PANORAMA BURN DUMP SITE	3500 THRU 3908 PANORAMA DRIVE	BAKERSFIELD	93306	15880001	CERT
1	15	KERN WATER BANK AUTHORITY	I-5 AND HWY 43	BAKERSFIELD	93380	15070031	CERT
1	15	WILLIAM B. BIMAT ELEMENTARY	RIVERLAKES DRIVE/NORTHSHORE DRIVE	BAKERSFIELD	93312	15010007	NFA
1	15	BERKSHIRE ROAD SCHOOL SITE	BERKSHIRE ROAD	BAKERSFIELD	93307	15010008	NA
1	15	SANDSTONE SCHOOL SITE	300 E TRUXTUN AVE	BAKERSFIELD	93305	15390001	NFA
1	15	HOSKINGS AVENUE HIGH SCHOOL (PROP)	HOSKINGS AVENUE/SOUTH UNION AVENUE	BAKERSFIELD	93309	15010011	NFA

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXICS SUBSTANCES CONTROL
CALSITES

SHORT SUMMARY REPORT

R	CO	SITE NAME	SITE ADDRESS	SITE CITY	ZIP CODE	IDNUM	STATUS
1	15	24TH & R SCHOOL SITE	24TH STEET/R STREET/KERN ISLAND CANAL	BAKERSFIELD	93301	15390002	PEAR
1	15	DONALD E. SUBURU SCHOOL	7315 HARRIS RD	BAKERSFIELD	93313	15820001	NFA
1	15	ROSEDALE ELEMENTARY SCHOOL #8	OLD FARM ROAD/YEARLING AVENUE	BAKERSFIELD	93312	15010013	NFA
1	15	KERN COUNTY GUN CLUB	2818 CHINA GRADE LOOP	BAKERSFIELD	93308	15860001	REFOA
2	15	BENHAM AND JOHNSON	340 DANIELS LN	BAKERSFIELD	93307	15280253	BKLG
1	15	BERKSHIRE ROAD SITE	AKERS ROAD/BERKSHIRE ROAD	BAKERSFIELD	93313	15010014	NFA
1	15	HOSKING AVENUE SITE	AKERS ROAD/HOSKING AVENUE	BAKERSFIELD	93313	15010015	NFA
1	15	SCHOOL SITE #9	VERDUGO LANE/BRIMHALL	BAKERSFIELD	93312	15010016	NFA
1	15	30-ACRE SCHOOL SITE	SHAFTER ROAD/SOUTH H STREET	BAKERSFIELD	93313	15010017	NFA
1	15	CARTER TRACT SITE	MORAGA COURT/VICTOR STREET	BAKERSFIELD	93308	15010018	VCP
1	15	VALLEY PERFORATING COMPANY	3201 GULF STREET	BAKERSFIELD	93308	15330013	REFRW
1	15	SHIRLEY LANE PROPERTY	SOUTH FAIRFAX ROAD/SHIRLEY LANE	BAKERSFIELD	93307	15010021	NFA
1	15	HIGH SCHOOL NO. 6	ALLEN ROAD/KRATZMEYER ROAD	BAKERSFIELD	93312	15010025	VCP

TOTAL NUMBER OF RECORDS FOR THIS REPORT = 59

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO, CALIFORNIA 95814-2922

REPLY TO
ATTENTION OF

December 11, 2002

RECEIVED
DEC 18 2002
PLANNING

Regulatory Branch (200200768)

Marc Gauthier
City of Bakersfield Development Services Department
1715 Chester Avenue
Bakersfield, California 93301

Dear Mr. Gauthier:

This letter concerns your proposed Westside Parkway. Most of this project is located north of the Kern River in the City of Bakersfield, Kern County, California.

The Corps of Engineers' jurisdiction within the study area is under the authority of Section 404 of the Clean Water Act for the discharge of dredged or fill material into waters of the United States. Waters of the United States include, but are not limited to, rivers, perennial or intermittent streams, lakes, ponds, wetlands, vernal pools, marshes, wet meadows, and seeps. Project features that result in the discharge of dredged or fill material into waters of the United States will require Department of the Army authorization prior to starting work.

After reviewing the submitted information, it appears project implementation may require Department of the Army authorization. Construction of a parkway and its associated infrastructure are examples of work that may result in the discharge of dredged or fill material into waters of the United States and would require approval of the District Engineer prior to starting work.

Projects considered should include alternatives that avoid impacts to wetlands or other waters of the United States. Every effort should be made to avoid project features which require the discharge of dredged or fill material into waters of the United States. In the event it can be clearly demonstrated there are no practicable alternatives to filling waters of the United States, mitigation plans should be developed to compensate for the unavoidable losses resulting from project implementation.

Any activity which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act, or which will destroy or adversely modify the critical habitat of such species may require consultation with the United States Fish and Wildlife Service or the National Marine Fisheries Service. Any activity which may affect historic properties listed, or eligible for listing, in the National Register of Historic Places must satisfy the requirements of the National Historic Preservation Act.

Please reference identification number 200200768 in any future correspondence concerning this project. If you have any questions, please write to Mr. Matt Hirkala at the letterhead address, or email Matthew.J.Hirkala@usace.army.mil, or telephone 916-557-5263.

Sincerely,

Nancy A. Haley

Nancy A. Haley
Chief, San Joaquin Valley Office

North Bakersfield Recreation & Park District
405 Galaxy Avenue, Bakersfield, California 93308 (661) 392-2000

December 12, 2002

RECEIVED
DEC 2002
CITY OF BAKERSFIELD
PLANNING DEPARTMENT

Mr. Marc Gauthier, Principal Planner
City of Bakersfield Development Services Department
1715 Chester Avenue
Bakersfield, California 93301

SUBJECT: Westside Parkway

Dear Mr. Gauthier:

North Bakersfield Recreation and Park District has two park sites very close to the Westside Parkway. Mondavi Park abuts the original proposed parkway alignment. The plan being circulated is of such a scale that it can't be determined if in fact the parkway is the same as the previous proposed Kern River Freeway. Please inform us that the alignment will be consistent with the Kern River Freeway alignment.

Will the environmental document address the safety of children playing in the park, since it may be impacted by vehicular traffic (i.e., vehicles that may veer off the road)? Will the parkway have sufficient barriers to stop vehicles? (A copy of Mondavi Park plan is enclosed.)

It appears the alignment is a considerable distance south of Liberty Park, so there shouldn't be much impact to that site.

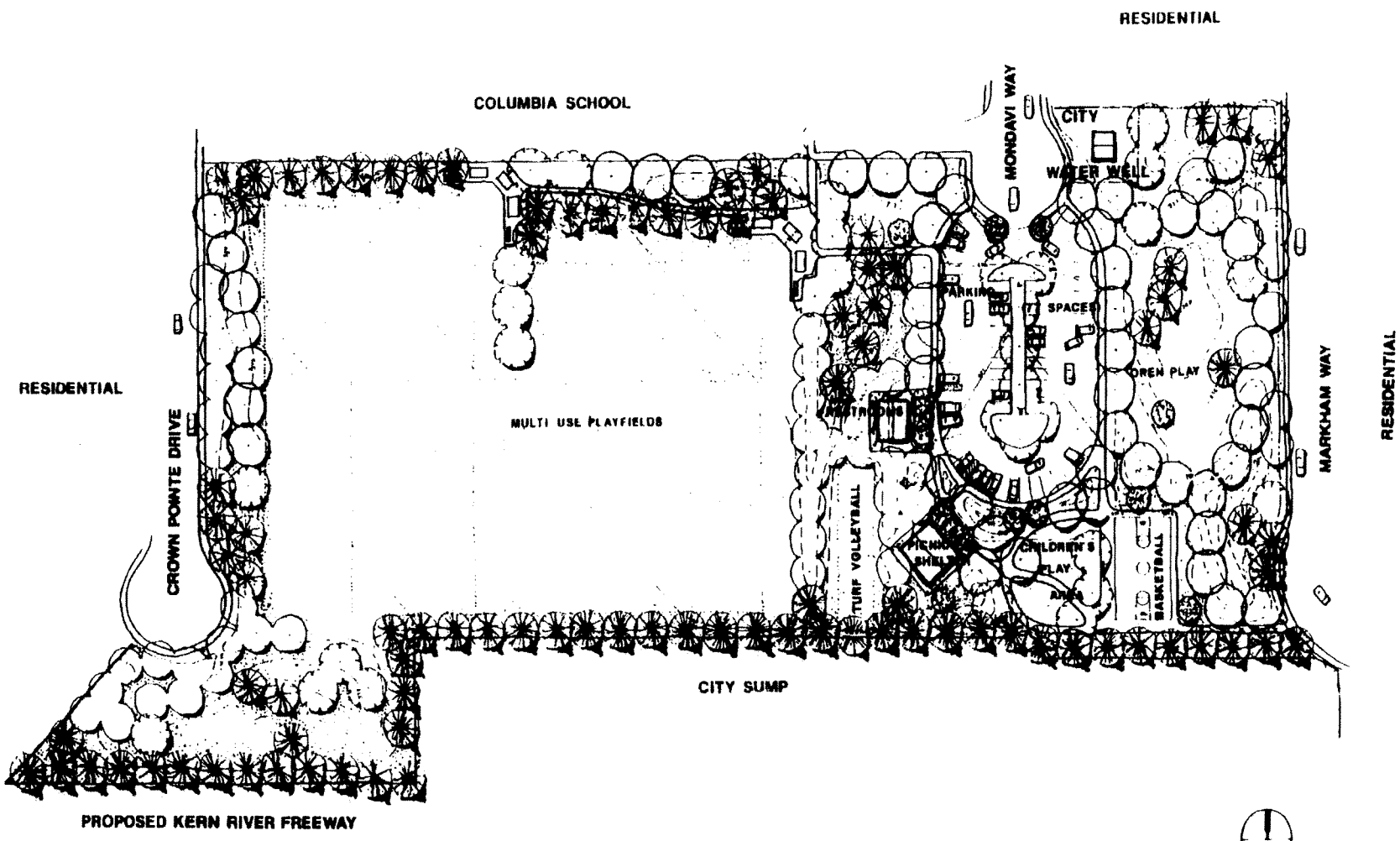
Sincerely,

Colon G. Bywater

Colon G. Bywater
Planning and Construction Director

CGB:bc

Enclosure



NORTH BAKERSFIELD RECREATION AND PARK DISTRICT
400 GALAXY AVE. BAKERSFIELD, CA. 93308 (805) 393-2000

PROJECT MONDAVI PARK SITE DEVELOPMENT PLAN

SHEET TITLE

DRAWN BY

DATE

SHEET

RECEIVED
DEC 2002
CITY OF BAKERSFIELD
PLANNING DEPARTMENT

Marc Gauthier
Principal Planner
City of Bakersfield
Development Services Dept.

December 5, 2002

RE: Westside Parkway

Dear Sir,

Thank you for the opportunity to comment on the proposed Westside Parkway. As usual,regardless of who opposes this parkway fiasco, no one has ever seen,in ANY form, a EIR report or EIS document. That statement holds true for the Taxpayer at least. If you or the other planners in your office have read such a document, then it has been in secret meetings and never revealed to the citizens of Bakersfield.

Additionally, we have NEVER seen a document regarding protection of
endangered plants and species,as per Federal guidelines. If such papers are indeed in your hands, where are they for public scrutiny? Some of the people concerned have taken time to note that Federal Laws restrict building ANY paved roadway through or near a river flood plain. And that Sir, is what exists regarding crossing over the Kern River or building road ways near it.

Despite the horrendous state of our existing roadways, no concern is apparently being given them, and new construction is now the watchword. I am not being smart assed when I say that our roads have been totally neglected for the want of finances to repair them. A case in point is the patch work on Stockdale Highway , Brimhall Rd. and Rosedale Highway. Specifically Stockdale from Coffee Rd west has not even been chuckhole patched in the last 5 years.. Need proof? Come out here and take a personal fact finding look. Keep your eyes open , in fact, after crossing Calloway Rd. at the Riverwalk Building on the north east corner.

I for one Mr. Gauthier, sincerely question the validity of spending large sums of road money to build new where the old roads have been totally neglected by our city..... As you have probably deducted by now

I am in opposition to building this Westside Parkway. (aka Hwy 58 Freeway).....

As stated, there always seems to be a drumbeat to spend hugh sums for new roads, when we will not maintain the old ones. Is it that we are a throw-away society?? I would hope not!

As a member of the citizen's group C.L.E.A.N., we hold MANY documents proving why our opposition will NOT cease! KERNCOG and the City of Bakersfield have never once proved that this "Parkway" will aleave ANY traffic congestion what so ever. Prove to me that dumping westbound traffic onto Stockdale @ Heath Rd. would stop another bottle-neck? Show me where Eastbound traffic dumped off @ Truxtun and Oak will help our gridlock? What we have here is the, to coin a phrase" a Freeway (parkway) that starts nowhere and ends nowhere.

No intelligent thought is displayed by the "experts" who have blown millions of dollars in "consulting fees" to shove this "parkway" concept onto the Taxpayer shoulders. Hell, man look at Highway 46 west of Wasco. Also known as the killer road to the coast. That fix is slated for 2006 or 2008 fiscal year. IF THEN!!!!

Let me cite one more incidence of CALTRANS mismanagement and screwup. Take a look at the project known as the Century Freeway in East Los Angeles. On that "Freeway", a six mile area was built over a known water aquifer. Consequently the billion dollar roadway started to buckle and heave. Caltrans spent an additional 66 million in the failed attempt to repair their blunder. (it didn't cure the problem at all) The Fix??? Was to build a 105 million water treatment plant nearby to keep the underground water from getting at the roadbed.... And that Sir is what is going to be attempted locally down the Kern River and across the Goose Lake Slough west of Allen Road. Can you understand our concern ??

Sincerely

Darrel Somers

Darrel Somers
13901 Las Entradas
Bakersfield, Ca. 93312
588-1127

Dear Mr. Gauthier,

December 31, 2002

I am residing at 14415 Via Contento. My backyard faces Renfro Road. I am very concerned about the overpass along Renfro Road that will be put in when the Westside Parkway is built. The main issue is SAFETY! I don't want anyone looking into my backyard. I have two young children. I feel that my family could become an easy target for burglars, sexual offenders, and pedophiles because we are always out back.

The second reason is privacy. In the early morning I like to read the paper and have a hot cup of tea, and even go for a swim. I don't want anyone to see me in my bathing suit or nightgown. I wouldn't feel comfortable to look up and see the early commuters on their way to work.

Please consider the following two options:

Option A: The Parkway would be depressed underneath Renfro Road, but Renfro would remain at grade level which would help prevent people looking into our backyards. This option would also help reduce the noise level of the parkway around surrounding homes.

Option B: Renfro Road would be depressed, but the parkway would remain at grade level which would also help passengers from the parkway from looking into someones backyard.

Could you also consider making the parkway with trees, a bikepath, and landscaping like Truxtun extension? When the parkway is being built, is there a way to reduce the dust/dirt from blowing around so we can minimize breathing harmful spores and dust?

Thank you for your concern,

Julie Trigueiro

Eric and Julie Trigueiro
14415 Via Contento
Bakersfield, CA 93312
589-0343

RECEIVED
JAN - 7 2003
CITY OF BAKERSFIELD
PLANNING DEPARTMENT

RECEIVED
JAN - 2 2002
CITY OF BAKERSFIELD
PLANNING DEPARTMENT

Marc Gauthier
Bakersfield Developmental Services Department
1715 Chester Avenue
Bakersfield, California
93301

Re: Westside Parkway Development

Dear Mr. Gauthier-

As a life-long resident of Bakersfield and one who will use this parkway when it is built, I would like to bring to your consideration these proposals that will greatly benefit how the community embraces this project, its ease of use, and its practicality.

Now I recognize that some of these proposals may not be cost effective, however, I believe these will make it very easy for city-wide residents to connect to and use the Parkway without adding to the already strenuous burden of streets like Truxtun Avenue and Oak Street. Other proposals herein I think will be readily embraced.

First of all, having to travel everyday on the Truxtun Extension myself, I don't understand why this 8-lane Parkway needs to dump onto an already over-burdened 4-lane Truxtun Avenue that will then lead to one of the city's worst intersections, Truxtun and Oak. What I propose is a so-called ***Fingers leading to the Hand*** approach as the Parkway nears downtown.

This where the Parkway can begin to branch off and merge with Truxtun just east of the railroad bridge as well as other surface streets along Oak, particularly 24th Street. It would be especially important to leave a connection for the proposed Centennial Corridor Freeway that will run along the Burlington Northern Santa Fe Railroad. The Parkway must connect with this or it is doomed to be another failure such as Freeways 178 and 58.

I understand it is the designers' intention to avoid a direct connector with Freeway 99. Even without a connector to Freeway 99 for this Parkway to benefit the city and be convenient it needs at least two, and perhaps three, connectors to the downtown area. In addition, a direct connection to Rosedale Highway near State Route 99, in the area between Landco and Gibson, could relieve traffic flow into downtown allowing for access to and from Freeway 99. At the same time, a direct connection to State Route 99 could be made with a restriction on non-residential commercial traffic, should that be desired.

Rosedale Highway at this intersection must be 6-lanes wide to make the flow of traffic on and off this connection feasible. The City should pressure CalTrans to widen Rosedale Highway from 99 all the way to Coffee Road to 6-lanes with long-term plans for Rosedale Highway to be widened to 4-6 lanes out to Allen Road.

As far as the proposed connection of Mohawk Street crossing the Kern River and connecting with Rosedale Highway, what purpose does that serve? There are not enough homes or businesses along this stretch of Rosedale to justify connecting the two parts of Mohawk together. Perhaps the Parkway would be of better service if the North side of Mohawk could be made to merge with Fruitvale Avenue where it can serve residents of the Northwest better as well as the businesses in that area. With this route, city residents seeking a shorter trip home will use a Fruitvale exit rather than bypassing Mohawk and exiting at Coffee Road and creating an even worse traffic situation at the terribly backed-up intersection of Rosedale Highway and Coffee Road.

As I stated earlier, traffic should connect to 24th Street (State Route 178) at Oak. How could this be done? Without tearing out Beach Park and my Grandfather's beloved horse shoe pits, a tunnel can be dug under State Route 99, under the park, and a grand entrance to the Parkway can be constructed on what is now the vacant southeast corner of 24th Street and Oak Street.

Even though this Parkway is designed for city residents west of downtown, it will ultimately be put to use by the residents of Northeast and East Bakersfield. These residents predominately use Highway 178 (and 24th Street) to get to the North and South West, traveling to new businesses and to family and friends. Placing an entrance here would ease traffic flow and divert traffic from a very busy Rosedale Highway.

As far as a tunnel is concerned what better way and location to make a statement that this is a Parkway for all of Bakersfield? A 4-lane tunnel that as it opens up on the west side of Highway 99 will cross the Kern River on a bridge that at its base depicts the way Bakersfield was 150 years ago in the time of Colonel Thomas Baker. Water spilling out of the mountains, tule-reeded ponds, valley oaks, sycamores, cottonwoods, poppies, and even the endangered Bakersfield cactus.

Once the Parkway crosses the river it will be joined up with connectors from Truxtun and the Gibson/Landco area of Rosedale Highway. It will have down its entire length a 12-15 foot wide median that is tree lined with various popular and indigenous trees and plants that the businesses and people of Bakersfield themselves have planted through a sponsorship program. This program can allow for businesses and individuals to place their names in sections of the median that they will pay for the landscaping materials. Their names won't be put on steel signs but rather carved wood or chiseled designs in concrete, rock, or any other material that can be illuminated with landscape lights. For people unable to afford large plots they can plant individual trees that the city will buy or might be donated to plant in either the median or the sides of the parkway.

This median would be raised about three feet above the roadway protected by a creatively designed cement guardrail on each side. The entire north side of the parkway will have a sloping 8-10 foot high berm that will be heavily landscaped to enhance a stunning natural scene and block the view of oil

refineries, rusty storage tanks, and oil wells. The Parkway will have a spectacular view of the Kern River to the south with landscape lighting effects so as to not block one's view, with golden poppies and other bright colored indigenous plants and flowers to symbolize the wealth of the Southwest business district.

As the Parkway passes Coffee Road and goes through residential areas it should be cut below ground level as close to original ground height as possible with the removed dirt making a 8-10 foot high gradually sloped berm on either side of the Parkway to deflect traffic noise. Here, heavy use of trees, plants, and landscape lighting will deflect the noise and provide a pleasant sight that area residents will be sure to appreciate. This should continue west until the Parkway's proposed terminus at Stockdale Highway and Heath Road.

At every on and off ramp, landscaping and artwork should be at the forefront. Art that depicts current and past scenes of Bakersfield and of each particular area's exit can be made on Parkway bridges or walls. Different styles of art can be used, from mosaics, to paintings, to statues, and imprints. This art could be protected from graffiti with a protective coat that will allow for it to be easily removed. Roses and flowers in the school colors of the high schools near the Parkway, including BC and CSUB, can be used year-round, even designs of these school's logos can be made with flowers. Road and exit signs should have a creative logo on them, a creative and pleasing Parkway logo that perhaps a local contest can lead to its creation.

To protect this potentially sensitive environment that the Parkway will travel through, water drainage should not go directly into the river or in areas near prime water recharging areas. In case of wrecks where fuel, oil, coolants, or even a hazardous material spill, they do not need to find their way into what is Bakersfield's drinking water. A system to filter this out should be in place or at least a way to prevent a direct contamination to our water supply.

Just imagine, on your way to downtown to see an event at Centennial Garden or have dinner, you leave your house on the very western edge of town. A wine theme has been put in on the Parkway's median depicting its proximity to San Luis Obispo's wine country. You travel east and rise up to slightly above ground level just west of Coffee Road to a spectacular view of downtown ahead of you with the Kern River leading the way. In the background is the Kern River Canyon from whence this source of our way of life came. On your right and left beautiful trees and bright flowers that make feel like you are in a grove. In the median is the work of Bakersfield's own. Wild scenes of Bakersfield past, it's dreams past and present shown in wonderful art, flowers, plants, and trees.

Who would not want to drive through this pleasant, citizen designed Parkway? Well, that may be no one if the Parkway only has one entry into downtown! Let's do this, do it well, and do it right. The last thing this city needs is another freeway mistake like Highway 58, which has become a nightmare at both its eastbound and westbound connections to Highway 99. Let's also have the foresight to reserve a right of way for the Parkway west from Heath Road all the way to I-5!

Very Sincerely, B. Landis

Brian Landis
9903 Paper Moon Way
Bakersfield, California
93312-5907
Phone: 661-399-0767

P.S.—I do hope you and the Parkway planners seriously consider what I have brought to you in this letter. I am a junior high history teacher and having been born and raised here in Bakersfield I care about my hometown. I have been involved with past city events such as the Centennial Celebration in 1998 and having named Centennial Garden in 1998.

For your information I will forward a copy of this letter to Mayor Hall, Council Member Mike Maggard who is a family friend, Council Member Davis Couch who represents my ward in Rosedale, and to Bob Price of the Bakersfield Californian.

Kern Water Agency

January 3, 2003

Mr. Marc Gauthier
City of Bakersfield Planning Department

Dear Mr. Gauthier:

As per my discussion earlier today with Ted Wright of City Public Works, the Kern County Water Agency is hereby submitting it's requests for environmental studies concerning the Westside Parkway Project via this email document. This email will be followed by a more in depth discussion of the Agency's desires to see the studies conducted as described herein, but wanted to preserve our rights with respect to the legal comment period which expires today.

Accordingly, the Kern County Water Agency requests that as part of the environmental assessment to be prepared for the Westide Parkway Project, City of Bakersfield staff and/or its consultants conduct the following studies to evaluate potential environmental impacts resulting from the Project:

1. Study the cumulative effects on the Kern River's water surface elevations during a 100-year flood event of all channel modifications, weirs constructed and any modifications thereto, bridge crossings, levee relocations, and any other work that will have impacted the water surface elevations relative to the Cross Valley Canal's flood control levee which protects the Rosedale area in the Agency's Improvement District No. 1 area.
2. Study pollution fallout impacts on the Cross Valley Canal conveyance of a raw drinking water supply source for 100,000 Bakersfield residents, based on the proximity of the parkway to the CVC. Please use the most recent adopted traffic studies for up to an eight lane parkway. The Agency's concern is that there could be fallout of heavy metals and other contaminants into the source of drinking water for the Henry C. Garnett Water Purification Plant.
3. Study potential soil contamination issues related to the two proposed relocations of the Cross Valley Canal between Coffee Road and Mohawk St.
4. Evaluate the potential for shallow groundwater impacts on the CVC's concrete liner by relocating RRBWSD's recharge ponds closer to the CVC near Allen Road.

Thank you in advance for your consideration of our requests. We look forward to continuing to work with the City and other local agencies to arrive at the best project for all concerned.

Sincerely,

Jon Parnell for

Letter 13

From: Arthur D Unger <alunger@juno.com>
To: <Mgauthie@ci.bakersfield.ca.us>
Date: 12/31/02 12:45PM
Subject: Westside Parkway Project scoping comments

Here are the scoping comments of the KERN KAWEAH CHAPTER OF THE SIERRA CLUB on the Tier II EIS/EIR for the Westside Parkway Project. It is our hope that if the community becomes aware of the environmental impacts of the options Tier II must consider, the community will reverse its decision to build this project.

Opponents and proponents of the Kern River Freeway have always thought the freeway, now the Kern River Parkway, would serve those traveling from east of Barstow, via Interstate 40, Freeway 58 and Interstate 5, to the San Francisco Bay area. Could this happen despite the absence of a Parkway-freeway interchange? If so, how and where (by which side streets) will freeway 58 traffic access the Kern River Parkway? How much PM10, NOx and VOC will traffic, including 18 wheel trucks, add to local air at this access place?

Is there a time, in the evolution of Metropolitan Bakersfield's traffic pattern, when congestion on freeway 99 north of the Parkway would be so intense that San Francisco Bay bound trucks would find it faster to use surface streets to access the Parkway than to stay on freeway 99? If they did, they would have a big impact on the lungs of a child born near the freeway during those years. The EIS/EIR should state that impact.

Could portions of the Parkway be built below grade level? Would Kern River water, and associated ground water enter a below grade level Parkway, especially just west of Coffee Road? Would some of the parkway have to be built above grade level to prevent flooding? How often would the parkway flood? What would the consequences be, what would repair cost, how long would traffic be interrupted?

All noise and air quality studies should be done with the parkway at the elevation above or below grade level at which the parkway will actually be built.

How will those living just west of Coffee Road, who will be most impacted by the air pollution, light and noise, be notified of this EIS/EIR?

Are there any nearby valuable water recharge areas, especially in section 36 just east of Allen Road? If so, how will oil trucks and other vehicles be prevented from leaving the freeway during collisions and high winds?

The EIS/EIR should address the possibility that building on land once used by an oil refinery (Tosco-Texaco) might release pollutants.

The Parkway area gets even more fog than the rest of town. Will there be lighting that will be used only during fog? Will there be speed limit signs that light up only in the fog? How many lives would lights save? How many deaths will there be each decade on this road? How many deaths if mass transit was substituted for this parkway?

What sort of mass transit will the Parkway accommodate? Can elevated light rail run in the median?

Why is this the first segment of the Centennial freeway, aka Alternate 15, to be built? Is it to justify the sprawl and retirement of prime farmland in western Bakersfield over the last several years and to stimulate more of the same?

How will wildlife in the Bakersfield Educational Studies Area, and people along the route, be shielded from the Parkway's light?

The parkway is near the bike path. People inhale larger volumes of air when they jog and bike than they do at rest, so they will be especially harmed by the auto exhaust. Will warning signs be placed on the bike path so people can elect to exercise elsewhere?

All landscaped roads should use only local native plants. The trees used along the Kern River Bike Path are all the Westside Parkway should use unless there is also a place for local wild flowers. Heavy tree cover decreases noise, deflects heat and may absorb air pollutants. Once the trees reach the water table, they will not need much watering. California Department of Transportation employs botanists.

There should be a parking lot at the east end of this stretch with connections to GET buses. A SERIES OF PARKING LOTS WITH CONNECTIONS TO GET BUSES SHOULD REPLACE THE ENTIRE WESTSIDE PARKWAY PROJECT. Funds from air pollution prevention programs should pay for these buses.

Thank you for the opportunity to comment,

Arthur Unger alunger@juno.com 323 5569

Areas of Expressed Concern

Areas of Concern	Comment Letter[1]
Air Quality	
Address how, during construction, dust/dirt will be reduced.	10
Address how much PM10, NOx, and VOC will be added to the ambient air from the proposed project.	13
Address how sensitive receptors (e.g., children, people using adjacent bikepath) might be impacted by construction of the proposed project.	13
Biology	
Any activity that is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act, or that will destroy or adversely modify the critical habitat of such species may require consultation with the United State Fish and Wildlife Service or the National Marine Fisheries Service.	7
Address how local native plants will be incorporated in to the design of the Parkway.	11,13
Cultural Resources	
Consult with the local Native American contacts so that they may be able to provide input concerning the project site.	4
Any activity that may affect historic properties listed, or eligible for listing, must satisfy the requirements of the National Historic Preservation Act.	7
Hazards/ Hazardous Waste	
The EIR should consider the potential impacts of the project on the Shell Oil Products US (SOPUS) property and refinery operations more substantially than the analysis provided in the Tier I environmental document.	1
Address the potential consequences of a petroleum product release in the vicinity of the proposed project.	1
The Tier II study will need to consider the possible existence of Shell Bakersfield refinery waste and other residual materials existing within the project right-of-way. Include contingencies for the handling and disposal of such materials and affected soils if they are encountered during construction.	1,13
The Tier II study will need to consider the existence of pipelines in the project right-of-way, the affect of the project on those pipelines, and appropriate mitigation measures should be provided, if necessary.	1
The proposed alignment for the project will destroy several groundwater monitoring wells within the SOPUS property. These well will need to be replaced at appropriate locations in order to provide adequate groundwater monitoring data for the southern portion of the Shell Bakersfield Refinery.	1
Address the risk of a toxic spill from a truck on the project right-of-way.	5,11
Noise	
Address the need for sound walls along the project right-of-way.	5
Parks	
Address the safety of children playing in the Mondavi Park, since it may be impact vehicular traffic (i.e., vehicles may veer off the road). Will the parkway have sufficient barriers to stop vehicles?	8
Traffic	
The proposed project will need to provide vehicle access to the Shell refinery's groundwater production well area or relocate the well and associated systems.	1
Address the issue of dense fog conditions and vehicle safety (e.g. lighting, signage, and road safety) in the project right-of-way.	5,13
Address how directing westbound traffic onto Stockdale at Heath Road and eastbound traffic onto Truxtun and Oak will reduce traffic congestion.	9
Address how the right-of-way might protect the privacy of nearby residences (e.g. lower grade).	10,11,13
Discuss how the 8-lane Parkway will transition to the 4-lane Truxtun Avenue without further reducing the LOS.	11
Address the reason for connecting Mohawk Street across the Kern River to Rosedale Highway. Would the purpose be better served if the north side of Mohawk Street merged with Fruitvale Avenue?	11
Address how the Parkway will connect to 24th Street at Oak without impacting Beach Park.	11
Address how a median would be beautified (trees).	10,11

[1] The attached comment letters received from the NOP have been numbered as a reference tool for this table.

Areas of Concern	Comment Letter[1]
Address how traffic from the 58 Freeway will access the Parkway.	13
Address how truck traffic might find it faster to use surface streets to access the Parkway than staying on the 99 Freeway.	13
Address what mass transit the Parkway will accommodate.	13
Address whether elevated light rail could run in the median of the Parkway.	13
Water Quality/ Hydrology	
Portions of the project encroach within Kern River Designated Floodway, over which the Reclamation Board has jurisdiction and exercises authority. The California Code of Regulations, Title 23, Waters, Article 3, require that a Reclamation Board permit be obtained before the start of any work including excavation and construction activities where the Reclamation Board has jurisdiction.	2
As construction associated with the project will disturb more than five acres, compliance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges of Storm Water Associated with Construction Activity will be required.	3
Before construction begins, the City must submit and NOI to comply with the permit to the State Water Resources Control Board and prepare a SWPPP.	3
The project will be required to comply with the City/County Storm Water Management Plan (SWMP).	3
If the project will involve the discharge of dredged or fill material into navigable waters or wetlands, the City must obtain a permit pursuant to Section 404 of the Clean Water Act and 401 Water Quality Certification.	3,7
If the project will result in discharge or dredged or fill materials into waters that are determined by the Corps to be non-jurisdictional, the City will not be required to obtain 401 Certification but may be required to submit a report of waste discharge.	3
A containment system for runoff should be addressed in the EIR.	5
The project should consider alternatives that avoid impacts to wetlands or other waters of the U.S.	7
Address the concern that Federal Laws restrict building any paved roadway through or near a river flood plain.	9
Address where water runoff from the Parkway will drain too.	11
Study the cumulative effects on the Kern River's water surface elevations during a 100-year flood event of all channel modifications, weirs constructed and any modifications that will have impacted the water surface elevations relative to the Cross Valley Canal's flood control levee.	12
Study pollutant fallout impacts on the Cross Valley Canal conveyance using the 8-lane parkway scenario.	12
Study potential soil contamination issues related to the two proposed relocations of the Cross Valley Canal between Coffee Road and Mohawk Street.	12
Evaluate the potential for shallow groundwater impacts on the Cross Valley Canal's concrete liner by relocating RRBWSD's recharge ponds closer to the Cross Valley Canal near Allen Road.	12
Address whether the Kern River water and associated groundwater might enter a below grade level Parkway, especially west of Coffee Road and how often Parkway might flood. Address how Parkway flooding will be mitigated, if applicable.	13
Address whether some of the Parkway will be built above grade level to prevent flooding.	13
Identify water recharge areas, especially just east of Allen Road.	13
Other	
Address how residents adjacent to the right-of-way are notified of the project EIS/EIR.	13

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Carolyn Belli, President
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Smart Growth Coalition of Kern County
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Chris Frank, President
Greater Bakersfield Chamber of Commerce
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Downtown Business Association
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Polly Hamm
Bakersfield Association of Realtors
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Bakersfield, CA 93389

Brian Todd
Building Industry Association of Kern County
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James Burger
Bakersfield Californian
1707 Eye Street
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Westpark Homeowners Association
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Ricky Lynn Peterson
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Stephanie Campbell
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Steven D. Overman
Supervisor, Environmental Bakersfield Refinery
Shell Oil Products US
Environmental Department
6451 Rosedale Highway
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Charles A. Owens
831 Texas
Bakersfield, CA 93307

Wil Moton
C/o Friendship House
2424 Cottonwood Road
Bakersfield. CA 93307

Guy Chaddock & Company
Attn: Mr. Dave Edwards
2201 East Brundage Lane
Bakersfield, CA 93307

Reverend Curtis Richardson
1101 T. Street
Bakersfield, CA 93304

Castle and Cooke
P.O. Box 11165
Bakersfield, CA 93389

Kimika Porter
Daycare Facility
1305 E. Planz Road
Bakersfield, CA 93307

Appendix C
Farmland Conversion Impact Rating

FARMLAND CONVERSION IMPACT RATING

Caltrans consulted with the Natural Resources Conservation Service (NRCS) on farmland impacts in 1994 for the SR58 Route Adoption project (Caltrans and FHWA, 2003). The resulting Farmland Conversion Impact Rating form (Form 1006) is included in this appendix.

Based on a conceptual eight-lane freeway facility from SR99 to I-5, the SR58 Route Adoption project would have covered 187 hectares (461 acres) of agricultural land. Of this total, 170 hectares (420 acres) were Prime Farmland. Based on the Farmland Conversion Impact Rating system developed by the U.S. Department of Agriculture, the impact of a freeway on the adopted route to farmland scored 106 points on a scale of 0 (least impact) to 260 (greatest impact). Sites with scores above 160 points are afforded increasingly higher levels of consideration for farmland protection. The criteria used to estimate farmland impacts include farmland classification, farming practices and services, and regional urban development. These criteria are explained in 7 CFR 658.5(b).

West of Calloway Drive, where important farmland is present in the project area, the Westside Parkway alternatives follow the same alignment as the adopted alignment for the previous SR58 Route Adoption project. The Westside Parkway alternatives would impact 32 hectares (79 acres) of Prime Farmland, approximately 19% of the farmland impact associated with construction of a transportation facility over the entire alignment (i.e., SR99 to I-5) for the SR58 Route Adoption project.

Appendix D
Biological Resources Correspondence and Documentation

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

June 28, 1994

Mr. Peter C. Markle,
Acting Division Administrator
U.S. Department of Transportation
Federal Highway Administration, Region 9
980 9th Street, Suite 400
Sacramento, CA 95814-2724

Dear Mr. Markle:

The Environmental Protection Agency has reviewed the information concerning **Route 58 between Interstate 5 and Route 99, Kern County, California** provided under your cover letter dated May 23, 1994 pursuant to the NEPA/404 Memorandum of Understanding (MOU). Based on the information provided, it appears that this project does not meet the criteria established in the MOU which necessitates preliminary concurrence from EPA only if a project is "likely to require an individual permit, impact 'special aquatic sites,' impact greater than five acres of other waters of the U.S." Preliminary indications are that Caltrans has done a good job avoiding and minimizing impacts to wetlands. We do recommend, however, that Caltrans request the Corps of Engineers to verify the extent of wetlands which could be impacted. If, based on that verification, it is determined that EPA's concurrence is necessary pursuant to the MOU, we would be pleased to provide additional input, although we would probably continue to decline the invitation to participate as a cooperating agency unless significant wetlands resources or impacts to air quality are anticipated.

Meanwhile, we recommend that FHWA and Caltrans continue to develop a least environmentally damaging practicable alternative and a wetlands mitigation plan for inclusion in the NEPA document prepared for this project.

We appreciate your efforts in providing information in keeping with the MOU. Should you have questions regarding our comments, please contact me at 415-744-1574. If you have questions concerning Section 404 issues, please have your staff contact Wendy Melgin at 415-744-1966.

Sincerely,

David J. Farrel, Chief
Environmental Review Section
Office of Federal Activities

RT58BK.DF

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO, CALIFORNIA 95814-2922

REPLY TO
ATTENTION OF

October 30, 1995

DEPT. OF TRANSP. DIST. 6
95 NOV -1 AM 7:51
ATTENTION: DAM

Regulatory Branch (199400457)

California Department of Transportation
Environmental Analysis Branch C
P.O. Box 12616
Fresno, California 93778

Dear Mr. Chavez:

This letter concerns the delineation of the alternatives for Route 58 between I-5 and Route 99 in Kern County, California.

Since the project would affect wetlands, a special aquatic site, your assessment that the NEPA/404 MOU would not apply is incorrect. The procedures described in that MOU would have to be followed.

We have reviewed and verified the revised wetland map of the Route 58 alternatives dated April 1995.

Our jurisdiction in this area is under Section 404 of the Clean Water Act. A Department of the Army permit is required prior to discharging dredged or fill materials into waters of the United States. Discharge of dredged material includes but is not limited to any addition, including redeposit, of dredged material, including excavated material, into the waters of the United States which is incidental to any activity including mechanized land clearing, ditching, channelization, or other excavation. Accordingly, a permit will be required prior to filling any of the 3.05 acres of waters present on the Rosedale alignment or the 3.15 acres of waters present on the Kern River alignment. The type of permit required will depend on the type and amount of waters which would be lost or adversely modified by fill activities.

This verification is valid for five years from the date of this letter unless new information warrants revision of the determination before the expiration date. Please refer to identification number 199400457 in any correspondence concerning this project. If you have any questions, please write to Tom Cavanaugh, Room 1480 at the letterhead address, or telephone (916) 557-5261.

Sincerely,

Larry Vinzant

Larry Vinzant
Chief, San Joaquin Valley Office

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO, CALIFORNIA 95814-2922

REPLY TO
ATTENTION OF

January 21, 1997

Regulatory Branch (199400457)

Mike Donahue
California Department of Transportation
District 6
P.O. Box 12616
Fresno, California 93778

Dear Mr. Donahue:

We have received your letter of November 26, 1996 requesting information concerning the applicability of Nationwide Permit number 14 to the State Route 58 project between State Route 99 and I-5 in Kern County, California and the potential for excluding this project from the NEPA-404 MOU review process.

The current nationwide permits expire on January 21, 1997 and the new ones will not take effect until February 11, 1997. It appears, from the information that you have provided, that it would be appropriate for you to seek authorization under Nationwide Permit number 14 after that date.

Since the remaining alternatives will not affect wetlands or other special aquatic sites, as you indicated in your phone call on January 21, 1997, the NEPA-404 process would not be applicable to this project.

If you have any questions, please write to Tom Cavanaugh, Room 1480 at the letterhead address, or telephone (916) 557-5261.

Sincerely,

Tom Cavanaugh
Ecologist
San Joaquin Valley Office

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
3310 El Camino Avenue, Suite 130
Sacramento, California 95821-6340

IN REPLY REFER TO:
1-1-98-F-139

March 22, 1999

Mr. Jeffrey A. Lindley
Division Administrator
Federal Highway Administration, California Division
980 Ninth Street, Suite 400
Sacramento, California 95814-2724

Subject: Endangered Species Formal Consultation on the Proposed Corridor for State Route 58 between State Route 99 and Interstate 5, Kern County, California

Dear Mr. Lindley:

This is in response to your request for formal consultation with the U.S. Fish and Wildlife Service (Service) on the proposed corridor for State Route 58 between State Route 99 and Interstate 5 in Kern County, California. This document represents the Service's biological opinion (Opinion) on the effects of the proposed action on the following federally-listed animal species:

San Joaquin kit fox, *Vulpes macrotis mutica*, (endangered)
Tipton kangaroo rat, *Dipodomys nitratoides nitratoides*, (endangered)
California condor, *Gymnogyps californianus*, (endangered)
Least Bell's vireo, *Vireo bellii pusillus*, (endangered)
blunt-nosed leopard lizard, *Gambelia silus*, (endangered)

and the following federally-listed plant species:

Hoover's eriastrum (also woolly-star), *Eriastrum hooveri*, (threatened)
California jewelflower, *Caulanthus californicus*, (endangered)
Kern mallow, *Eremalche kernensis*, (endangered)
San Joaquin woolly-threads, *Lembertia congdonii*, (endangered) and
Bakersfield cactus, *Opuntia basilaris treleasei*, (endangered)

in accordance with section 7 of the Endangered Species Act of 1973, as amended (Act).

Per your request, the Service has considered the information you provided about the other endangered, threatened, and proposed species on the lists provided by the Service on September 20, 1996 and March 24, 1998. On the basis of that information, the Service concurs that this project is not likely to adversely affect the following species:

giant kangaroo rat, *Dipodomys ingens*, (endangered)
Aleutian Canada goose, *Branta canadensis leucopareia* (threatened)
American peregrine falcon, *Falco peregrinus anatum* (endangered)
bald eagle, *Haliaeetus leucocephalus* (threatened)
giant garter snake, *Thamnophis gigas* (threatened)
California red-legged frog, *Rana aurora draytonii* (threatened)
Delta smelt, *Hypomesus transpacificus* (threatened)
Sacramento splittail, *Pogonichthys macrolepidotus* (proposed threatened)
valley elderberry longhorn beetle, *Desmocerus californicus dimorphus* (threatened)
vernal pool tadpole shrimp, *Lepidurus packardi*, (threatened)
vernal pool fairy shrimp, *Branchinecta lynchi*, (threatened)
Conservancy fairy shrimp, *Branchinecta conservatio*, (endangered)
longhorn fairy shrimp, *Branchinecta longiantenna*, (endangered)
San Joaquin adobe sunburst, *Pseudobahia peirsonii*, (threatened)
Greenhorn adobe-lily, *Fritillaria striata*, (Species of Concern)

Therefore, for these species, unless new information indicates that the action will affect them in a way not considered, no further consultation under the Act is necessary. If new information comes to light that indicates the action may affect them, please contact us immediately.

This Opinion is based on information provided in the July 1998, *Biological Assessment*, which was received, with your request for consultation, on July 20, 1998; and the *Draft Tier I Environmental Impact Statement/Environmental Impact Report (DEIS/DEIR)* signed November 4, 1997; meetings on March 4 and July 8, 1998; the letter from the California Department of Transportation dated July 6, 1998; various telephone conversations; and other sources of information. A complete administrative record of this consultation is on file in this office.

Consultation History

The State Route 58 Alignment project has been in development since 1991. Resource conservation issues that have been discussed between California Department of Transportation (Caltrans) and the Service include: developing a programmatic section 7 consultation to address multiple Caltrans projects in the San Joaquin Valley, effects on habitat conservation lands (Kern Water Bank), crossing the Kern River, wetlands, growth inducing effects, and San Joaquin kit fox corridors. Resource agencies involved include: the Army Corps of Engineers (Corps), California Department of Fish and Game (CDFG), and the Wetlands Branch and Endangered Species Division of the Service. The Corps File Number is 199400457.

Ten alternative alignments initially were considered for State Route 58 between State Route 99 and Interstate 5. All but one have been rejected because they do not meet the transportation needs of the region, impacts to archaeological sites were too numerous, or impacts to already developed property were unacceptable.

Limited surveys were done to determine potential locations of sensitive resources. This included cultural and biological resources. Plant and animal surveys of the proposed corridor and buffer zone identified locations of potential or known San Joaquin kit fox dens, burrowing owl burrows, and occurrences of Hoover's eriastrum, Kern mallow, San Joaquin bluecurls (*Trichostema ovatum*) (on the California Native Plant Society watch list) and recurved larkspur (*Delphinium recurvatum*), a species of concern.

Caltrans began coordination with regulatory agencies on issues concerning jurisdictional wetlands and water with a meeting in February 1994 with the Corps and the U.S. Environmental Protection Agency (EPA). Caltrans participated in a 404 permit preapplication meeting on May 5, 1994 with the Corps, EPA, Federal Highway Administration (FHWA), CDFG, and the Service. In a letter dated May 23, 1994, the FHWA requested that the Service become a cooperating agency in the development of the DEIS/EIR and participate in the coordination process as outlined in the Memorandum of Understanding (MOU) among the FHWA, Caltrans, and the Service. On June 28, 1997, the Service agreed to participate in preparation of the DEIS/EIR as a cooperating agency and provide comments in accordance with the MOU.

Prior to circulation of the DEIS/EIR the Cross Valley Canal Option (of the Kern River alignment), a route that avoids impacts to all jurisdictional wetlands, was identified. Upon notification of this alternative, the Corps confirmed that a Nationwide Permit #14 would likely be required prior to project construction, and the NEPA/404 coordination process would not be applicable to the Cross Valley Canal Option (Corps 1997). The Department of the Interior provided comments on the DEIS/EIR on February 12, 1998 (Interior 1998).

The Service consulted with Caltrans about other projects in 1996 and suggested that effects on endangered species in the San Joaquin Valley be addressed in a formal programmatic consultation to meet the requirements as described in Conner v. Burford. 848 F.2d 1441 (9th Cir. 1988) court ruling. The Service first recommended the formal programmatic consultation in its' biological opinion of September 19, 1996 on a proposed project to repave and widen a portion of State Route 46, between Route 33 and Route 5, in Kern County, California (Service File No. 1-1-96-F-85).

A request for an extension for delivery of the Biological Opinion to December 31, 1998 from November 30, 1998 was made by the Service by letter dated November 30, 1998 to the FHWA. The Kern River alignment, which intersected Interstate 5 north of Stockdale Highway, was removed from consideration by Caltrans on December 7, 1998. The Kern River alignment, with the Cross Valley Canal Option, which intersects Interstate 5 south of Stockdale Highway, is the

only alignment that Caltrans is now considering for the project (York personal communication 1998).

BIOLOGICAL OPINION

Description of the Proposed Action

The project as developed by Caltrans and the FHWA is to adopt an east-west transportation corridor for State Route 58 (Figure 1) that will:

1) provide continuity for State Route 58 in Kern County and
2) provide an alignment for future multi-modal transportation facilities that reduces congestion on the transportation network in the western Bakersfield metropolitan area (Caltrans 1998).

The Act's implementing regulations require that the Service address the entire scope of the project, to the extent possible, not just acquisition of a right-of-way. Acquisition of a right-of-way is an irretrievable commitment of funds and the construction of the highway is interrelated and interdependent with acquisition of the right-of-way, as explained in our comments on the DEIS/EIR (Service 1998*c*). This Biological Opinion addresses build out of the road as much as possible at this stage in the design process, as well as the adoption of a highway alignment.

The proposed project addresses a 16.9 mile section of the highway in Kern County, as shown on Figure 2. From west to east, the segment of Route 58 addressed by this project presently consists of a two-lane conventional highway from Interstate 5 to Allen Road, a four-lane conventional highway from Allen Road to Camino Del Rio Court, and a short six-lane segment between Camino Del Rio Court and Route 99. The existing transportation system in the project area is shown on Figure 3.

The Selected Alternative

The Cross Valley Canal Option is the selected route identified through the DEIS/DEIR process (Caltrans 1997; York personal communication 1998). This alignment begins at Interstate 5, north of the Cross Valley Canal, approximately two miles south of the Stockdale Highway interchange. It parallels the canal in a northeasterly direction to Enos Lane. It then shifts to the south, running parallel to the Cross Valley Canal east to Nord Road. At this point, the alignment bends northward through an urban area east of Heath Road and then crosses the Kern River just west of the existing railroad bridge and runs east, terminating at Route 99 near the present Route 99 overcrossing of Truxton Avenue. Six interchanges are envisioned with the following roads: Enos Lane (Route 43), Nord Road, Allen Road, the vicinity of Calloway Drive, Coffee Road, and Mohawk Street.

The proposed freeway will connect on the eastern end of the project directly to the Route 58 East freeway by ramps running parallel to Route 99. Ramps would also be provided for southbound traffic on Route 99 to access the Route 58 freeways to the east and west without interfering with traffic exiting or accessing Route 99 from Rosedale Highway and California Avenue.

For purposes of preserving sufficient right-of-way to meet long-term (i.e., 20-year) transportation needs, the alignment will be 300 feet wide. This width provides flexibility in the design of future transportation facilities because it is wide enough to accommodate an eight-lane freeway and a median that could be used for additional lanes or other transportation facilities such as High Occupancy Vehicle (HOV) lanes, busways, and rail up to Route 99. All construction activities will occur within the 300-foot width. Access for construction vehicles will be from the six proposed interchanges with existing north-south roads.

Schedule

Development of a new transportation facility for Route 58 will be accomplished in phases commencing within a few years and concluding as much as 50 years from now. The time line for each phase depends on traffic demand, transit service strategies, operational management strategies, and funding. Predicted future traffic demand indicates the need for additional transportation facilities over the next 20 years. Following route adoption, the right-of-way can be protected by acquisition of property and implementation of local land use controls.

A schedule for buying land and building the freeway has not been determined because the project will be developed, in part, with state funds as they are appropriated by the legislature. The *Metropolitan Bakersfield 2010 General Plan* (City of Bakersfield 1990) describes the need for a Westside Freeway, and estimates that by 2010 the freeway will be completed between Renfro Road and Route 99, approximately half the project described here. Renfro Road is five miles east of Enos Lane; the western boundary of the Metropolitan Bakersfield planning area is a quarter mile west of Enos Lane. The road will likely be built in segments bounded by the six interchanges proposed in the project, starting in the east and moving to the west as needed.

Consistency with Local Planning Efforts

The *General Plan* is based on the population growing from 286,000 people in 1987 to 567,000 people in 2010 in the Bakersfield metropolitan area. This is the highest population estimate provided by the City and County's consultant. Since the high estimate is used for the basis of land use and transportation planning, and will accommodate all of the growth based on that estimate, it is obvious that City and County policy is to not limit growth at this time.

The *General Plan* delineates roads and intersections that are presently suffering congestion, as shown on Figure 4. Congestion occurs on Rosedale Highway in the vicinity of Route 99, on Gosford Road where it crosses the Kern River, between Rosedale Highway and California Avenue to the east of Route 99 on Oak Street, and on Route 99 between Rosedale Highway and

California Avenue. The easternmost segment of the proposed project would alleviate some or all of the congestion near Route 99 just described. The *General Plan* delineates proposed highways, including an east-west road in the northwest sector that mirrors the proposed project, and a north-south highway to the west of Bakersfield at about Allen Road, as shown on Figure 5.

The *General Plan* proposes to direct and concentrate growth toward higher density mixed use centers in order to reduce vehicle use and encourage pedestrian traffic in Bakersfield, as shown on Figure 6. Three higher density mixed use centers are proposed for the periphery of urban Bakersfield, including one in the northwest, near Allen Road and Rosedale Highway.

Accommodations for Sensitive Species

Direct impacts to habitat are estimated based on the assumption that a future transportation facility will make the entire corridor unavailable to special status plants and animals. The land area directly affected by the project was estimated by habitat type from aerial photographs, engineering alignment maps, and field reconnaissance. Conservation acreage will be set aside incrementally as each segment of the road is built. The amount of conservation acreage has been estimated here, but may change because construction plans are conceptual at this phase in the project. Conservation acreage amounts will be defined in the Tier II environmental documents for a specific future project, following the approach described here. A summary of potential impacts and proposed species conservation concepts is presented in Table 1. Only those measures that apply to the Cross Valley Canal Option are of interest.

Direct impacts to non-riparian habitat will be compensated for by acquiring and enhancing similar habitat prior to construction of any future transportation facilities. Impacts to grasslands will be compensated for by acquiring grassland at a 3:1 ratio (3 acres preserved for every one acre destroyed) or valley saltbush scrub, alkali sink scrub, Great Valley mesquite scrub, and/or Valley sacaton grassland at a 1:1 ratio. Impacts to agricultural land and recharge basins will be compensated for by acquiring retired agricultural land at a 1:1 ratio, or acquiring land vegetated with the higher value habitats just mentioned at a ratio of 0.5 :1.

Lands acquired for species conservation will be enhanced or restored by implementing the following measures adapted from the *Recovery Plan for Upland Species of the San Joaquin Valley, California (Recovery Plan)*(Service 1998*d*):

- constructing artificial dens for kit foxes
- installing fencing to prevent vehicle encroachment and manage grazing animals
- seeding native barley, and other native plants of the San Joaquin Valley, to minimize establishment of non-native, invasive weeds, reduce soil erosion, and provide food and cover for small animals that are prey for foxes and raptors

A management plan will be developed for all acquired lands that includes goals and objectives, potential for enhancement, monitoring, vegetation management, and fire management. Lands are

proposed to be acquired by Caltrans on or near existing ecological preserves near the project area. Possibilities at this time include the Semitropic Ridge Preserve, the Coles Levee Ecosystem Preserve, and the Lokern Conservation and Management Area. Caltrans and the FHWA have not specifically mentioned protecting this land in perpetuity, or provided a fund for management of the land.

Conservation Measures for Impacts to Riparian Species. Riparian impacts on the east end of the project at the Kern River will be compensated for by enhancement and/or restoration of 0.2 acre of Great Valley cottonwood riparian forest (a 1:1 ratio) adjacent to the proposed alignment. Conservation measures will consist of constructing levee setbacks, 10-foot-wide low terraces adjacent to the channel, and planting riparian trees and shrubs on the terrace and banks. The low terrace would be constructed at an elevation that would be inundated and saturated at a sufficient frequency and duration to support riparian tree species. Banks would also be planted with riparian plant species. Proposed species are presented on Table 2 of the Biological Assessment (Caltrans 1998). All species are native to local riparian plant communities and include understory shrubs and herbaceous species as well as trees to encourage creation of a balanced riparian habitat. Planting would take place in the early spring at the end of the rainy season. Trees and shrubs would be planted from 'deepot' containers (2.5-inch by 9-inch plastic tubes) to promote rapid root growth. Tree shelters and/or shrub shelters will be used to protect plantings from herbivory. All riparian plantings will be irrigated as needed during the first two years or until monitoring shows that is has become established. Monitoring will continue for a minimum of five years. A specific conservation program for riparian vegetation will be developed in consultation with the California Department of Fish and Game. The conservation program will include:

- Preparation of plans and guidelines for site preparation, planting and irrigation specifications, plant species and planting methodologies, performance criteria, and maintenance and monitoring requirements and procedures.

- Seeds, rooted cuttings, and container plants specified in the plan would be obtained from suppliers and contract growers of native plants, with special consideration given to obtaining plants from the local genetic stock. Advance notice of 9 to 12 months will be required for the supplier/grower to ensure that the required species are ready at the time of proposed planting.

- The conservation site will be monitored by a qualified biologist or horticulturist with appropriate credentials and experience in native habitat restoration. Construction impacts will be avoided or minimized by installing protective fencing around preserved riparian vegetation to prevent damage during construction activities.

Conservation Measures for Impacts to Upland Species. The selected alternative (the Cross Valley Canal Option) will impact 544 acres of upland habitat that can support San Joaquin kit fox. This includes 85 acres of grassland and 459 acres of agricultural land. The grassland can

also support other upland species. Approximately 52 acres of the agricultural land at the western terminus of this alignment has recently been developed as recharge basins by the Kern Water Bank Authority but this area is included in the 459 acres of agricultural land potentially affected by this alignment.

The potential for disruption of kit fox corridors depends on the design and location of the proposed project. The proposed alignment will begin at Route 99 and extend west through a fully developed industrial area crossing over Truxton Avenue, Kern River Parkway, Burlington Northern Santa Fe Railroad, and the Cross Valley Canal on the north side of the Kern River. Route 58 will be elevated in this area and will not block kit fox travel corridors along the river and railroads except during construction.

North of the Kern River the proposed Route 58 alignment will be slightly elevated until it reaches the bridges necessary to span the Friant-Kern Canal and Coffee Road. To insure north-south movement of kit foxes to and from undeveloped industrial properties near Mohawk Street, three 2-foot-diameter culverts will be placed underneath the facility at critical locations. These locations are to be determined by a biologist working with local experts and the resource agencies. Brian Cypher, kit fox expert and former head of the Endangered Species and Archeology Program at the Naval Petroleum Reserve, recommended culverts of this size because they are more likely to be used as corridors instead of places to den. Corridors at the Friant-Kern Canal and Coffee Road will not be obstructed (Caltrans 1998).

Between Coffee Road and Calloway Drive, the alignment will be slightly elevated. According to Brian Cypher there are no north-south kit fox corridors in this region, and therefore no culverts or other accommodations for kit fox are planned at this time (Caltrans 1998).

Between Calloway Drive and Route 43 (Enos Lane) no accommodations for kit fox travel corridors are planned.

West of Route 43 (Enos Lane) the proposed freeway parallels the Cross Valley Canal as it turns to the southwest to connect with Interstate 5. The land is owned by the Kern Water Bank Authority and is subject to a Habitat Conservation Plan (HCP) approved by the Service. This area is being used for recharge basins and upland wildlife corridors. The construction design of the proposed facility includes ten 2-foot-diameter culverts evenly distributed along this portion of the facility.

Avoidance of Construction-related Impacts. Impacts to special status species during construction will be avoided by implementing the following general measures as necessary:

- An environmental awareness training program will be required for construction personnel before construction begins. The program will provide workers with information on their responsibilities with regard to sensitive species including locations of environmentally

sensitive areas, exclusion zones, timing constraints, and communication with biological resource monitors.

- Conduct preconstruction surveys to identify active breeding or nesting sites.
- Schedule construction to avoid breeding or nesting periods for special status species to the extent possible.
- Designate and avoid environmentally sensitive areas by fencing and monitoring.
- Modify construction easements, access routes, and staging areas to avoid sensitive areas.
- Monitor during all activities related to construction.

A project-specific conservation plan will be developed to address construction-related special status species impacts. The conservation plan will emphasize avoidance and minimization of impacts to plant populations previously described.

Caltrans plans to implement specific measures to reduce impacts to San Joaquin kit foxes, Tipton kangaroo rats, blunt-nosed leopard lizards, Swainson's hawks, and burrowing owls. Those measures for protection of the federally-protected species - San Joaquin kit fox, Tipton kangaroo rat, and blunt-nosed leopard lizard - are summarized here.

San Joaquin Kit Fox. Surveys will be conducted 2 years prior to construction to identify active dens in the project area. Caltrans will mitigate for kit fox dens that cannot be avoided by following the kit fox provisions and constructing artificial dens in locations that are mutually agreeable to Caltrans and the Service.

No less than 60 days prior to beginning construction, additional preconstruction surveys will be conducted to determine if active dens are present in the project area. If active dens are present, Caltrans will establish exclusion zones around the den site and no work shall be permitted within 150 feet during the pupping period (January 1 to June 14). During the non-pupping period, all potential San Joaquin kit fox dens within a project work area shall be hand-excavated under the direct supervision of a qualified biologist. If at any time during excavations, a San Joaquin kit fox is encountered, excavation shall cease and the animal shall be allowed to escape uninjured.

Tipton Kangaroo Rat and Blunt-nosed Leopard Lizard. Caltrans will implement the following measures to minimize impacts to Tipton kangaroo rats and blunt-nosed leopard lizards:

- A biological monitor shall be present during all ground-disturbing construction activities

- If individual Tipton kangaroo rats or blunt-nosed leopard lizards are discovered within the project work area during construction, Caltrans shall relocate these individuals according to Service and CDFG protocols.

Status of the Species

The entire range of the species being addressed in this Opinion is described, as it was known historically, and as it occurs today. The major threats to the species are noted. The reader is directed to the *Recovery Plan* (Service 1998*d*) for further information on taxonomy, ecology, and biology of the species described here. Federally threatened and endangered animals are addressed first, with species accounts for plants presented second.

San Joaquin Kit Fox (*Vulpes macrotis mutica*)

Species Description and Life History. The San Joaquin kit fox was federally listed as endangered on March 11, 1967 (32 **FR** 4001) and State listed as threatened in 1971. The San Joaquin kit fox is a small canid, with an average body length of 20 inches and weighing about 5 pounds. They are lightly built, with long legs and large ears. Pelage color ranges from tan to buffy gray in the summer to silvery gray in the winter. The belly is whitish and the tail is black-tipped.

The diet of kit foxes varies geographically, seasonally and annually, based on temporal and spatial variation in abundance of potential prey. In the southern portion of their range, kangaroo rats *(Dipodomys* spp.), pocket mice (*Perognathus* spp.), white-footed mice (*Peromyscus* spp.), and other nocturnal rodents comprise about one-third or more of their diets. Kit foxes also prey on California ground squirrels (*Spermophilus beecheyi*), black-tailed hares (*Lepus californicus)*, San Joaquin antelope squirrels (*Ammospermophilus nelsoni)*, desert cottontails (*Sylvilagus audubonii)*, ground-nesting birds, and insects. Dens are used by the fox for temperature regulation, shelter from adverse environmental conditions, and escape from predators. Kit foxes excavate their own dens, use those constructed by other animals, and use human-made structures (culverts, abandoned pipelines, and banks in sumps or roadbeds). Kit foxes often change dens and many dens may be used throughout the year. However, evidence that a den is being used by kit foxes may be absent. Kit foxes are subject to competitive exclusion or predation by other species, such as the nonnative red fox *(Vulpes vulpes)*, coyote (*Canis latrans)*, domestic dog (*Canis familiaris*), bobcat (*Felis rufus*), and large raptors.

Historical and Current Distribution. The current range of the San Joaquin kit fox is divided into two areas, the northern range centering around Contra Costa County, and the southern range in the San Joaquin Valley and neighboring valleys. In the San Joaquin Valley before 1930, the San Joaquin kit fox occurred within an 8,700-square mile range in central California from the vicinity of Tracy in the upper San Joaquin Valley on the west side, and near La Grange, Stanislaus County, on the east side, south to the general vicinity of Bakersfield. Historically, San Joaquin kit foxes occurred in several San Joaquin Valley native plant communities. In the southernmost portion of the range, these communities included Valley Sink Scrub, Valley Saltbush Scrub,

Upper Sonoran Subshrub Scrub, and Annual Grassland. By 1930, the kit fox southern range had been reduced by more than half, with the largest portion remaining in the southern and western parts of the Valley. By 1958, an estimated 50% of the Valley's original natural communities had been lost, due to extensive land conversions, intensive land uses, and the use of pesticides. In 1979, only about 6.7% of the San Joaquin Valley's original wildlands south of Stanislaus County remained untilled and undeveloped. Today many of these communities are represented only by small, degraded remnants. Kit foxes are, however, found in grassland and scrubland communities, which have been extensively modified by humans with oil exploration, wind turbines, agricultural practices, and/or grazing. The population is fragmented, particularly in the northern part of the range.

Kit foxes currently are limited to remaining grassland, saltbush, open woodland, alkali sink valley floor habitats, and other similar habitats located along bordering foothills and adjacent valleys and plains. The largest extant populations of kit foxes are in the Elk Hills and the Buena Vista Naval Petroleum Reserve, and the Carrizo Plain Natural Area in San Luis Obispo County. The natural lands of western Kern County, including the Naval Petroleum Reserve, Elk Hills, the Lokern Area, and adjacent natural land inhabited by kit foxes are essential for kit fox recovery. In the southern San Joaquin Valley they appear to make extensive use of habitat fragments in an urbanizing environment (Service 1998*d*).

Reasons for Decline. Intensive agriculture, urbanization, and other land-modifying actions have eliminated extensive portions of habitat and are the most significant causes of this species endangerment. Such habitat losses contribute to kit fox declines through displacement, direct and indirect mortalities, barriers to movement, and reduction of prey populations. The coyote and the introduced red fox compete for food resources with the smaller kit fox, and are known to prey upon kit fox as well (DOE and Chevron 1998). Predation, competition, poisoning, and vehicle strikes contribute substantially to the vulnerability of this species.

Recovery Actions. A recovery plan approved in 1983 proposed interim objectives of halting the decline of the San Joaquin kit fox and increasing population sizes above 1981 levels (Service 1983). In 1998, a recovery plan for San Joaquin Valley upland terrestrial species was finalized which includes a revised recovery plan for the kit fox (Service1998*d*). This plan calls for protecting the Carrizo Plain, western Kern County, and the Ciervo-Panoche Natural Area as core populations while reducing their isolation by managing populations on connecting private and public lands through conservation agreements.

Tipton Kangaroo Rat (*Dipodomys nitratoides nitratoides*)

Species Description and Life History. The Tipton kangaroo rat was federally listed as endangered on July 8, 1988 (53 **FR** 25608), and state listed as endangered in 1989. The Tipton kangaroo rat is one of three subspecies of the San Joaquin kangaroo rat. Adult Tipton kangaroo rats weigh about 35 to 38 grams, have a head and body length of about 100 to 110 millimeters and a tail

about 125 to 130 millimeters in length. Adaptations for two-footed or bipedal hopping include elongated hind limbs, a long, tufted tail for balance, a shortened neck, and a large, flattened head.

Tipton kangaroo rats eat mostly seeds, with small amounts of green, herbaceous vegetation and insects supplementing their diet when available. The preferred location for Tipton kangaroo rat burrows typically involves alluvial fans and flood plains and includes fine, highly alkaline sands and, to a lesser degree, alkaline sandy loams. Burrow systems are usually in open areas but may occur in areas of thick scrub. They are typically simple, but may include interconnecting tunnels. Most are less than 10 inches deep. They are commonly in slightly elevated mounds, the berms of roads, canal embankments, railroad beds, and bases of shrubs and fences where wind-blown soils accumulate above the level of surrounding terrain. Terrain not subject to flooding is essential for permanent occupancy by Tipton kangaroo rats.

Historical and Current Distribution. Tipton kangaroo rats inhabit saltbush scrub and alkali sink scrub communities in the Tulare Lake Basin of the southern San Joaquin Valley. The historical geographic range of Tipton kangaroo rats was over 1.7 million acres. Distribution was limited to arid-land communities occupying the valley floor of the Tulare Basin in level or nearly level terrain. By 1985, the inhabited area had been reduced, primarily by cultivation and urbanization, to about 60 thousand acres, only about 4 percent of the historical acreage. Current occurrences are limited to scattered, isolated areas. In the southern San Joaquin Valley this includes the Kern National Wildlife Refuge, Delano, and other scattered areas within Kern County.

Density estimates range from 2.8 to 3.6 animals per acre. Habitat type and climatic conditions appear to play a role in density. For example, at the end of a 5 year drought in April 1991, populations erupted, peaking in January 1993. In April 1995, following a higher than average rainfall year, the populations declined. In 1997 the Service estimates that they now inhabit approximately 4 percent of their historic range (Service 1998*d*).

Reasons for Decline. The construction of dams and canals that made a dependable supply of water available and allowed the cultivation of the alkaline soils of the saltbush and valley sink scrub and relictual dune communities, was principally responsible for the decline and endangerment of the Tipton kangaroo rat. Widespread, unrestricted use of rodenticides to control California ground squirrels probably contributed to the decline or extirpation of small populations. Urban and industrial development and petroleum extraction all have contributed to habitat destruction. Except for small, isolated populations, predation is unlikely to threaten Tipton kangaroo rats. The increasing fragmentation of the range of Tipton kangaroo rats, however, increases the vulnerability of small populations to predation. Current threats of habitat destruction or modifications come primarily from industrial and agriculturally-related developments, cultivation and urbanization, and secondarily from flooding.

Recovery Actions. Recovery of the Tipton kangaroo rat is addressed in the Recovery Plan (Service 1998*d*). This plan calls for (1) research to determine how to manage natural lands to enhance habitat for Tipton kangaroo rats that lessens the frequency and severity of population

crashes (2) consolidation and protection of blocks of suitable habitat to minimize the effects of random catastrophic events on their populations.

California Condor (*Gymnogyps californianus*)

Species Description and Life History. The California condor was federally listed as endangered on March 11, 1967 (32 **FR** 4001). Critical habitat was designated in Tulare, Kern, Los Angeles, Ventura, Santa Barbara, and San Luis Obispo Counties.

The California Condor is a member of the Cathartidae family or new world vultures. With a wing span of nearly 10 feet (3 meters) and weighing approximately 22 pounds (10 kilograms), it is one of the largest flying birds in the world, as well as one of the rarest. Adults are black except for white underwing linings and edges of the upper secondary coverts. The head and neck are mostly naked; the skin on the neck area is gray, grading into various shades of yellow, red, and orange on the head. Males and females cannot be distinguished by size or plumage characteristics.

Condors do not kill for food but feed on available carrion. The principal foraging regions used by condors since the late 1970s have been the foothills bordering the southern San Joaquin Valley and axillary valleys in San Luis Obispo, Santa Barbara, Kern, and Tulare Counties. Typically, foraging sites are in grasslands or oak-savannah regions at lower elevations, and roosting and nesting sites are located at higher elevations on cliffs. The important foraging areas are primarily private grazing lands. Condors nest in various types of rock formations including crevices, overhung ledges and potholes. They do not breed until they are about 6 years of age; they produce one egg per year or every other year in the wild.

Historical and Current Distribution. During the Pleistocene era (10,000 to 100,000 years ago) the California condor ranged from British Columbia, Canada to Baja California, Mexico and through the southwest to Florida and north to New York State. With the extinction of the large Pleistocene Era mammals, condors declined in range and numbers. Another large decline occurred when European settlers arrived on the West Coast; the decline accelerated during the gold rush of 1849. Condors were wantonly shot, poisoned, and eggs and birds were collected. By 1940 the condor's range was reduced to a horseshoe-shaped area in southern California that included the coastal mountain ranges of San Luis Obispo, Santa Barbara and Ventura Counties; a portion of the Transverse Range in Kern and Los Angeles Counties; and the Southern Sierras in Tulare County. Kern County was one of the principal foraging regions used by California condors from the late 1970s to 1987 until the wild birds were all captured for breeding stock. Condors foraged extensively in the foothills adjacent to the northern boundary of Los Padres National Forest, to Reyes Station in the west, to the Pleito Hills west of Interstate Highway 5, and eastward throughout much of the region from the Tehachapi Mountains north to the slopes of Cummings Mountain.

Young birds raised in captivity have been reintroduced into the wild in western Monterey County, eastern San Luis Obispo County, and eastern Santa Barbara County in California, and near the Grand Canyon in Arizona.

Reasons for Decline. The California condor declined over the past century to such a low level that only 21 individuals existed in 1982. Reasons for decline include human persecution, egg collecting, pesticides, lead poisoning, and habitat loss. Since reintroduction five birds have died from colliding with power lines.

Recovery Actions. In 1981 a captive breeding program was established to provide captive-reared condors to release to the wild. The Service began reintroducing California condors to the wild in 1992, and as of September 1998, 34 birds in California and 24 birds in Arizona are being closely monitored in the wild. No birds have bred yet in the wild. Because of the deaths from contact with power lines, condors started undergoing power line aversion training in 1995 before their release. However, in 1997 two more condors died as a result of power line collisions (Service 1998*a*). The Service proposes to release 6 condors in the Wind Wolves Preserve in Kern County in 1999. The *Condor Recovery Plan* was revised in 1996.

Least Bell's Vireo (*Vireo bellii pusillus)*

Species Description and Life History. The least Bell's vireo was federally listed as endangered in May 2, 1986 (51 **FR** 16474) and state listed as endangered in 1980. Designated critical habitat for the least Bell's vireo includes the Santa Ynez River (Santa Barbara County), Santa Clara River (Ventura and Los Angeles Counties), Santa Ana River (Riverside and San Bernardino Counties), and Santa Margarita River, San Luis Rey River, Sweetwater River, San Diego River, Tijuana River, Coyote Creek , and Jumul-Dulzura Creeks (San Diego County).

The least Bell's vireo is a small gray, migratory passerine. The above is grayish ash; below is pure white with sometimes a faint suffusion of a light shade of brownish gray on the breast; sides under the wings are moderately tinged with sulphur yellow. It has a narrow, barely discernable eye ring; two faint white bars on each wing; dull white narrow margins on the outer border of the wings and tail; and an olive tinge on the tail (Terres 1995).

The least Bell's vireo is a sub-tropical migrant, traveling some 2,000 miles annually between breeding and wintering grounds. Little is known about the least Bell's vireo's wintering habitat requirements. Least Bell's vireos arrive on the southern California breeding grounds in mid-March to early April, with males arriving in advance of females by several days. Observations of banded birds suggest that returning adult breeders may arrive earlier than first year birds by a few weeks (Kus unpublished data). Least Bell's vireo are generally present on the breeding grounds until late September, although they may begin departing by late July. Stragglers have been noted in October and November (McCaskie and Pugh 1965; McCaskie 1969) and occasionally individuals overwinter in California (S. Laymon, personal communication, no date).

Males establish and defend territories through counter-singing, chase and sometimes physical confrontation with neighboring males. Territory size ranges from 0.5 to 7.5 acres. Nest building commences a few days after pair formation (Pitelka and Koestner 1942, Barlow 1962). The majority of nests by far are placed in willows and mulefat.

Egg-laying begins one to two days after nest completion. Typically three to four eggs are laid, occasionally two, and rarely five. Average clutch size of non-parasitized nests observed with complete clutches has ranged from 3.1 to 3.9 during recent years. Adults continue to care for the young for at least two weeks after fledging, during which time territorial boundaries may be relaxed as family groups range over larger areas. Fledglings generally remain in the territory or its vicinity for most of the season, although the behavior of older fledglings produced early in the year has not been well studied.

The least Bell's vireo is a common host (Hanna 1928; Dawson 1923, Rowley 1930, Grinnell and Miller 1944, Goldwasser et al. 1980, Salata 1981) and readily accepts cowbird eggs, although it is a relatively poor host and does not fledge many cowbirds (Friedmann 1963). The tendency of male least Bell's vireo to sing from the nest no doubt enhances vulnerability to parasitism, although cowbirds evidently locate most nests by observing the pair during nest construction. In heavily parasitized areas, up to four cowbird eggs may be found in least Bell's vireo nests (Salata 1983).

Within the Lake Isabella vicinity upstream on the Kern River from Bakersfield, recent sightings on the South Fork of the Kern River suggest that the least Bell's vireo may be returning to this area. In May of 1992, a single unmated male was sighted in this area for six weeks during the breeding season. In 1994, a male least Bell's vireo was sighted in August, and another vireo was seen in December of 1995 (S. Laymon, personal communication, no date). During the 1996 breeding season, five least Bell's vireos were recorded using the South Fork of the Kern River. No breeding surveys have been conducted within the project area.

Historical and Current Distribution. Historically, the least Bell's vireo was widespread and abundant, ranging from interior northern California near Red Bluff (Tehama County), south through the Sacramento-San Joaquin Valleys and Sierra Nevada foothills, and in the Coast Ranges from Santa Clara County south to approximately San Fernando, Baja California, Mexico (Grinnell and Miller 1944). Populations also were found in the Owens Valley, Death Valley, and scattered oases and canyons throughout the Mojave Desert.

In 1973, no least Bell's vireos were found during an intensive search in formerly occupied habitat between Red Bluff, Tehama County, and Stockton, San Joaquin County (Gaines 1974). By the early 1980's, the vireo had been extirpated from the Sacramento and San Joaquin Valleys, once the center of its breeding range, and the species was restricted to two localities in the Salinas River Valley (Monterey and San Benito Counties; D. Roberson, personal communication), one locality along the Amargosa River (Inyo County), and numerous small populations in southern California south of the Tehachapi Mountains and in northwestern Baja California, Mexico

(Gaines 1977, Goldwasser 1978, Goldwasser et al. 1980). By the time the least Bell's vireo was listed in 1986, the statewide population was estimated at 300 pairs, the majority of which were concentrated in San Diego County.

The entire known United States population in 1994 consisted of approximately 700 breeding pairs (Service 1995). In 1996 survey results showed an increase to approximately 1,300 pairs (Service 1997).

Least Bell's vireo are obligate riparian breeders, typically inhabiting structurally diverse woodlands along watercourses. They occur in a number of riparian habitat types, including cottonwood-willow forests, oak woodlands, shrubby thickets, and mulefat scrub. Several investigators have attempted to identify the habitat requirements of least Bell's vireo by comparing characteristics of occupied and unoccupied sites, and have converged on two features which appear to be essential: (1) the presence of dense cover within 3 to 6.5 feet of the ground, where nests are typically placed, and (2) a dense, stratified canopy for foraging (Goldwasser 1981; Gray and Greaves 1984; Salata 1981, 1983). Although least Bell's vireo typically nest in willow-dominated areas, plant species composition does not appear to be as important a determinant of nesting site selection as habitat structure.

The selection of breeding sites by least Bell's vireo does not appear to be limited to riparian stands of a specific age, although least Bell's vireo are characterized as preferring early successional habitat. Again, vegetation structure, more than simply age, appears to be the important determinant of site use. Early successional riparian habitat typically supports the dense shrub cover required for nesting, and also a structurally diverse canopy for foraging. If permitted to persist, willows and other species form dense thickets that, in approximately 5 to 10 years, become suitable vireo habitat (Goldwasser 1981). In mature riparian habitat, the understory vegetation often consists of species such as California wild rose (*Rosa californica*), poison oak (*Toxicodendron diversiloba*), California blackberry (*Rubus ursinus*), grape (*Vitis californica*), and a variety of perennials that provide concealment for vireo nests. In addition, vireo nest placement tends to occur in openings and along the riparian edge, where exposure to sunlight allows the development of shrubs.

Although least Bell's vireos are tied to riparian habitat for nesting, they have been observed extending their activities into adjacent upland habitats. The arid nature of the southern California landscape typically results in the close proximity of riparian and non-riparian habitats such as coastal sage scrub, and least Bell's vireo along the edges of riparian corridors are able to maintain territories that incorporate both habitat types. Kus and Miner (1989) found that least Bell's vireo along the Sweetwater River in San Diego County traveled 6 to 200 feet from the riparian edge to reach upland areas. Upland habitat was used primarily by foraging adults and adults foraging with fledglings; however, 35 percent of the pairs whose territories included non-riparian habitat placed at least one nest there.

Reasons for Decline. Predation is responsible for the majority of nest failures, with most predation occurring during the egg stage. Predators are believed to include scrub jays (*Aphelocoma coerulescens*), Cooper's hawks (*Accipiter cooperii*), gopher snakes (*Pituophis melanoleucus*) and other snake species, raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), coyote (*Canis latrans*), long-tailed weasels, dusky-footed woodrats (*Neotoma fuscipes*), deer mice (*Peromyscus maniculatus*), rats (*Rattus spp.*), and domestic cats (*Felis domestics*) (L. Hays, personal communication 1996). Other sources of nest failure are human disturbance (trampling of nest or nest site; clearing of vegetation), and abandonment following cowbird parasitism, ant infestations, rainstorms, and unknown factors. Least Bell's vireo pairs may attempt as many as five nests in a breeding season, although most attempt only one or two.

The decline of this California land bird species has been attributed, in part, to the combined, perhaps synergistic effects of the widespread and relentless destruction of riparian habitats due to cattle grazing, farming, urban development, and water diversions for human activities, and brood-parasitism by the brown-headed cowbird ((Salata 1986; Service 1986*c*; Garrett and Dunn 1981). Habitat loss and fragmentation continues to threaten the remaining least Bell's vireo populations in southern California and Baja California. These conditions make least Bell's vireo populations particularly vulnerable to local, and possibly range wide extinction (Wilcox 1980). Small populations are susceptible to catastrophic extinction, where the entire population could be adversely impacted as a result of stochastic events such as fire, flooding, as well as demographic failure, where the population fails to produce any or enough offspring to survive into the future. Large inter-population distances reduce the ability to disperse which is necessary for genetic exchange among populations, heightening the risk of deleterious inbreeding (Soule 1980; Conway 1980; Senner 1980). Lack of available habitat to serve as "refuges" during years when floods and other processes eliminate breeding sites poses a serious threat to the continued survival of the species.

Riparian habitat loss in the Central Valley, estimated at 95 percent of that present during the Gold Rush (Smith 1977), has resulted in near extirpation of the least Bell's vireo from an area that at one time supported 60 to 80 percent of the Statewide population. Riparian woodlands have been cleared primarily for agricultural purposes, rivers have been diked to prevent winter flooding of bottomlands, and dams built to impound water for agricultural, industrial, and domestic use. As a result, large amounts of least Bell's vireo breeding habitat has been inundated or removed. Flood control projects and channelization of rivers have further reduced available least Bell's vireo habitat. Livestock grazing destroyed the choice lower strata of vegetation preferred by the least Bell's vireo (Overmire 1962). Similar activities are responsible for the decline of riparian habitat in Baja California (Short and Crossin 1967). Grinnell and Miller (1944) considered the least Bell's vireo still "common, even locally abundant under favorable conditions of habitat". However, they noted that in the "last fifteen years a noticeable decline has occurred in parts of southern California and in the Sacramento-San Joaquin Valley".

Recovery Actions. Efforts were underway in 1986 to develop a series of Habitat Conservation Plans for the Sweetwater Reservoir/River, San Diego River, and San Luis Rey River.

Development of these plans is being coordinated by the San Diego Association of Governments. A *Least Bell's Vireo Recovery Plan* was drafted in 1986 (Service 1986b).

Since the vireo was listed in 1986 and intensive cowbird removal programs initiated, the species has undergone an increase almost as dramatic as its decline. While a few populations surviving the decline have generally stabilized in size (e.g., the Sweetwater, San Diego, and Santa Ynez populations), most have undergone tremendous growth. For example, least Bell's vireo at the Santa Margarita River at Marine Corps Base Camp Pendleton (MCBCP) have increased in number from 15 males in 1980 (Salata 1980) to 348 in 1994 (Service 1995); similar increases have occurred at the Prado Basin on the Santa Ana River, where the vireo population grew from 12 males in 1985 (Service 1986*c*) to 188 in 1994 (Pike and Hays 1993), and at the Tijuana River, where the population expanded from 13 males in 1990 (Kus 1990) to 80 four years later (Kus 1994). Although a thorough range wide survey has not been conducted since the 1986-87 effort, available census data indicate that the vireo population in southern California has tripled over the last eight years.

Least Bell's vireos appear to be expanding their range and recolonizing sites unoccupied for years or decades. Expansion is occurring both eastward in San Diego County as birds become re-established in the more inland reaches of the coastal valleys, and northward as birds disperse into Riverside and Ventura Counties. Observations of color-banded birds at these sites reveal that dispersal from the more southerly breeding populations is partially responsible for the colonization. As populations continue to grow and least Bell's vireo disperse northward, it is anticipated they could reestablish in the central and northern portions of their historic breeding range.

Blunt-nosed Leopard Lizard (*Gambelia silus*)

Species Description and Life History. The blunt-nosed leopard lizard was federally listed as endangered on March 11, 1967 (32 FR 4001) and state listed as endangered in 1971. The blunt-nosed leopard lizard is a relatively large lizard of the family Iguanidae, with a long, regenerative tail; long, powerful hind limbs; and a short, blunt snout. Blunt-nosed leopard lizards are darker than other leopard lizards, and exhibit tremendous variation in color and pattern on the back. Background color ranges from yellowish or light gray-brown to dark brown depending on the surrounding soil color and vegetation association. The under surface is uniformly white.

Adult lizards often seek safety in burrows, while immature lizards use rock piles, trash piles, and brush. The lizards use burrows constructed by mammals, such as kangaroo rats, for overwintering and estivation. Adult lizards hibernate during the colder months of winter, and are less active in the hotter months of late summer. Adults are active above ground from about March or April through June or July. Hatchlings are active until mid-October or November.

Historical and Current Distribution. The blunt-nosed leopard lizard was distributed historically throughout the San Joaquin Valley and adjacent interior foothills and plains, extending from

central Stanislaus County south to extreme northeastern Santa Barbara County. The blunt-nosed leopard lizard prefers open, sparsely vegetated areas of low relief and inhabits valley sink scrub, valley saltbush scrub, valley/plain grasslands, and foothill grasslands vegetational communities.

Reasons for Decline. Lizard habitat has been significantly reduced, degraded, and fragmented by agricultural development, petroleum and mineral extraction, livestock grazing, pesticide application, and off-road vehicle use. Today its distribution is limited to scattered parcels of undeveloped land, with the greatest concentrations occurring on the west side of the valley floor and in the foothills of the Transverse Range.

Recovery Actions. A recovery plan was first prepared in 1980 and revised in 1985 (Service 1985). The multi-species Recovery Plan issued by the Service in 1998 replaces the 1985 plan. The recovery strategy requires that the Service (1) determine appropriate habitat management and compatible land uses for the blunt-nosed leopard lizard; (2) protect additional habitat for them in key portions of their range; and (3) gather additional data on population responses to environmental variation at representative sites in their existing geographic range (Service 1998*d*).

Hoover's eriastrum *(Eriastrum hooveri)*

Species Description and Life History. Hoover's eriastrum was federally listed as threatened on July 19, 1990 (55 **FR** 29361). Hoover's eriastrum is an inconspicuous member of the phlox family (Polemoniaceae). The wiry stems of this species may or may not branch and vary in height from 1 to 20 centimeters (0.4 to 8 inches) at flowering. The leaves are thread-like and may have two narrow lobes near the base. Hoover's eriastrum has tiny white to pale blue flowers that are nearly hidden in tufts of woolly hair. The stamens are shorter than the corolla (Service 1998*d*).

Hoover's eriastrum grows in scrub-grassland habitats with moderate cover of saltbush. It often grows among cryptogamic soil crusts (i.e., mats of moss, lichen, and algae) that reduce competition from annual grasses (Taylor and Davilla 1986).

Historical and Current Distribution. Hoover's eriastrum was historically distributed in the Temblor Range (Kern and San Luis Obispo Counties), Cuyama Valley (San Luis Obispo and Santa Barbara Counties), and discontinuously in the San Joaquin Valley from Fresno County south, excluding the vicinity of Tulare Lake. The present distribution still extends from Bridge Road west of Fresno to near Cuyama in Santa Barbara County (Taylor and Davilla 1986). Hoover's eriastrum was reported to exist at 130 sites in 1990 (Service 1990) and additional populations may yet be found. Field surveys conducted throughout the southern San Joaquin Valley by Federal agencies and private consultants since 1992 have documented numerous occurrences of Hoover's eriastrum (BLM 1992; BLM 1994). Surveys have shown that Hoover's eriastrum populations range from the upper Cuyama Valley near Ventucopa, Santa Barbara County, northward to the Panoche Hills in San Benito County, a distance of approximately 140 miles. Hoover's eriastrum occurs in 42 U.S. Geological Survey 7.5 minute quadrangles within Kings, Kern, San Luis Obispo, Santa Barbara, San Benito, and Fresno counties. Hoover's

eriastrum occurrence primarily are located within four areas. The four areas from largest to smallest are: (1) the Kettleman Hills area, (2) the Carrizo Plain-Elkhorn Plain-Temblor Range-Caliente Mountains-Cuyama Valley-Sierra Madre Mountains area, (3) the Lokern-Elk Hills-Buena Vista Hills-Coles Levee-Maricopa-Taft area, and (4) the Antelope Plain-Lost Hills-Semitropic area. Additional, more isolated, populations occur throughout the region. Hoover's eriastrum is now known from Fresno, Kings, San Luis Obispo, and Santa Barbara Counties at scattered locations spanning a distance of 100 miles in the inner southern Coast Range of central California. Recently, approximately 20,000 acres of 47,000 acres of Naval Petroleum Reserve No. 1 (part of area 3) in Kern County burned. Hoover's eriastrum is expected to recover in the burned areas (Brian Cypher personal communication 1997).

Reasons for Decline. Hoover's eriastrum has declined mainly as a result of habitat conversion to agricultural and urban uses. An estimated 92% of known extant populations are threatened by future conversions to agricultural use, groundwater recharge basins, and oil and gas development (Taylor and Davilla 1986). Although some sites contain substantial populations (5,000-40,000 individuals), most of the remaining sites on the valley floor are at risk because they are isolated from one another, range in size from approximately 1 acre to less than 400 acres, and contain fewer than 1,000 individuals (Service 1990).

Recovery Actions. Recovery of the species is addressed in the *Recovery Plan*. Several populations are protected at TNC's Paul Paine Preserve and CDFG's Alkali Sink Ecological Reserve. Some protection is afforded to known populations on Federal lands administered by BLM and U.S. Department of Energy.

California Jewelflower *(Caulanthus californicus)*

Species Description and Life History. California jewelflower was federally listed as endangered on July 19, 1990 (55 **FR** 29361). California jewelflower is an annual herb of the mustard family (Brassicaceae). Its stems are erect, up to about 1 foot tall, and produce several flowering branches. The leaves are wavy-margined and most are in a basal rosette. The flowers are translucent white with purple to green tips. Fruit, stem, and foliar hair characteristics distinguish this species from other jewelflowers.

California jewelflower occurs in grassland and mixed grassland-scrub habitats, often on sandy soils. All of the previously known and recently discovered populations occur in remnants of mixed native/non-native grassland habitat.

Historical and Current Distribution. California jewelflower is endemic to the southern San Joaquin Valley region. It originally occurred throughout much of the Tulare Basin from Coalinga and Fresno in Fresno County to the Cuyama Valley in Santa Barbara County and Bakersfield in Kern County. Historical collections document its occurrence at 47 sites and an early collector described the plant as "abundant on the plains of the San Joaquin from Tulare southward" (Taylor and Davilla 1986; Service 1990).

In 1990, California jewelflower was known to occur at only 10 populations, primarily in three areas: the mouth of Santa Barbara Canyon in Santa Barbara County, the southern portion of the Carrizo Plain in San Luis Obispo County, and at TNC's Paul Paine Preserve in Kern County (a small colony of introduced plants). Since 1990, several more populations have been discovered following wet winters (Skinner and Pavlik 1994; CDFG 1993; Service 1990).

Reasons for Decline. Habitat loss resulting from agricultural land conversion, increased livestock grazing and trampling associated with the development of summer water sources, oil and gas development, other human activities, and competition with aggressive non-native annual grasses probably eliminated California jewelflower from Fresno, Kings, and Tulare Counties and reduced its range in Kern and Santa Barbara Counties. These factors continue to threaten many of the remaining populations (Taylor and Davilla 1986; Service 1990).

Recovery Efforts. California jewelflower was federally listed as endangered on July 19, 1990 (Service 1990). Several populations are protected at the Carrizo Plain Natural Area through a cooperative effort between the CDFG, U.S. Bureau of Land Management (BLM), and The Nature Conservancy (TNC). CDFG has entered into a memorandum of understanding with the University of California at Berkeley to study the taxonomy of the plant (CDFG 1992). This species is addressed in the *Recovery Plan.*

Kern Mallow (*Eremalche kernensis)*

Species Description and Life History. Kern mallow was federally listed as endangered on July 19, 1990 (55 **FR** 29361). Kern mallow was first described as *Eremalche kernensis* (Wolf 1938). The most recent treatments (Bates 1992, 1993) assign Kern mallow the name Greene ssp. *parryi.* Bates' treatment of Kern mallow, which includes both white- and purple-flowered gynodioecious plants, has not widely been accepted by the scientific community. Due to the debate within the scientific community over the newest treatment, the Service intends to undertake a status review to solicit available scientific information on which to base a determination of the appropriate taxonomic circumscription of Kern mallow. In the interim, the Service will continue to consider the listed entity to be *E. kernensis* C.B. Wolf, which was the circumscription used when Kern mallow was listed in 1990 (Service 1990). The endangered Kern mallow is a small annual herb of the mallow family 2 to 4-inches in height primarily with white flowers.

Historical and Current Distribution. Kern mallow is restricted to the eastern base of the Temblor Range, occurring from the vicinity of McKittrick to near Buttonwillow within valley saltbush scrub in Kern County (Taylor and Davilla 1986).

Several suspected populations of Kern mallow have been identified on DOE-administered NPR-2 lands. One population of Kern mallow was found in Section 18H during plant surveys conducted in the spring of 1993. The plants were found growing in alkali soils in association with inkweed and annual saltbush species. Kern mallow also has been observed in Sections 18B, 20B, 28B, 8D, and 32G of the former Naval Petroleum Reserve-1 (DOE and Chevron 1994).

Reasons for Decline. The species is threatened by oil and gas development, transmission line maintenance or expansion, agricultural conversion, overgrazing by livestock, exotic plant competition, and off-road vehicle use.

Recovery Actions. Recovery of Kern mallow is addressed in the *Recovery Plan.* The top-priority task for recovery is to protect 90 percent of the remaining occupied habitat. Other high priority tasks include continuing demographic and ecological research on the species.

San Joaquin Woolly-threads (*Lembertia congdonii*)

Species Description and Life History. San Joaquin woolly-threads was federally listed as endangered on July 19, 1990 (55 **FR** 29361). San Joaquin woolly-threads is an annual herb. A member of the sunflower family, San Joaquin woolly-threads produces several frequently branching stems arising from the base. These white-woolly stems grow about 10 inches in length and often trail on the ground. The leaves are about 1/4 inch wide and about 1 ½ inches long, and have uneven, wavy margins. The flowers, which begin to bloom in late February, are small, have a yellow center, lack rays and are about 1/4 inch in diameter. The presence of dimorphic achenes (one-seeded indehiscent fruit) separate it from its closest relative, *Eatonella nivia*, which has only one type of achene.

Little is known of the habitat preferences of San Joaquin woolly-threads. It appears to favor non-alkaline soils of sandy or silty sand texture and an arid climatic regime (Taylor 1987). San Joaquin woolly-threads is associated with valley saltbrush scrub, and valley and foothill grasslands.

Historical and Current Distribution. The San Joaquin woolly-threads was first collected in 1883. Only 12 populations of San Joaquin woolly-threads remain in the San Joaquin Valley and adjoining foothills from the vicinity of Panoche Pass southeasterly to Caliente Creek east of Bakersfield. Another seven populations occur to the southwest in the Cuyama Valley and Carrizo Plain.

Reasons for Decline. Thirty-three populations or 63 percent of the 52 historical populations of the species have been lost. Conversion of grassland sites to agriculture, urbanization, gravel and sand extraction, oil and gas development, continued overgrazing, and off-road vehicle use threaten the remaining stands of San Joaquin woolly-threads.

Recovery Efforts. Recovery of San Joaquin woolly-threads is addressed in the *Recovery Plan.* The top-priority task is to protect existing habitat in the San Joaquin Valley.

Bakersfield Cactus (*Opuntia basilaris* var. *treleasei*)

Species Description and Life History. Bakersfield cactus was federally listed as endangered on July 19, 1990 (55 **FR** 29361). Bakersfield cactus is a succulent, spiny member of the cactus

family (Cactaceae). It is a spreading perennial plant with gray-green stems that form flat pads or "joints". It has large, showy, magenta flowers that bloom from March through June. It is a close relative of the familiar beavertail cactus of the southern California deserts. Bakersfield cactus is a distinct member of the beavertail group that is endemic to the southern Tulare Basin in Kern County (Service 1990). Bakersfield cactus occurs in grassland on bluffs, low hills, toe slopes, drainages, and flats. It prefers substrates of coarse cobble and well-drained sand.

Historical and Current Distribution. Bakersfield cactus once formed extensive colonies around Bakersfield, along the bluffs of the Kern River, along the Caliente Creek drainage and nearby foothills of the Tehachapi Mountains, and south to the Tejon Hills. Its current distribution is very fragmented and much reduced, with remnant populations in five areas: the oilfields northeast of Oildale, Kern River bluffs northeast of Bakersfield, the bluffs and rolling hills west of north Caliente Creek east of Bakersfield, Comanche Point on the Tejon Ranch southeast of Arvin, and northwest of the community of Wheeler Ridge (Service 1990).

Reasons for Decline. A substantial decline of this species has resulted from urbanization, agricultural conversion (primarily for citrus groves and row crops), oilfield development, overgrazing, dumping, sand mining, and invasion of weedy grasses (CDFG 1992). These activities plus ORV use, telecommunication and electrical line construction, and proposed flood control basins continue to threaten the remaining sites (Service 1990). Agricultural conversion remains the most pervasive threat to this species.

Recovery Actions. Recovery of the cactus is addressed in the *Recovery Plan.* A few of the remaining populations are protected at The Nature Conservancy's Sand Ridge and Paine Preserves.

Environmental Baseline

This section contains an analysis of the effects of past and ongoing human and natural factors leading to the current status of the species and their habitats addressed in this biological opinion within the action area of the proposed project. The action area of the proposed project is generally northwest Kern County. The effects of the proposed project are addressed in the following section and are not included here.

Human activities that have led to the current status of native species in the San Joaquin Valley include farming, oil and mineral exploration and extraction, urban development, pesticide applications, off-road vehicle use, and construction of transportation, communications, and irrigation infrastructures. Between 1870 and 1985 more than 94 percent of the wild lands on the San Joaquin Valley floor were converted to uses that make them unsuitable for wildlife or plants (Service 1985).

These human activities can be linked to subsidized imported water and population growth in the San Joaquin Valley. Completion of the San Luis Unit of the Central Valley Project and the

California Aqueduct of the State Water Project resulted in rapid cultivation and irrigation of wild lands along the west side of the San Joaquin Valley (Service 1998*d*). The population of Kern County is expected to double between 1987 and 2010, from 286,000 people to 567,500 people. This population will occupy an additional 34,000 acres for houses and 10,500 acres for commercial and industrial uses. (City of Bakersfield 1990). Therefore the pressure to develop remaining wild land parcels will grow.

San Joaquin Kit Fox. Loss and degradation of habitat by agricultural, industrial, and urban developments and associated practices continue to affect San Joaquin kit fox. Loss of habitat contributes to kit fox declines through displacement, direct and indirect mortalities, barriers to movement, and reduction of prey. The isolation of remaining habitat fragments coupled with habitat degradation and barriers to movement, such as aqueducts and busy highways, can limit dispersal, and threaten survival of kit fox populations (Service 1998*d*).

The west side of the Kern County valley floor area harbors some of the highest densities of kit fox. However, population monitoring of San Joaquin kit fox at the Naval Petroleum Reserve on the west side of Kern County, in the hills, indicate a general downward trend in foxes captured from 1981 to 1996, as shown in Table 3. EG&G captured more than 50 individual foxes in 1981, 1982, and 1994. Thirty three foxes were captured in 1995, and 24 foxes were captured in 1996. Reasons for the decline are not fully understood and are probably complex. The decrease in fox captures from 1995 to 1996 may be caused in part by a decrease in the abundance of kangaroo rats, other rodents, and lagomorph prey species, possibly depressing overall reproductive success and survival (Otten 1997).

Elsewhere, occurrences are more fragmented. Some kit foxes have managed to find foraging and denning habitat within the City of Bakersfield, especially along the Kern River.

Tipton Kangaroo Rat. During and following the 1994-1995 winter, biologists noted a decline in abundance of kangaroo rats in the southern San Joaquin Valley. Lower than expected trapping results, and decreased sign of activity were observed at several dispersed sites. Dramatic declines were noted for short-nosed, Tipton, and Heermann's kangaroo rats, although only modest reductions were noted for giant kangaroo rat populations on the valley floor (Single et al. 1996).

California Condor. The California condor roosts and nests in higher elevation areas on cliffs, and forages across hilly lower elevation areas. Condors from San Luis Obispo and Santa Barbara Counties have been seen in Taft in Kern County, at the edge of the coastal mountains (Mitchell personal communication 1998). The birds in Santa Barbara and San Luis Obispo counties, and the birds proposed for reintroduction in the Wind Wolves Preserve in southern Kern County in early 1999, will forage in the foothills west of Interstate 5 in Kern County, but are not likely to venture out onto the Valley floor east of Interstate 5, where the proposed project is located. Foraging habitat for the California condor has been lost to oil development, urban development, and row crops (Service 1998*a*).

Least Bell's Vireo. The least Bell's vireo has been seen in Kern County in recent years, but more information is needed about their status. Least Bell's vireos primarily inhabit dense, willow-dominated riparian habitats with lush understory vegetation. Most riparian habitat in Kern County has been eliminated due to water diversions for agriculture, industry, and urban uses.

Blunt-nosed Leopard Lizard. In Kern County the blunt-nosed leopard lizard currently occupies scattered parcels of undeveloped land on the Valley floor, and occurs in the foothills of the Coast Range. While the blunt-nosed leopard lizard can occupy grassland used for grazing it prefers lands with scattered shrubs and sparse grass/forb cover. Habitat for the blunt-nosed leopard lizard has been lost to oil development, urban development, and row crops (Service 1998*d*).

In recent years, above average precipitation seems to have increased the amount of vegetative cover. This increase in cover may be a factor in the low abundance of adult lizards seen during the population monitoring at the Naval Petroleum Reserve in Western Kern County, in 1995 (DOE and Chevron 1996).

Hoover's Eriastrum. Hoover's eriastrum exists on some remnants of native habitat in western Kern County. Valley floor populations of Hoover's eriastrum have been destroyed primarily by farming operations and secondarily by urban development. Occurrences of the plant in the Bakersfield metropolitan area are threatened by development. Hoover's eriastrum was found during surveys for this project on a parcel south of the proposed project footprint, east of the Southern Pacific Railroad, and north of the Cross Valley Canal. The population identified during surveys for this project is part of the Lokern-Elk Hills-Buena Vista Hills-Coles Levee-Maricopa-Taft area population. Conversion of land from native habitat or grazing to row crops continues to threaten Hoover's eriastrum populations in western Kern County (Service 1998*d*).

California Jewelflower. Habitat loss resulting from agricultural land conversion, increased livestock grazing and trampling associated with the development of summer water sources, oil and gas development, other human activities, and competition with aggressive non-native annual grasses probably eliminated California jewelflower from Fresno, Kings, and Tulare Counties and reduced its range in Kern and Santa Barbara Counties. These factors continue to threaten many of the remaining populations (Taylor and Davilla 1986; Service 1990). The California jewelflower was not found in the footprint or near the proposed project during Caltrans botanical surveys. One known population in the project action area has already been extirpated.

Kern Mallow. Kern mallow is known from a single metapopulation consisting of intermittent occurrences within an area of approximately 40 square miles at the eastern base of the Temblor Range in western Kern County to the west of Interstate 5 around Lokern Road. Kern mallow was found during surveys for this project on a parcel south of the proposed project footprint, east of the Southern Pacific Railroad, and north of the Cross Valley Canal. Oil field development and agricultural uses continue to threaten the existence of Kern mallow (Service 1998*d*).

San Joaquin Woolly-threads. San Joaquin woolly-threads exists on some remnants of native habitat and grasslands in western Kern County near the Kern River east of Interstate 5 and near Lost Hills. Valley floor populations of San Joaquin woolly-threads have been destroyed primarily by farming operations and secondarily by urban development. Occurrences of the plant in the Bakersfield metropolitan area have mostly been extirpated, and the rest are threatened by development. Conversion of land from native habitat or grazing to row crops continues to threaten San Joaquin woolly-threads populations in western Kern County (Service 1998*d*).

Bakersfield Cactus. Bakersfield cactus occurs in grassland on bluffs, low hills, toe slopes, drainages, and flats. It prefers substrates of coarse cobble and well-drained sand. Most of the remaining Bakersfield cactus occurs to the north and east of downtown Bakersfield, or south of the proposed project action area near the intersection of 5 and 99, and not to the west in the proposed project area. Substantial decline has resulted from urbanization, agricultural conversion (primarily for citrus groves and row crops), oilfield development, overgrazing, dumping, sand mining, and invasion of weedy grasses (CDFG 1992). These activities plus off road vehicle (ORV) use, telecommunication and electrical line construction, and proposed flood control basins continue to threaten the remaining sites (Service 1990). Agricultural conversion remains the most pervasive threat to this species.

Effects of the Proposed Action

The effects of the proposed action are presented here. For the effects analysis, the Service has divided the project into the following components:

1. Adding a Limited Access Highway in West Kern County
2. Acquiring and Maintaining a Transit Corridor
3. Compensating for Adverse Effects on Endangered Species
4. Building the Highway
5. Using the Highway
6. Maintaining the Highway

The direct and indirect effects of each component will be described as they apply to federally-protected animal and plant species. The following section will address cumulative effects.

<u>Adding a Limited Access Highway in Northwest Kern County</u>

Direct Effects. Direct effects to animals and plants of building a new highway in Northwest Kern County include: impacts to the Kern Water Bank; habitat losses for animal and plant species on the proposed transit corridor; and restrictions to animal movements through the area.

The Kern Water Bank (KWB), in addition to its groundwater recharge functions, is an existing project that protects endangered species. The KWB is part of a complex of protected species preserves which includes the Elk Hills Conservation Area and the Coles Levee Ecosystem

Preserve, as shown on Figure 7. The selected alternative is routed across KWB land, most of which is presently in use as recharge basins, as shown on Figure 8. The portion of the KWB that lies under and to the north of the proposed project, the North Basins, is approximately 650 acres in size (Cheryl Harding, personal communication 1998); approximately 400 acres are used as recharge basins and approximately 200 acres are designated as "compatible habitat" in the Kern Water Bank Habitat Conservation Plan (KWB HCP) (Kern Water Bank Authority 1997). Compatible habitat is defined as previously farmed lands that are known to support protected species, and that are being managed to enhance their habitat value. "Sensitive habitat", as defined in the KWB HCP, is land area where remnants of saltbush scrub or sink scrub communities are present. None of the 600 acres is presently designated as "sensitive habitat" in the KWB HCP. The conservation bank portion of the KWB is located about three and a half miles south of the proposed project area, on the south side of the Kern River. The proposed project will provide a second and larger barrier, in addition to the Cross Valley Canal, to movement of San Joaquin kit foxes, blunt-nosed leopard lizards, and Tipton kangaroo rats between the 600 acre portion and the rest of the KWB. The road will impede local movements between populations and relocation or recolonization of species, which is a mechanism that allows populations to persist during cyclical changes in climate, natural catastrophes or other disturbances.

The selected alternative is routed across KWB land that supports recharge basins. Approximately 5 percent of the route is designated as compatible habitat. The recharge basins affected by the project are were slated to be flooded frequently (KWBA 1997), making them less usable as habitat by upland protected species than if they were only flooded occasionally.

Habitat losses in acres from the selected alternative and proposed conservation ratios are presented on Table 1 for various types of habitat. The information about the Kern River alignment in that Table is no longer relevant and can be ignored.

East of the Southern Pacific Railroad, and between the proposed project and the Cross Valley Canal, is a small area, of undetermined size, where Caltrans found San Joaquin bluecurls (*Trichostema ovatum*) (no status), Hoover's eriastrum, and Kern mallow. This area is not in the path of the proposed project and, therefore, will not be directly affected by the project.

The effects of the project on animal movement across the project are negative, but unquantifiable. The effects of the project on animal movement between the northern 600 acres and the rest of the KWB have been mentioned. The highway project will also affect the movement of blunt-nosed leopard lizards, Tipton kangaroo rats, and San Joaquin kit foxes in other portions of the proposed project. Non-native grassland and the Kern River corridor can support and serve as a movement corridor for the protected species just mentioned. The occurrence of grassland next to the proposed project corridor is shown on Figure 9. The grassland areas occur in four locations: to the west of Interstate 5 in the footprint of the proposed interchange with the selected alternative; in the area near Enos Lane, in the area near Renfro and Allen Roads; and in the area between 99 and Coffee Road. In the three areas east of Interstate 5 the proposed project would fragment habitat for these three species and limit movement across the highway. Foxes, lizards and

kangaroo rats will be deterred by noise, lights and the movement of cars, or they will die from colliding with vehicles.

The effects of the proposed project on kit fox movements will be discussed from east to west. The proposed highway will be elevated where it crosses the river and for a short distance on the north side of the river, and therefore will not block kit fox travel directly in the river corridor. However, the reduced cover from the lack of plants under a new bridge will reduce the habitat value of the river corridor to animals, including kit foxes. Caltrans proposes to install three 2-foot-diameter culverts underneath the freeway near the crossing of Mohawk Street, with exact locations to be determined by local kit fox experts, the Service, and CDFG. The placement of culverts under roads for use by kit foxes has not been adequately studied to determine its effectiveness and how it should be implemented.

Caltrans proposes to leave existing corridors along the Friant-Kern Canal and Coffee Road unobstructed to allow for their continued use by kit fox. Again, the existence of the bridge will reduce the amount of cover because of the lack of plants under the bridge, and reduce the value of the existing corridors for kit fox travel. Caltrans does not propose to install any culverts for kit foxes between Coffee Road and Calloway Drive due to the limited habitat in the area and expert advice that no north-south kit fox corridors exist in this 1.5-mile stretch of the proposed alignment (Caltrans 1998). The Service does not have enough evidence to agree or disagree with this assertion. Between Calloway Drive and Route 43 (Enos Lane) no accommodations for kit fox travel corridors are planned. From aerial photographs provided by Caltrans it is apparent that there is extensive agricultural land and grassland north and south of the proposed project between Calloway Drive and Route 43. Figure 8 shows that there are two areas of grassland in this stretch of the proposed project, and these would be areas where kit fox might den. The lack of kit fox culverts under the proposed project could be detrimental to kit foxes using the area. In the final segment of the selected alternative, from Route 43 to Interstate 5, Caltrans proposes to install ten 2-foot-diameter culverts evenly-spaced along the proposed project. Most of this segment is within the boundaries of the KWB. The use of fences to guide kit fox to culverts installed for their use, and limit their travel across the freeway, has been tried in other locales by Caltrans. It's effectiveness is unknown. No such fences are mentioned in the project description provided by Caltrans and FHWA.

Indirect Effects. Indirect effects to animal and plant species that are federally listed include effects from residential, commercial, and industrial projects that will be constructed in Northwest Bakersfield because transportation has improved. The effects of those projects that are within the planning area of the *Metropolitan Bakersfield 2010 General Plan* (*General Plan*) on nine species have been addressed by the Service in the Biological Opinion (Service 1994) for the Metropolitan Bakersfield HCP (City of Bakersfield 1994). To the northwest of Bakersfield the planning area boundary is a quarter mile west of Route 43 (Enos Lane) and a quarter mile north of Seventh Standard Road. The species addressed are:

- blunt-nosed leopard lizard,

- Tipton kangaroo rat,
- San Joaquin kit fox,
- Hoover's eriastrum,
- California jewelflower,
- Kern mallow,
- San Joaquin woolly-threads, and
- Bakersfield cactus.

Take of the animal species listed above is authorized under the Metropolitan Bakersfield HCP. The City of Bakersfield and Kern County are buying endangered species habitat mostly in pre-approved areas to the northeast and southwest of the metropolitan Bakersfield area to compensate for losses within the planning area. Because these pre-approved purchase areas are not in the project vicinity, the indirect effects from the proposed project will not conflict with the Metropolitan Bakersfield HCP efforts to protect endangered species habitat.

The *General Plan* is based on a projected population growth from 286,000 people in 1987 to 567,000 people in 2010 in the Bakersfield metropolitan area. The easternmost segment of the proposed project would alleviate some or all of the congestion near Route 99 shown on Figure 4. The *General Plan* delineates proposed highways, including an east-west road in the northwest sector that mirrors the proposed project, and a north-south highway to the west of Bakersfield at about Allen Road, as shown on Figure 5. The *General Plan* is constructed to accommodate growth in the planning area. Kern County west of the planning area (essentially west of Enos Lane) is not zoned for development. The public policy, as contained in the various planning instruments, is to keep growth mostly inside the *General Plan* planning area. Of course, zoning can be changed in the future. The Service finds that the proposed project is consistent with existing plans for expansion of the Bakersfield metropolitan area, and those effects on endangered and threatened species within the planning area have been previously addressed by the Service.

Development west of the *General Plan* planning area due to the construction of the proposed project will affect endangered and threatened species and those effects have not yet been addressed. Natural lands west of Enos Lane will be developed for housing, commercial, and industrial purposes because of the improved infrastructure. Agricultural land may move from grazing to row crops as land values rise. Conversion of grazing land to row crops does not require local permits, but does require authorization from the Service. Such authorization is rarely sought, and therefore effects on endangered species are not often addressed. Any development projects will require Kern County Planning Department review, and standard Service policies for avoidance and conservation measures will be required as part of the local agency review process. Effects from agriculture, industry, and oil activities could be addressed through the Kern County Valley Floor Habitat Conservation Plan (KCVF HCP), which is in development (Cross personal communication 1998). The KCVF HCP will not allow conversion of agricultural land to urban uses if the conversion to agricultural from native habitat was illegal. No interchanges are planned west of Enos Lane. However, Enos Lane is on the edge of the General Plan planning area, and development will occur outside the planning area because of the Enos Lane access to the highway.

Acquiring and Maintaining a Transit Corridor

Once the highway is conceptually designed and environmental approvals are obtained, the next step is to buy land for the highway right-of-way. Land purchases will occur in stages as money becomes available to Caltrans for the project. Once the land for a particular segment is bought Caltrans may take several years before building that portion of the highway. Animal species such as kit fox, blunt-nosed leopard lizard and kangaroo rats can benefit temporarily if the land is managed to benefit wildlife. The project description does not include information about how the land will be managed. No temporary benefits will accrue to endangered or threatened plants as none were found in the direct path of the proposed project.

Compensating for Adverse Effects on Endangered Species

Conservation measures proposed as part of the project description generally meet Service minimum requirements for each of the animals addressed. However, Service policy is that projects on the KWB are to be mitigated at a higher ratio than is used elsewhere in Kern County because the land has already been set aside for endangered species protection. The conservation ratio for setting aside land for projects on the KWB is 4 to1 for permanent projects. Therefore the conservation acreage proposed by Caltrans for the portion of the project on KWB lands does not compensate for the full effects of the project. Additionally, the Caltrans project description does not include endowment or management funds for proposed conservation acres.

Accommodations for kit fox travel corridors have been proposed by Caltrans, but the utility and appropriateness of installing culverts, the effectiveness of two-foot-diameter culverts, and the spacing of culverts has not been sufficiently studied or proven. In addition, not enough is known about the movement of kit foxes within the Metropolitan Bakersfield planning area to determine the magnitude of the adverse effect of the highway on kit fox movement and dispersal. No accommodation for kit fox travel is proposed for the project between Calloway Drive and Route 43 (Enos Lane).

The proposed conservation concepts presented in Table 1 as part of the Project Description do not meet Service minimum requirements in two areas. First, burrowing owls are protected by the Migratory Bird Treaty Act (MBTA), and relocating burrows of owls may not be allowed under the MBTA. Second, blunt-nosed leopard lizard are most active above ground from April 15 to June 30 and August 1 to September 15. In order to time construction to avoid or minimize impacts, construction should occur from April 15 to June 30 and August 1 to September 15 (CDFG 1990).

Building the Road

The described project is designed to minimize and avoid most effects from construction of the road. Caltrans proposes to provide a project-specific conservation plan to address construction-related special status species impacts when the details of the project are better defined. Some aspects of the construction-related conservation measures go beyond the minimum Service

requirements, such as conducting kit fox den surveys 2 years prior to construction in order to plan around existing dens as much as possible, and construction of artificial dens on appropriate nearby land to replace dens that cannot be avoided. Not all extant Service minimum requirements are listed in the project description, and no reference is made to Service minimum requirements.

Disturbance Effects on Listed Plant Species. The proposed project will not directly affect the listed plant species covered under this biological opinion as they do not presently occur in the footprint of the project.

Disturbance Effects on San Joaquin Kit Foxes. The likelihood of direct mortality to kit foxes from either crushing or entombment in dens is medium to low because of avoidance measures proposed in the project description. Not all avoidance measures required by the Service are mentioned in the project description. Kit fox may be adversely affected by vehicle strikes, and harassment from noise and vibration. Kit foxes may be adversely affected by construction activities temporarily blocking north-south travel corridors in urban Bakersfield as well as in the grassland and agricultural areas in the center and west portions of the project.

However, San Joaquin kit foxes inhabiting the project area and surrounding vicinity (for purposes of this biological opinion the surrounding vicinity is described as 500-feet outside and adjacent to the project footprint) may be subject to indirect effects including temporary harassment from noise associated with project activities and human presence, and a reduction in natural food sources as a result of habitat disturbance. Harassment can also result from heavy equipment vibration causing the collapse of dens and subsequent displacement of resident animals. The effects of harassment on kit foxes could be considered significant if construction activities were to occur in the vicinity of natal dens during winter months when they breed, and/or spring months when they whelp. Caltrans has specifically described avoidance measures to reduce the effects of the project on kit foxes from January 1 to June 14 of each year. Habitat compensation measures are anticipated to offset habitat loss due to project implementation.

Disturbance Effects on Blunt-nosed Leopard Lizards, and Tipton Kangaroo Rats. Blunt-nosed leopard lizards, and Tipton kangaroo rats may be adversely affected by vehicle strikes, entombment in burrows, and harassment from noise and vibration. These three species are only likely to be present in the three portions of the project that support grassland and in any adjacent agricultural fields. Caltrans will provide a biological monitor who can remove individuals from harms' way or allow them to escape unimpeded. Habitat compensation measures are anticipated to offset habitat loss due to project implementation.

Disturbance Effects on California Condor. The California condor is not likely to be adversely affected by construction activities on the project site. The foothills of the coastal range are approximately 4 miles west of the closest part of the proposed project. Condors forage over the foothills, but not over the valley floor. However, there is a small risk to condors foraging near the proposed project from electrocution if power lines are built into the foothills of northwest Kern County because of development that follows the road.

Disturbance Effects on Least Bell's Vireo. The east end of the proposed project includes building a bridge over the Kern River, and removing and replacing, adjacent to the project site, 0.2 acre of Great Valley cottonwood riparian forest. Least Bell's vireos have been seen on the Kern River in recent years on the south fork of the Kern River above Lake Isabella. Therefore Least Bell's Vireo could recolonize downstream if suitable habitat is available. This project may affect them because creation of new riparian habitat is a difficult task and is not always successful.

Using the Road

Cars and trucks using the road will have effects on endangered and threatened animals. Vehicle strikes will occur with San Joaquin kit fox, blunt-nosed leopard lizard, and Tipton kangaroo rat. In reports from the Department of Energy and from the California Energy Commission for areas in Kern County, vehicle strikes are the second most prevalent cause of death among kit foxes in oil field areas (Service 1998*b*). Small-scale scientific studies are underway to determine if San Joaquin kit fox will use culverts for crossing under large man-made obstructions. Whether kit fox will use culverts for travel routes has not been demonstrated. Greg Warick, from the Endangered Species Recovery Program, reports that kit fox like to den in 8-inch culverts under access roads on the California Aqueduct. The culverts are 35 feet long, and kit fox will exit from either end of a culvert used for denning. One end of the culvert overhangs a concrete apron on the side of the aqueduct (Greg Warick, personal communication 1999). Cheryl Johnson, also from the Endangered Species Recovery Program, found evidence of feral cats using culverts at the State Route 152 and 33 interchange as part of a Caltrans study. No foxes were found in or near the culverts (Endangered Species Recovery Program 1998). The number of culverts required, their design, and their locations also require further study. The use and design of fences to keep kit fox off the highway and to funnel them to the culverts requires consideration and study. Fences were installed at the Route 152/33 interchange, but their design is not presented in the Caltrans study report, and their usefulness could not be evaluated.

Maintaining the Road

Runoff from the road will contain oil, and will contribute incrementally to soil and water contamination in the vicinity of the road. Spills from accidents on the road will also contribute to environmental degradation in the vicinity of the road, affecting all biota, including protected species.

Animals. Activities involved in maintaining the shoulders and median of the road will effect endangered and threatened animal species. If fences are installed for any reason, they may effect the movement of kit foxes, positively (funneling them toward culvert crossings), or negatively (limiting their ability to move through the area). If fencing is erected to funnel foxes towards culvert crossings, the fences will require maintenance in order to be effective.

Plants. Weedy species on the shoulders and median of the highway can invade neighboring parcels of land, affecting threatened plant species and remnants of natural communities. The area

where San Joaquin bluecurls, Hoover's eriastrum, and Kern mallow were found, within 100 feet of the project footprint, could be affected by weeds and non-native species from the highway right-of-way. Non-native and weed species on the portion of the highway through the KWB also are of concern.

Cumulative Effects

Cumulative effects include the effects of future State, Tribal, local or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act.

Numerous non-federal activities continue to eliminate habitat for the San Joaquin kit fox, blunt-nosed leopard lizard, Tipton kangaroo rat, California condor, least Bell's vireo, Hoover's eriastrum, California jewelflower, Kern mallow, San Joaquin woolly-threads, and Bakersfield cactus in the project area for the State Route 58 corridor. Loss and degradation of habitat affecting both animals and plants continues as a result of urbanization, oil and gas development, road and utility right-of-way management, flood control projects, overgrazing by livestock, and continuing agricultural expansion. Listed and proposed animal species are also affected by poisoning, shooting, increased predation associated with human development, and reduction of food sources.

The current strategy for recovery of listed species is to secure large contiguous blocks of habitat to support core populations. In addition, land connecting the large core areas would be managed to support scattered populations and to serve as corridors between core areas. Rehabilitation of disturbed lands may also be necessary to provide sufficient habitat to support populations that will remain stable in perpetuity.

Agencies and organizations, such as the Service, the California Department of Fish and Game, The Nature Conservancy, and the Center for Natural Lands Management, have begun to secure some of the core lands identified as important for recovery. Several local planning efforts which are focused on reducing the impacts of urbanization and industrialization on listed species are also underway. These positive actions may reduce the likelihood that the continued existence of these species will be jeopardized in the short term. These actions, however, are not expected to be sufficient to lead to the downlisting of these species in the long term, and may not be sufficient to protect the species from jeopardy in the long term.

Conclusion

After reviewing the current status of the blunt-nosed leopard lizard, Tipton kangaroo rat, California condor, least Bell's vireo, San Joaquin kit fox, Hoover's eriastrum, San Joaquin adobe sunburst, California jewelflower, Kern mallow, San Joaquin woolly-threads, and Bakersfield cactus, the environmental baseline for the action area, the effects of the proposed Route 58

highway project and the cumulative effects, it is the Service's biological opinion that the Route 58 highway project, as proposed, is not likely to jeopardize the continued existence of the listed species covered under this biological opinion, and is not likely to destroy or adversely modify designated critical habitat. No critical habitat has been designated for blunt-nosed leopard lizard, Tipton kangaroo rat, San Joaquin kit fox, therefore, none will be affected. Critical habitat for the California condor has been designated at Tejon Ranch in Southern Kern County and in Kern County rangelands northeast of Bakersfield, however, this action does not affect those areas and no destruction or adverse modification of that critical habitat is anticipated. Critical habitat for the least Bell's vireo has been designated in Santa Barbara, Ventura, Los Angeles, Riverside, San Bernardino, and San Diego Counties, however, this action does not affect those areas and no destruction or adverse modification of that critical habitat is anticipated.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harass is defined by the Service as an intentional or negligent act or omission which creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. Harm is defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by impairing behavioral patterns including breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with this Incidental Take Statement.

The measures described below are non-discretionary, and must be implemented by FHWA so that they become binding conditions of any grant or permit issued to Caltrans, as appropriate, in order for the exemption in section 7(o)(2) to apply. The FHWA has a continuing duty to regulate the activity covered by this incidental take statement. If the FHWA (1) fails to require the applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, and/or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse.

Sections 7(b)(4) and 7(o)(2) of ESA do not apply to the incidental take of listed plant species. However, protection of listed plants is provided to the extent that ESA requires a Federal permit for removal or reduction to possession of endangered plants from areas under Federal jurisdiction, or for any act that would remove, cut, dig up, or damage or destroy any such species on any other area in knowing violation of any regulation of any State or in the course of any violation of a State

criminal trespass law. The California Native Plant Protection Act forbids the take of state-listed plants.

Amount or Extent of Take

Based on information provided in the project biological assessment (Caltrans 1998), information in our files, and through prior consultations, the Service anticipates that the following numbers of kit foxes, leopard lizards, and kangaroo rats may be subject to harm or mortality during proposed remediation and archaeological activities over the life of the project:

1. One (1) San Joaquin kit fox in the form of direct mortality or injury through accidental death during project construction activities.

2. One (1) blunt-nosed leopard lizard in the form of direct mortality or injury through accidental death during project construction activities.

3. One (1) Tipton kangaroo rat in the form of direct mortality or injury through accidental death during project construction activities.

The number of animals subject to incidental take must not exceed the amounts stated above. No take of California condor or least Bell's vireo is authorized.

The number of San Joaquin kit fox, blunt-nosed leopard lizard, and Tipton kangaroo rat subject to harassment from noise, vibrations, and capture or excavation of dens and burrows cannot be estimated because the number of individuals of these species within potential project areas is unknown. Therefore, the Service anticipates and authorizes harassment of all individuals of these federally listed species within 50 feet of the project footprint, provided that such harassment: (1) is the result of bona fide project activities, aand (2) that all terms and conditions specified below are fully implemented.

Effect of the Take

The Service has determined that this level of anticipated take is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat.

Reasonable and Prudent Measures

The following reasonable and prudent measures are necessary and appropriate to minimize the potential for incidental take of San Joaquin kit foxes, blunt-nosed leopard lizards, and Tipton kangaroo rats authorized by this opinion.

1. Minimize the potential for harm, harassment or killing of federally listed wildlife species from all segments of the proposed project, including the segment across KWBA land.

2. Minimize the potential for harm, harassment or killing of federally listed wildlife species from growth induced by the highway outside of the boundary of the Metropolitan Bakersfield HCP.

3. Minimize the potential for harm, harassment or killing of federally listed wildlife species during construction of the road.

4. Minimize the potential for harm, harassment or killing of federally listed wildlife species during operation and maintenance of the road.

5. Minimize the potential for inadvertent capture or entrapment of federally listed wildlife species during construction, operation, and maintenance of the road.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of ESA, the FHWA must comply with the following terms and conditions, which implement the reasonable and prudent measures described above. These terms and conditions are nondiscretionary.

1. The FHWA shall minimize effects on listed species from all segments of the proposed project. Conservation acres, initial management funds, and endowments shall be purchased/set aside for each phase of construction before construction starts.

    1. The portion of the alignment that crosses KWBA lands shall be compensated for at a ratio of 4:1; otherwise the conservation ratios presented in Table 1 shall apply except as noted in 1.b. below. KWBA lands shall be compensated for through the KWBA, if approved by the KWBA. All applicable fees shall be paid, as required by the KWBA. For conservation lands not managed by the KWBA, funds will be set aside for all conservation lands for initial maintenance and for perpetual care of all conservation acreage as required by the conservation bank manager, or, the fund amount required shall be calculated using the method developed by the Center for Natural Lands Management (CNLM)(CNLM 1999). Lands appropriate for satisfying conservation needs are described in the *Recovery Plan* (Service 1998*d*).

    2. Riparian habitat shall be mitigated at a ratio of 3:1 rather than at the 1:1 ratio in the Project Description. Replacement of riparian habitats at a 1:1 ratio does not take into account the temporal loss of the riparian habitat and its value to wildlife over time. In general, evaluations completed by the Service have shown that riparian habitat replacement should occur at ratios not less than 3:1, unless the replacement habitat has reached its full function and value prior to impacts occurring.

2. The FHWA shall minimize the negative effects from growth induced by the highway outside of the boundary of the Metropolitan Bakersfield HCP by not constructing the project west of Nord Road until the Kern County Valley Floor HCP, or an HCP that addresses urban development impacts to protected species west of Enos Lane in the west Bakersfield area, has been approved by the Service and implemented. Section 5.4 of the DEIS/EIR identifies that the Caltrans modeled the proposed action and found that the proposed project would distribute growth relatively evenly across the metropolitan area. These results were reviewed by a local panel which determined that the project would not be growth inducing. However, no scientific evidence is presented in the DEIS/EIR to document that the proposed action is not growth inducing.

3. The FHWA shall minimize the potential for harm, harassment, or killing of federally listed wildlife species resulting from project related activities by ensuring implementation of the following during construction phases of the project:

    1. Prior to the initiation of any field work, a Service approved biologist shall conduct an environmental orientation for all project personnel. Topics to be covered shall include descriptions of the listed species, regulations regarding protection of listed species, take avoidance measures to be implemented, reporting procedures if an incidental take occurs, and consequences of non-compliance. Any person working on the project must receive this orientation prior to working on the site.

    2. Preactivity surveys for listed species shall be conducted by a Service approved biologist prior to any ground disturbing activities at the appropriate interval before earthmoving activities start, as found in Service survey protocols and avoidance and minimization protocols. Any listed species or sensitive habitat features observed must be noted and clearly marked. The map of these features shall be submitted to the Service with the preactivity survey report. All relevant field survey data shall be submitted to the CDFG Natural Diversity Database (NDDB), and to the Service.

    3. An exclusion zone shall be established around sensitive habitat features such as kit fox dens, burrows occupied by Tipton kangaroo rats or blunt-nosed leopard lizards, Potential kit fox dens shall be avoided by 50 feet, known kit fox dens shall be avoided by at least 100 feet, active pupping dens shall be avoided by at least 200 feet, and burrows occupied by Tipton kangaroo rats or blunt-nosed leopard lizards, and listed plants shall be avoided by at least 50 feet. If least Bell's vireo are found in the area the Service will be contacted and an exclusion zone will be determined.

    4. If any work has to be conducted near sensitive biological areas or within exclusion zones, a Service approved biologist must monitor work activities to ensure that sensitive resources are not impacted.

5. Project activities shall be conducted during daylight hours to minimize impacts to listed animals.

6. Project activities that may result in destruction of blunt-nosed leopard lizard dens and burrows shall be conducted between May 1 and September 30 as much as possible. Project activities that may result in destruction of dens should occur during leopard lizard activity periods, when the air temperatures are between 77 and 95 degrees Fahrenheit (25 to 35 degrees Celsius). This will maximize the leopard lizards' ability to escape from slow-moving vehicles and minimize the risk of accidental entombment in burrows.

7. All project activities and vehicles shall be limited to existing roads, previously disturbed areas, and the footprint of the project presented to the Service and surveyed by the Service-approved biologist.

8. All spills of hazardous materials shall be immediately cleaned up to prevent exposure to wildlife.

9. Pets and firearms shall be prohibited at project sites.

10. All food-related trash shall be cleaned up and disposed of daily at project sites.

11. Vehicles must observe a 20-mph speed limit in and around project sites.

12. Use of rodenticides and herbicides in project areas shall be restricted. All uses of such compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, the California Department of Pesticide Regulation, and by other State and Federal legislation.

13. Service minimum requirements may change before the highway is fully constructed, and therefore the FHWA shall informally consult with the Service at the start of each segment of the project to determine if reinitiation is necessary.

4. The FHWA shall minimize the potential for harm, harassment, or killing of federally listed wildlife species resulting from project related activities by ensuring implementation of the following during operation and maintenance phases of the project:

   a. Spilled substances shall be promptly cleaned up to avoid chronic or acute poisoning of wildlife.

b. Appropriate barriers and devices shall be constructed and maintained to guide kit fox to the culverts installed for their use, as determined by research. Culverts installed for use by kit fox shall be maintained.

c. Caltrans and FHWA shall apply to the Service to formally consult on the development of a programmatic biological opinion for all highway construction and maintenance in the San Joaquin Valley, and will do research to support the programmatic biological opinion. The research will include the following elements:

1. Data collection and field verification.

2. Preparation of a Biological Assessment, including analyzing and mapping species distribution, mapping distribution of vegetation associations, mapping construction and maintenance projects, estimating potential impacts, developing a conservation strategy, developing a compensation strategy, and developing a monitoring plan.

3. Studying kit fox mortality due to roads and traffic. This includes traffic studies that quantify the traffic and differentiate between different types of roads in performing the analysis of effects on kit fox.

2. Studies shall be conducted before and after highway construction to determine the effects of highways on kit fox and the appropriateness of proposed conservation measures. A study plan shall be submitted to the Service for approval prior to the start of the studies. The FHWA shall:

1. Examine and document the movement of San Joaquin kit fox across the entire length of the proposed Route 58 project area.

2. Collect data on kit fox vehicle strikes on highways within the range of the kit fox and assess the data to determine how to minimize vehicle strikes in the design and maintenance of the proposed project.

3. Conduct research on kit fox corridors, including assessing the effectiveness of using culverts for kit fox corridors, and if culverts are effective, determining where to use them, spacing, size, and the use of fences or other devices to control kit fox access to the highway. If the culverts included in the Project Description are found to be inappropriate, FHWA may consult with the Service on this topic.

5. A study shall be conducted, at an appropriate time of the year, before construction of the Kern River overpass, to determine the status of least Bell's vireo on the Kern

River from the outlet of Lake Isabella to Interstate 5. A study plan shall be submitted to the Service for approval prior to the start of the study.

5. The FHWA shall minimize the potential for inadvertent capture or entrapment of federally listed wildlife species during construction activities by ensuring implementation of the following:

   a. If a kit fox den is present in a work area and cannot be avoided, the den shall be monitored for 3 nights to ensure vacancy, and then must be excavated and backfilled according to Service guidelines (attached as Appendix A to this Opinion.

   b. If listed rodents or blunt-nosed leopard lizards are observed within designated work areas and cannot be avoided, they shall be captured and relocated by a qualified biologist (who has a current 10(a)(1)(A) permit from the Service authorizing trap, capture, and relocation of these listed species) to outside of the work area to avoid injury or mortality. A relocation plan shall be developed and approved by the Service and CDFG before each phase of construction which shall identify appropriate habitat for release sites and methods for conducting the relocation that are most effective for survival of the individuals involved.

   c. To prevent entrapment of animals, any trenches or pits more than 2 feet deep that are created during project activities shall be either covered at night, or earthen or wooden escape ramps shall be provided. Before work continues in these areas, trenches and pits shall be inspected by a Service approved biologist to ensure that no animals are present.

   4. To prevent entrapment of animals, all construction pipes, culverts, or similar structures with a diameter of 2-inches or greater that are stored at a construction site for one or more overnight periods should be capped and thoroughly inspected for animals before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If an animal that could be a protected species is discovered inside a pipe, that section of pipe should not be moved until the Service has been consulted. If necessary, and under the direct supervision of a Service approved biologist, the pipe may be moved once to remove it from the path of construction activity, until the animal has escaped.

   5. Service minimum requirements may change before the highway is fully constructed, and therefore the FHWA shall contact the Service at the start of each segment of the project to informally consult with the Service and determine if reinitiation is necessary.

f. The FHWA shall comply with the Reporting Requirements below.

The reasonable and prudent measures, with their implementing terms and conditions, are designed to minimize the impact of incidental take on a species that might result from the proposed action. With implementation of these measures, the Service believes that no more than one San Joaquin kit fox, one blunt-nosed leopard lizard, and one Tipton kangaroo rat will be incidentally taken, and harassment will be minimized. If, during the course of the action, this level of incidental take is exceeded, such incidental take would represent new information requiring review of the reasonable and prudent measures provided. The FHWA must immediately provide an explanation of the causes of the taking and review with the Service the need for possible modification of the reasonable and prudent measures.

Review Requirement

The requirements of this Biological Opinion will be reviewed at the beginning of construction of each segment of the road for the following reasons:

- The schedule of construction of the road is unknown and could occur over 20 to 50 years,
- Construction and conservation aspects of the project are in the conceptual stage at this time,
- Additional environmental documents, including a Tier II EIR will be produced,
- Service requirements for the protection of endangered species could be different in 20 years than they are now.

These reviews will be initiated by FHWA and reinitiation of consultation is required. Conservation ratios and protection measures may be affected.

Reporting Requirements

The following reporting requirements apply to this project:

a. Preactivity survey results will be submitted to the Service before any ground disturbing activities start. The preactivity survey will include legible maps of listed species or sensitive habitat features. All relevant field survey data will be submitted to the CDFG Natural Diversity Database (NDDB), and to the Service. Plant survey sheets for surveys accomplished in 1993 and 1994 have already been received by the Service.

2. Any contractor, employee, or military or agency personnel who inadvertently kills or injures a listed species shall immediately report the incident to their representative. This representative shall contact the CDFG immediately in the case of a dead, injured or entrapped kit fox. The CDFG contact for immediate assistance is State Dispatch at (916) 445-0045 or the Fresno Region 4 Office, (559) 222-3761. Please note the new Fresno area code.

3. The Sacramento Fish and Wildlife Office and CDFG will be notified in writing within three working days of the accidental death or injury to a listed species during project related activities. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal and any other pertinent information.

4. Within 90 days of the completion of each portion of the project construction, the Department must submit a post-project compliance report to the Service and CDFG. This report will include dates that work was conducted, compliance performance by workers, any take of listed species, any project effects on listed species including the number of dens or burrows damaged or destroyed, a summary of reclamation activities, and any other pertinent information.

5. If any new habitat disturbance is deemed necessary, the Service and CDFG must be notified prior to the disturbance and a strategy must be identified for providing any required habitat compensation.

6. Within 90 calendar days following the end of each fiscal year, the FHWA must submit to the Service's Sacramento Fish and Wildlife Office a brief annual report detailing the following information: (i) pertinent information concerning the FHWA's success in meeting project conservation measures; (ii) an explanation of failure to meet such measures, if any; (iii) known project effects on federally listed species, including an estimate of the number of kit fox dens and Tipton kangaroo rat dens destroyed, including a general estimate of other small mammal burrows impacted, if any; (iv) known occurrences of incidental take of listed species, if any; and (v) other pertinent information.

7. Results of studies required in Terms and Conditions 4 will be submitted to the Service and CDFG promptly.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities that can be implemented to further the purposes of the Act, such as preservation of endangered species habitat, implementation of recovery actions, or development of information and data bases. Actions the FHWA can take that are necessary to prevent a species from declining irreversibly in the foreseeable future include the following:

1. Coordinate all vegetation management on the right-of-way within the KWB with the KWB and the KWB Vegetation Management Plan.

2. Report all spills, of materials potentially toxic to plants and wildlife, on the portion of the highway adjacent to or within the watershed of the KWBA to the KWBA.

No additional actions were found in the *Recovery Plan* that were relevant to FHWA or Caltrans actions or that they have the authority to implement. In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats, the Service requests notification of the implementation of these conservation recommendations.

REINITIATION--CLOSING STATEMENT

This concludes formal consultation on the action(s) outlined in the request. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

Please contact Susan Jones or Peter Cross of this office at (916) 979-2728, if you have any questions.

Sincerely,

Wayne S. White
Field Supervisor

Enclosures/Attachments

cc: Mary Frederick, Caltrans Project Manager
Dana York, Caltrans Biologist/Environmental Planner
Cheryl Harding, Kern Water Bank Authority
Steve Strait, Kern County Planning Department
Jim Movius, City of Bakersfield Planning Department
Jeff Single, California Department of Fish and Game, Fresno

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Table 3
SAN JOAQUIN KIT FOX CAPTURES FROM 1981 TO 1996 ON THE NAVAL PETROLEUM RESERVE STUDY AREA, KERN COUNTY, CALIFORNIA

Year	Trap Nights	Captures	Individuals
1981	711	209	141
1982	710	117	87
1983	712	17	17
1984	711	51	42
1985	708	31	26
1986	712	25	22
1987	712	27	23
1988	712	27	23
1989	712	27	26
1990	712	28	18
1991	712	2	2
1992	712	20	16
1993	712	50	40
1994	712	80	61
1995	712	40	33
1996	706	34	24

Source: Department of Energy 1998

Appendix A

U.S. Fish and Wildlife Service
Kit Fox Den Excavation Procedure

United States Department of the Interior
FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, W-2605
Sacramento, California 95825-1846

IN REPLY REFER TO:

1-1-00-F-0185

August 29, 2000

Mr. David A. Nicol
Acting Division Administrator
Federal Highway Administration-California Division
980 Ninth Street, Suite 400
Sacramento, California 95814-2724

Subject: Response to Request to Amend Biological Opinion 1-1-98-F-0139 for Realignment of State Highway 58 Between Interstate 5 and State Highway 99 in Kern County, California

Dear Mr. Nicol:

We are responding to your requests to amend the Biological Opinion (BO) we issued on March 22, 1999, to the Federal Highway Administration (FHWA) for acquisition of a State Route 58 corridor between Interstate 5 and State Highway 99 in Kern County, California. We met several times with you and the California Department of Transportation (Caltrans) between June 1999, and January 2000, to discuss your concerns with the requirements in the BO. Those concerns, as we understand them, include the following:

- Term and Condition 1 concerning purchase and endowment of compensation acreage for effects of projects on listed species;
- Term and Condition 2 concerning indirect effects and growth inducing effects of constructing a high capacity road through farmland and natural habitat land outside the Metropolitan Bakersfield HCP boundary;
- Term and Condition 4c concerning the development of a programmatic biological opinion for future road projects funded by FHWA.
- Term and Condition 4d concerning kit fox/road studies to assess effects of road projects and effectiveness of potential minimization measures; and
- Term and Condition 4e concerning the size of the study area for Least Bell's Vireo surveys.

Each of these concerns is addressed in turn.

Term and Condition Number 1. Caltrans has used FHWA funding to buy and endow compensation acreage in the past, and is presently proposing projects with compensation acreage included in the project description, for instance the Route 41 improvements. National FHWA policy does not preclude this action, as shown in the attachments to our December 14, 1999, letter. The Service, therefore, expects that this Term and Condition is no longer in contention, and that Caltrans, acting for FHWA, will continue to comply with compensation ratios and requirements that are applied to all applicants by the U.S. Fish and Wildlife (Service).

Term and Condition Number 2. As presented in the Biological Opinion, the Service is concerned about the indirect effects and growth-inducing effects of constructing a high capacity road through farmland and natural habitat land outside of the boundary of the existing Habitat Conservation Plan (HCP) for Bakersfield. We understand that Caltrans is not expecting to build this portion of the highway for approximately 20 years. We agreed at the June 15, 1999, meeting to amend the language to acknowledge the tiered environmental documents being produced for this project. Therefore, Term and Condition Number 2 is amended to read as follows:

"At the time Route 58 is proposed to be built west of Nord Road, FHWA will reinitiate consultation with the Service."

Term and Condition 4c concerns the development of a programmatic biological opinion for future road projects funded by FHWA. The Service agreed at a meeting on June 15, 1999, to put the development of a programmatic consultation into the recommendations section rather than the terms and condition section of the Biological Opinion if the Service received a reasonably complete draft Biological Assessment from FHWA by July 31, 1999. An inadequate Biological Assessment was received on October 22, 1999. Comments were provided by the Service on December 14, 1999; a revised Biological Assessment has not yet been received. FHWA and Caltrans state that they are willing to produce the Biological Assessment and consult with the Service to produce a programmatic approach to upcoming projects. Caltrans and FHWA have consulted informally on numerous projects being evaluated by Caltrans biologists in Fresno at this time, and we do not see that the Biological Assessment to support a programmatic approach is receiving sufficient priority. The Service expects to see a Biological Assessment, that responds adequately to our previous comments, by October 15, 2000. FHWA must initiate consultation once the Biological Assessment is provided, and the Service will then provide a programmatic Biological Opinion. Effects on kit fox from roads continue to occur and must be addressed in the near future. We are not willing to remove this requirement from the Route 58 Biological Opinion. We do expect the results of the kit fox/road study, described below, will require reinitiation of the programmatic consultation.

Term and Condition 4d concerns kit fox studies to assess the effects of roads and to evaluate minimization measures for future projects. FHWA has asked that this requirement be made a recommendation in the Biological Opinion, as it has been in previous biological opinions since 1996. The Service believes that FHWA has had ample time to fulfill this recommendation and meet their responsibilities under section 7(a)(1) of the Act. The Service believes such a study is technically feasible, and that the information that will result from the study is necessary to make a jeopardy or no jeopardy decision in subsequent opinions on road projects. FHWA at first contended that they could not fund a study due to national policy constraints. The Service

presented FHWA with numerous documents attached to our December 14, 1999, letter showing that FHWA has conducted studies on wildlife and roads in other parts of the country, and that studies are not contrary to national FHWA policy. At a May 12, 1999, meeting in Fresno attended by the Service, the Bureau of Reclamation, and Caltrans, Endangered Species Recovery Program (ESRP) staff took the time to present to Caltrans staff some projects they have underway and suggested that Caltrans could join in on financing to assist in kit fox mortality studies. At the June 15, 1999, meeting with the Service, Caltrans and FHWA agreed verbally to consider a three-year study at a level of approximately $100,000 per year. Between the issuance of the BO on March 22, 1999, and the present, Caltrans has authorized $20,000 to be spent on a literature review (by letter on January 26, 2000). Several first year study designs were presented to Caltrans by ESRP, an organization that has the expertise to lead such a research effort to produce meaningful results, but none of the study plans were approved by FHWA or Caltrans. On June 15, 1999, the Service agreed to move the requirement from the Terms and Conditions section of the Route 58 Biological Opinion to the Recommendations section if adequate progress is shown. While Caltrans has made a short term financial commitment for the literature review, and has listed possible study areas in a memorandum from Perry Coy to Jay Norvell dated September 24, 1999, FHWA has not committed to carrying out a study with defined schedule and funding elements. FHWA has not taken the opportunity to fulfill their responsibilities under 7(a)(1) of the Act on this issue. Therefore, the Service will not make the requested amendment to the Route 58 BO. The Service expects to see a study design for approval by December 31, 2000, and expects the study to commence by April of 2001.

Term and Condition 4e concerns the size of the study area for least Bell's Vireo surveys, to be done before construction of the Kern River overpass. The study area was initially defined as the Kern River corridor from the outlet of Lake Isabella to Interstate 5. The Service agreed at the June 15, 1999 meeting that it is more appropriate for the surveys to cover the Kern River corridor from the east end of Hart Memorial Park in northeast Bakersfield to Interstate 5. Therefore, Term and Condition Number 4e is amended to read as follows:

"A study shall be conducted, at an appropriate time of the year, before construction of the Kern River overpass starts, to determine the status of least Bell's vireo in the Kern River corridor from the east end of Hart Memorial Park to Interstate 5. A study plan shall be submitted to the Service for approval prior to the start of the study. If least Bell's vireo are found, FHWA will reinitiate consultation with the Service to assess the impacts of the project, and any appropriate mitigation."

The Service is very concerned that FHWA and Caltrans are not meeting their present obligations under the Route 58 BO. The Service also is gravely concerned that FHWA and Caltrans have not met their past obligations under the Act. It is our understanding that compensation has not been completed as required under Biological Opinion 99-F-10, addressing improvements to State Route 33 in Fresno County, and 96-F-88, addressing improvements to State Route 180 in Fresno County. As part of an effort to bring FHWA and Caltrans into compliance with the Act, the Service expects to see an accounting of how obligations for completed projects have been met, and will be met. We expect to see this accounting by February 15, 2001.

The Service is very concerned because we know that Caltrans is preparing to make many road improvements in the foreseeable future. Without the information from the kit fox/road study, or the programmatic consultation, the Service will not be able to adequately assess the effects of

projects on kit fox, and will not be able to process the projects in a timely manner. The Service strongly urges Caltrans and FHWA to make some of the commitments in writing that have been discussed at our meetings. We are ready to work quickly on reviewing the next draft of the programmatic Biological Assessment to expedite development of a programmatic consultation.

Please contact Susan Jones or Peter Cross at (916) 414-6600, if you have any questions regarding this letter.

Sincerely,

Cay C. Goude

Cay C. Goude
Acting Field Supervisor

cc: Michael Donahue, Caltrans, Fresno, California
Cheryl Johnson, Caltrans, Fresno, California
Andy Gordus, CDFG, Fresno, California
Patrick Kelly, ESRP, Fresno, California
Brian Cypher, ESRP, Bakersfield, California
James Burger, Bakersfield Californian, Bakersfield, California
Alison Sheehy, Biologist, Bakersfield, California

SUMMARY OF PROCEEDINGS

Metropolitan Bakersfield Habitat Conservation Plan
Implementation Trust Group Hearing
Thursday, September 11, 2003

TRUST GROUP CONVENED (10:08 A.M.)

Trust Group Members: Ted James - Kern County (Chairman); Jack Hardisty - City of Bakersfield (Secretary); Susan Jones - USFWS Advisory Member; Wes Rhodehamel - Public At-Large Advisory Member; Michelle Selmon - CDFG Advisory Member

The Chairman requested that the attendees observe a moment of silence in memory of the victims of the September 11, 2001 attack on the World Trade Center.

ROLL CALL: all present

<u>* CONSENT AGENDA/OPPORTUNITY FOR PUBLIC COMMENT:</u> ALL ITEMS LISTED WITH AN ASTERISK (*) WERE CONSIDERED TO BE ROUTINE AND WERE APPROVED BY ONE MOTION

TRUST GROUP ACTION SHOWN IN CAPS AFTER EACH ITEM

*1) Proposed Implementation Trust Group Budget for Fiscal Year 2003-2004. Staff recommendation: Adopt budget. ADOPTED BUDGET.

*2) Proposed amendment of contract for Personal/Professional Consulting Services with Michael Burger & Associates to increase compensation by $30,000 for a new not-to-exceed amount of $46,000 for services of Mitch Van Wyk on future negotiations for property acquisition, on as-needed basis. Staff recommendation: Approve; authorize Chairman to sign amended agreement. APPROVED; AUTHORIZED CHAIRMAN TO SIGN AMENDED AGREEMENT.

*3) Purchase of Habitat Mitigation Land:

(a) Kern County Assessor Parcel Number (APN) 047-070-18 (5 acres). Being the N 330 ft of the S 594 ft of the E½ of the W½ of the NW¼ of Section 7, T 25 S, R 24 E, MDB&M, in the County of Kern, State of California; approximately .55 mile north of Garces Hwy., 1 3/4 miles west of Scofield Road, in north-central Kern County.

(b) APN 047-070-31 (5 acres). Being the S 330 ft of the N 990 ft of the W½ of the W½ of the NW¼ of Section 7, T 25 S, R 24 E, MDB&M, in the County of Kern, State of California; approximately .8 mile north of Garces Hwy., approximately 1.9 miles west of Scofield Road, in north-central Kern County.

(c) APN 046-102-03 (75.18 acres). Being the NE¼ of the NW¼; also the NW¼ of the NE¼ of Section 15, T 25 S, R 23 E, MDB&M, in the County of Kern, State of California; on the south side of Garces Hwy., approximately ¼ mile west of Rowlee Ave., in north-central Kern County.

(d) APN 046-180-03 (40 acres). Being Lots 1 and 7 of the Smyrna Colony; a portion of the NE¼ of Section 15, T 25 S, R 23 E, MDB&M, in the County of Kern, State of California; on the south side of Garces Hwy., 2¼ miles west of Wildwood Ave., in north-central Kern County.

(e) APN 046-102-32 (40 acres). Being Lots 58 and 82 of the Smyrna Colony; a portion of the SE¼ of Section 15, T 25 S, R 23 E, MDB&M, in the County of Kern, State of California; 7/8 mile south of Garces Hwy., 2 miles west of Wildwood Ave., in north-central Kern County.

(f) APN 046-171-01 (5 acres). Being Lots 1, 2, 3, 4, and 5 of Tract 1226; a portion of the NE¼ of Section 23, T 25 S, R 23 E, MDB&M, in the County of Kern, State of California; 1 mile south of Garces Hwy., 1 mile west of Wildwood Ave., in north-central Kern County.

(g) APN 046-172-23 (4 acres). Being Lots 151, 152, 153, and 154 of Tract 1226; a portion of the NE¼ of Section 23, T 25 S, R 23 E, MDB&M, in the County of Kern, State of California; approximately 1.2 miles south of Garces Hwy., approximately 1.35 miles west of Wildwood Ave., in north-central Kern County.

(h) APN 046-090-06 (20 acres). Being the E½ of the NE¼ of the SW¼ of Section 14, T 25 S, R 23 E, MDB&M, in the County of Kern, State of California; approximately ½ mile south of Garces Hwy., 1 mile west of Wildwood Ave., in north-central Kern County.

(i) APN 059-020-03 (30 acres). Being the E½ of the NE¼ of the NW¼; also the SW¼ of the NE¼ of the NW¼ of Section 11, T 26 S, R 23 E, MDB&M, in the County of Kern, State of California; 1 mile east of Bell Road, 1 mile south of Peterson Road, in north-central Kern County.

(j) APN 058-010-26 (238.62 acres). Being the NE¼; also the N½ of the SE¼ of Section 12, T 26 S, R 21 E, MDB&M, in the County of Kern, State of California; 1½ miles east of Lost Hills Road, 4¼ miles north of State Route 46, in north-central Kern County.

(k) APN 058-340-06 (21.62 acres). Being the N½ of the NW¼ of the SW¼ of Section 31, T 26 S, R 22 E, MDB&M, in the County of Kern, State of California; ¼ mile east of Interstate 5, 3/8 mile north of State Route 46, in north-central Kern County.

The property involved in items (3)(a) through (3)(k) is owned by Alma Investments; the combined acreage is 484.37 acres and the proposed total purchase price is $161,200.

Staff recommendation: (1) Make finding that the acquisition is Categorically Exempt pursuant to §15313 of CEQA; (2) approve acquisition in accordance with the provisions of the draft Memorandum of Sale and Escrow, subject to the Kern County Planning Department reviewing the acquisition for consistency with the Kern County General Plan; (3) upon (a) seller's signing of a Memorandum of Sale and Escrow and (b) Staff's receipt of documentation from CDFG indicating CDFG's intent to accept title to the property at the close of escrow, authorize City of Bakersfield Finance Director to issue warrant in amount not to exceed $162,700 ($161,200 purchase price plus up to $1,500 for escrow costs) to Commonwealth Title Company for the purpose of paying the seller in accordance with the signed Memorandum of Sale and Escrow; (4) authorize the payment of real estate taxes at close of escrow for period which the MBHCP is responsible, if applicable; (5) authorize payment to seller of .75% of sale price per month at close of escrow as compensation for State time in processing of title, if applicable; (6) within 30 days following close of escrow, transfer the appropriate amount to CDFG for enhancement (fencing); and within 6 months following close of escrow, transfer the appropriate amount to CDFG for endowment. APPROVED PER STAFF'S RECOMMENDATION.

4) Purchase of Habitat Mitigation Land:

(a) APN 045-230-06 (82.84 acres). Being the N½ of the SE¼ of Section 33, T 25 S, R 22 E, MDB&M, in the County of Kern, State of California; 1 mile west of Corcoran Road, 5¼ miles north of State Route 46, in north-central Kern County.

(b) APN 058-200-09 (39.09 acres). Being the NE¼ of the SE¼ of Section 3, T 26 S, R 22 E, MDB&M, in the County of Kern, State of California; west side of Corcoran Road, 5 3/4 miles north of State Route 46, in north-central Kern County.

The property involved in items (4)(a) and (4)(b) is owned by the Chaffey Family Trust; the combined acreage is 121.93 acres and the proposed total purchase price is $48,780.

Staff recommendation: (1) Make finding that the acquisition is Categorically Exempt pursuant to §15313 of CEQA; (2) approve acquisition in accordance with the provisions of the draft Memorandum of Sale and Escrow, subject to the Kern County Planning Department reviewing the acquisition for consistency with the Kern County General Plan; (3) upon (a) seller's signing of a Memorandum of Sale and Escrow and (b) Staff's receipt of documentation from CDFG indicating CDFG's intent to accept title to the property at the close of escrow, authorize City of Bakersfield Finance Director to issue warrant in amount not to exceed $48,980 ($48,780 purchase price plus $200 for escrow costs) to Commonwealth Title Company for the purpose of paying the seller in accordance with the signed Memorandum of Sale and Escrow; (4) authorize the payment of real estate taxes at

close of escrow for period which the MBHCP is responsible, if applicable; (5) authorize payment to seller of .75% of sale price per month at close of escrow as compensation for state time in processing of title, if applicable; (6) within 30 days following close of escrow, transfer the appropriate amount to CDFG for enhancement (fencing); and within 6 months following close of escrow, transfer the appropriate amount to CDFG for endowment. ARTHUR UNGER (SIERRA CLUB) SPOKE; APPROVED PER STAFF'S RECOMMENDATION.

*5) Purchase of Habitat Mitigation Land:

(a) APN 099-310-04 (40 acres). Being the NE¼ of the SE¼ of Section 30, T 29 S, R 22 E, MDB&M, in the County of Kern, State of California; ¼ mile east of the intersection of State Route 33 and Cymric Road, in western Kern County.

(b) APN 099-310-45 (25.17 acres). Being a portion of the N½ of the NW¼ of Section 30, T 29 S, R 22 E, MDB&M, in the County of Kern, State of California; ¼ mile northwest of the intersection of State Route 33 and Cymric Road, in western Kern County.

(c) APN 099-310-22 (20.07 acres). Being a portion of the NW¼ of the NW¼ of Section 30, T 29 S, R 22 E, MDB&M, in the County of Kern, State of California; ¼ mile northwest of the intersection of State Route 33 and Cymric Road, in western Kern County.

(d) APN 099-310-46 (31.62 acres). Being that part of the N½ of the NW¼ lying east of State Route 33 in Section 30, T 29 S, R 22 E, MDB&M, in the County of Kern, State of California; ¼ mile north of the intersection of State Route 33 and Cymric Road, in western Kern County.

The property involved in items (5)(a) through (5)(d) is owned by William R. Drennen; the combined acreage is 116.86 acres and the proposed total purchase price is $40,900.

Staff recommendation: (1) Make finding that the acquisition is Categorically Exempt pursuant to §15313 of CEQA; (2) approve acquisition in accordance with the provisions of the draft Memorandum of Sale and Escrow, subject to the Kern County Planning Department reviewing the acquisition for consistency with the Kern County General Plan; (3) upon (a) seller's signing of a Memorandum of Sale and Escrow and (b) Staff's receipt of documentation from CDFG indicating CDFG's intent to accept title to the property at the close of escrow, authorize City of Bakersfield Finance Director to issue warrant in amount not to exceed $41,100 ($40,900 purchase price plus $200 for escrow costs) to Commonwealth Title Company for the purpose of paying the seller in accordance with the signed Memorandum of Sale and Escrow; (4) authorize the payment of real estate taxes at close of escrow for period which the MBHCP is responsible, if applicable; (5) authorize payment to seller of .75% of sale price per month at close of escrow as compensation for State time in processing of title, if applicable; (6) within 30 days following close of escrow,

transfer the appropriate amount to CDFG for enhancement (fencing); and within 6 months following close of escrow, transfer the appropriate amount to CDFG for endowment. APPROVED PER STAFF'S RECOMMENDATION.

*6) Purchase of Habitat Mitigation Land: APN 058-230-06 (42.39 acres). Being the SE¼ of the SW¼ of Section 6, T 26 S, R 22 E, MDB&M, in the County of Kern, State of California; 5 miles north of State Route 46, 2 ¼ miles east of Lost Hills Road, in north-central Kern County; from Curtis and Gloria Friebel at a purchase price of $17,000.

Staff recommendation: (1) Make finding that the acquisition is Categorically Exempt pursuant to §15313 of CEQA; (2) approve acquisition in accordance with the provisions of the draft Memorandum of Sale and Escrow, subject to the Kern County Planning Department reviewing the acquisition for consistency with the Kern County General Plan; (3) upon (a) seller's signing of a Memorandum of Sale and Escrow and (b) Staff's receipt of documentation from CDFG indicating CDFG's intent to accept title to the property at the close of escrow, authorize City of Bakersfield Finance Director to issue warrant in amount not to exceed $17,500 ($17,000 purchase price plus $500 for escrow costs) to Commonwealth Title Company for the purpose of paying the seller in accordance with the signed Memorandum of Sale and Escrow; (4) authorize the payment of real estate taxes at close of escrow for period which the MBHCP is responsible, if applicable; (5) authorize payment to seller of .75% of sale price per month at close of escrow as compensation for State time in processing of title, if applicable; (6) within 30 days following close of escrow, transfer the appropriate amount to CDFG for enhancement (fencing); and within 6 months following close of escrow, transfer the appropriate amount to CDFG for endowment. APPROVED PER STAFF'S RECOMMENDATION.

*7) Purchase of Habitat Mitigation Land: Kern County APN 059-070-04 (160 acres); being the S½ of the S½ of Section 15, T 26 S, R. 23 E, MDB&M, in the County of Kern, State of California; located 1 mile east of Gun Club Road, and 1 mile south of Sherwood Avenue in north-central Kern County; from Richard E. Guggenhime, at a purchase price of $57,600.

Staff recommendation: (1) Make finding that the acquisition is categorically exempt pursuant to §15313 of CEQA; (2) approve acquisition in accordance with the provisions of the draft Memorandum of Sale and Escrow, subject to the Kern County Planning Department reviewing the acquisition for consistency with the Kern County General Plan; (3) upon (a) seller's signing of a Memorandum of Sale and Escrow and (b) Staff's receipt of documentation from CDFG indicating CDFG's intent to accept title to the property at the close of escrow, authorize City of Bakersfield Finance Director to issue warrant in amount not to exceed $57,800 ($57,600 purchase price plus $200 for escrow costs) to Commonwealth Title Company for the purpose of paying the seller in accordance with the signed Memorandum of Sale and Escrow; (4) authorize the payment of real estate taxes at close of escrow for period which the MBHCP is responsible, if applicable; (5) authorize payment to seller of .75% of sale price per month at close of escrow as compensation for

State time in processing of title, if applicable; (6) within 30 days following close of escrow, transfer the appropriate amount to CDFG for enhancement (fencing); and within 6 months following close of escrow, transfer the appropriate amount to CDFG for endowment. APPROVED PER STAFF'S RECOMMENDATION.

*8) Purchase of Habitat Mitigation Land: APN 045-230-23 (41.79 acres). Being the E½ of the E½ of the SW¼ of Section 34, T 25 S, R 22 E, MDB&M, in the County of Kern, State of California; 1/2 mile west of Corcoran Road, 6 miles north of McCombs Road, in north-central Kern County; from the Murata Family Trust at a purchase price of $16,725.

Staff recommendation: (1) Make finding that the acquisition is Categorically Exempt pursuant to §15313 of CEQA; (2) approve acquisition in accordance with the provisions of the draft Memorandum of Sale and Escrow, subject to the Kern County Planning Department reviewing the acquisition for consistency with the Kern County General Plan; (3) upon (a) seller's signing of a Memorandum of Sale and Escrow and (b) Staff's receipt of documentation from CDFG indicating CDFG's intent to accept title to the property at the close of escrow, authorize City of Bakersfield Finance Director to issue warrant in amount not to exceed $16,925 ($16,725 purchase price plus $200 for escrow costs) to Commonwealth Title Company for the purpose of paying the seller in accordance with the signed Memorandum of Sale and Escrow; (4) authorize the payment of real estate taxes at close of escrow for period which the MBHCP is responsible, if applicable; (5) authorize payment to seller of .75% of sale price per month at close of escrow as compensation for State time in processing of title, if applicable; (6) within 30 days following close of escrow, transfer the appropriate amount to CDFG for enhancement (fencing); and within 6 months following close of escrow, transfer the appropriate amount to CDFG for endowment. APPROVED PER STAFF'S RECOMMENDATION.

*9) Purchase of Habitat Mitigation Land:

(a) APN 046-090-04 (10 acres). Being the SE¼ of the SE¼ of the NW¼ of Section 14, T 25 S, R 23 E, MDB&M, in the County of Kern, State of California; 3/8 mile south of Garces Hwy., 1½ miles west of Wildwood Ave., in north-central Kern County.

(b) APN 046-090-18 (89.09 acres). Being the NW¼ of Section 14, T 25 S, R 23 E, MDB&M, in the County of Kern, State of California; excepting therefrom the NE¼ of the NW¼; also except the S½ of the SE¼ of the NW¼; also except the SE¼ of the SW¼ of the NW¼; south side of Garces Hwy., 1 3/4 miles west of Wildwood Ave., in north-central Kern County.

The property involved in items (9)(a) and (9)(b) is owned by Stanley and Lucile Slocum; the combined acreage is 99.09 acres and the proposed total purchase price is $33,500.

Staff recommendation: 1) Make finding that the acquisition is Categorically Exempt pursuant to §15313 of CEQA; (2) approve acquisition in accordance with the provisions of the draft Memorandum of Sale and Escrow, subject to the Kern County Planning Department reviewing the acquisition for consistency with the Kern County General Plan; (3) upon (a) seller's signing of a Memorandum of Sale and Escrow and (b) Staff's receipt of documentation from CDFG indicating CDFG's intent to accept title to the property at the close of escrow, authorize City of Bakersfield Finance Director to issue warrant in amount not to exceed $33,700 ($33,500 purchase price plus $200 for escrow costs) to Commonwealth Title Company for the purpose of paying the seller in accordance with the signed Memorandum of Sale and Escrow; (4) authorize the payment of real estate taxes at close of escrow for period which the MBHCP is responsible, if applicable; (5) authorize payment to seller of .75% of sale price per month at close of escrow as compensation for State time in processing of title, if applicable; (6) within 30 days following close of escrow, transfer the appropriate amount to CDFG for enhancement (fencing); and within 6 months following close of escrow, transfer the appropriate amount to CDFG for endowment. APPROVED PER STAFF'S RECOMMENDATION.

10) Request by City of Bakersfield to allow that portion of the proposed Westside Parkway within the Primary Floodway of the Kern River to be subject to the Terms and Conditions of the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP). Staff recommendation: Approve, subject to concurrence from CDFG and USFWS. APPROVED SUBJECT TO CONCURRENCE FROM CDFG AND USFWS.

11) Request by Semitropic Water Storage District (SWSD) for Metropolitan Bakersfield Habitat Conservation Plan incidental take coverage for proposed SWSD Stored Groundwater Banking Project. Staff Recommendation: Receive input from CDFG and USFWS. PUBLIC AT-LARGE ADVISOR, WES RHODEHAMEL, RECUSED HIMSELF. CDFG AND USFWS ADVISORY MEMBERS STATED THEIR AGENCIES HAVE NOT FORMULATED OFFICIAL POSITIONS, BUT AGREED TO REPLY IN WRITING IN NEXT FEW WEEKS; CONTINUED TO NEXT HEARING.

PUBLIC PRESENTATIONS

12) This portion of the meeting is reserved for persons to address the Implementation Trust Group on any matter not on this agenda but under the jurisdiction of the Implementation Trust Group. The Implementation Trust Group members may respond briefly to statements made or questions posed. They may ask a question for clarification, make a referral to staff to report back to the Implementation Trust Group at a later meeting. Also, the Implementation Trust Group may take action to direct the Staff to place a matter of business on a future agenda. Speakers are limited to two minutes. Please state your name before making your presentation.

ARTHUR UNGER (SIERRA CLUB) REQUESTED THOSE INVOLVED WITH THE MBHCP TO REFER TO IT BY NAME WHEN DEALING WITH THE MEDIA SO AS TO AVOID CONFUSION.

IMPLEMENTATION TRUST GROUP MEMBER ANNOUNCEMENTS OR REPORTS

13) On their own initiative, Implementation Trust Group members may make a brief announcement or a brief report on their own activities. They may ask a question for clarification, make a referral to Staff or take action to have Staff place a matter of business on a future agenda (Government Code §54954.2 [a]).

THERE WERE NO TRUST GROUP MEMBER ANNOUNCEMENTS OR REPORTS.

ADJOURNED (11:25 A.M.) TO CLOSED SESSION

CLOSED SESSIONS

(Subject of Agenda Item only is noted – Implementation Trust Group action is not indicated)

14) The Metropolitan Bakersfield Habitat Conservation Plan Implementation Trust Group will hold a closed session (Government Code §54956.8) to confer with and grant authority to its negotiator regarding the possible purchase of real property. The closed session involves the property identified below:

(a) Kern County APN 386-040-28 (109.25 acres); being the NE¼ of Section 7, T 29 S, R 29 E, MDB&M, in the County of Kern, State of California, excluding therefrom the right-of-way of Morning Drive and excluding that portion of the S½ of the NE¼ lying easterly of the right-of-way of Morning Drive; located along the east and west sides of Morning Drive, approximately 2,400 feet southwest of the intersection of Morning Drive and Alfred Harrell Highway, in the northeast Bakersfield area; owned by Piedmont Oil Co.

(b) Kern County APN 058-210-03 (158.8 acres); being the SE¼ of Section 10, T 26 S, R 22 E, MDB&M, in the County of Kern, State of California; located on the west side of Corcoran Road, 4 miles north of McCombs Road, in north-central Kern County; also APN 058-242-05 (61.08 acres); 058-242-06 (53.60 acres); 058-242-08 (81.35 acres); 058-242-09 (81.54 acres); and 058-242-10 (80.49 acres); being portions of Section 14, T 26 S, R 22 E, MDB&M, in the County of Kern, State of California; located on the east side of Corcoran Road, 3 miles north of McCombs Road, in north-central Kern County; owned by Sharky Klian.

RECONVENED (12:05 P.M.) IN OPEN SESSION

ADJOURNED (12:07 P.M.) TO THURSDAY, OCTOBER 30, 2003, AT 10:00 A.M.

METROPOLITAN BAKERSFIELD
HABITAT CONSERVATION PLAN IMPLEMENTATION TRUST GROUP

STAFF REPORT

September 11, 2003

AGENDA ITEM #10

SUBJECT: Request by City of Bakersfield to allow that portion of the proposed Westside Parkway within the Primary Floodway of the Kern River to be subject to the Terms and Conditions of the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP)

GENERAL LOCATION: Portions of the Kern River west of State Route 99 that would be crossed by a realignment of State Route 58 and an extension of Mohawk Street, in the Bakersfield area

BACKGROUND: The primary floodplain of the Kern River was excluded from the MBHCP and related 10(a) and 2081 permits due to its value as a dispersal corridor for protected species within the MBHCP study area (MBHCP, page 44).

The MBHCP provides the possibility for projects not covered under the plan to request coverage through the Implementation Trust Group. Historically, the Trust Group has authorized project coverage for City and County projects occurring in the primary floodplain. These projects include a bike path expansion near Hart Park, the Calloway Road bridge north of Cal State Bakersfield, and the Allen road trunk sewer project. The proposed project is a similar request.

Approval by the Trust Group would allow the now-excluded portion of the overall project to be subject to the terms of the MBHCP and would result in habitat compensation responsibilities based on that portion of the project's impact on wildlife and habitat within the primary floodplain. As of this writing, it is Staff's understanding that the proposal (as it relates to MBHCP coverage of that portion within the primary floodway) has not been reviewed in detail by CDFG and USFWS. The MBHCP is already available to cover project impacts outside the primary floodplain, and those impacts are not the subject of this request. However, considerable background information is included for those portions of the overall project for which MBHCP coverage is already available.

PROJECT DESCRIPTION: The Westside Parkway Project is a two-tier project. Tier I was a Caltrans/Federal Highway Administration (FHWA) project that reviewed various alternatives for an east-west transportation corridor in west Bakersfield. Four alternatives were analyzed during the Tier I phase: (1) Cross Valley Canal alternative, which is also referred to as the

Preferred Alternative; (2) Kern River alternative; (3) Transportation System Management alternative; and (4) No-project alternative. The Preferred Alternative was the alignment that was selected. The United States Fish and Wildlife Service (USFWS) issued a Biological Opinion for the Preferred Alternative in 1999.

The Tier II process is being implemented by the City of Bakersfield. The Tier I Preferred Alternative is being used, with small-scale changes in the alignment in Tier II. The western extent of the project area is now Stockdale Highway near Heath Road, rather than Interstate 5. The alignment is reconfigured through the Rosedale-Rio Bravo Spreading Basins and Allen Road interchange to minimize recharge impacts. The Mohawk Street interchange is shifted and includes connections to Rosedale Highway and Truxtun Avenue.

There are two alternative alignments on the eastern end of the project. Alternative 1 ends at State Route 99. Alternative 2 continues along the Burlington Northern – Santa Fe Railroad right-of-way to Oak Street. Both alternatives include a crossing of the Kern River by the State Route 58 alignment. In addition, with either alternative, there will be an extension of Mohawk Street across the Kern River. As such, with either Alternative 1 or Alternative 2, there will be two new roadway crossings of the Kern River.

The width of disturbance along the alignment will generally be 64 meters (210 feet) throughout, except through the Rosedale-Rio Bravo Spreading Basins where the width will be reduced to 54 meters (175 feet). The amount of disturbance to natural land outside the primary floodplain of the Kern River (82.3 acres of non-native grassland) and agricultural land (146.3 acres) will total 228.6 acres.

With either alternative, the amount of permanent disturbance in the primary floodplain of the Kern River will be 0.4 acre. That amount represents the area needed for footings/pilings for the State Route 58 (Westside Parkway) crossing, as well as the Mohawk Street extension crossing.

The Mohawk Street bridge over the Kern River will be approximately 30.5 meters (approximately 100 feet) wide. As such, the amount of "footprint" disturbance (total width of the bridge multiplied by the length of the bridge across the primary floodplain) within the primary floodplain of the Kern River related to construction of the Mohawk Street bridge will be 1.3 acres. This will be the acreage of permanent shading of the river due to the Mohawk Street crossing.

The State Route 58 (Westside Parkway) bridge over the Kern River will likely be constructed as two independent bridges, including an eastbound bridge and a westbound bridge. Each bridge will be approximately 21 meters wide with about 4 meters of open space in between the two bridges. Thus, the total deck width over the river is expected to be 42 meters (about

138 feet). If the footprint disturbance is represented by the two bridges exclusive of the open space in between, then the acreage in the primary floodplain will be 2.4 acres, based on a 138-foot width. If the footprint disturbance is represented by the two bridges and the open space in between, then the acreage in the primary floodplain will be 2.6 acres, based on a 150-foot (46-meter) width (21 meters multiplied by 2, plus the 4 meters in between the two bridges).

Although the project is now being implemented by the City of Bakersfield and is no longer a Caltrans/FHWA project, 90% of the funding will come from FHWA. The City, with the assistance of URS Corporation, is preparing a Tier II EA/EIR. A Tier I EIS/EIR was prepared earlier by Caltrans, with the assistance of Woodward Clyde Consultants. During the Tier I phase of the project, Woodward Clyde also prepared a Tier I Natural Environment Study (NES). The City is in the process of preparing a Tier II addendum to the NES, with the assistance of URS and Garcia and Associates. During field surveys conducted for the Tier I and Tier II phases, the following special-status species of wildlife were evaluated as having potential to occur in the project area:

- Swainson's hawk
- Western burrowing owl
- Loggerhead shrike
- Tipton kangaroo rat
- San Joaquin kit fox

During the Tier II surveys, one loggerhead shrike was observed in the Rosedale-Rio Bravo Spreading Basins, and sign of kit fox was noted at the crossings of the Kern River. The area within the primary floodplain could also be used by burrowing owls and foraging Swainson's hawks, in addition to use by kit fox as a travel and movement corridor.

The following are acreages of disturbance due to construction of the Westside Parkway Project (either Alternative 1 or 2):

- Agricultural land – 146.3 acres
- Non-native grassland – 33.3 acres
- Areas within the primary floodplain of the Kern River (permanent disturbance) – 0.4 acre
- Areas within the primary floodplain of the Kern River (footprint disturbance that does not include the open area between the two bridges) – 3.7 acres
- Areas within the primary floodplain of the Kern River (footprint disturbance that includes the open area between the two bridges) – 3.9 acres

DISTURBANCE TOTALS

Scenario 1: Outside the primary floodplain plus only the permanent disturbance within the primary floodplain = 180.0 acres

Scenario 2: Outside the primary floodplain plus footprint disturbance within the primary floodplain, based on the 42-meter (138-foot) Westside Parkway bridge width = 183.3 acres

Scenario 3: Outside the primary floodplain plus footprint disturbance within the primary floodplain, based on the 46-meter (150-foot) Westside Parkway bridge width = 183.5 acres.

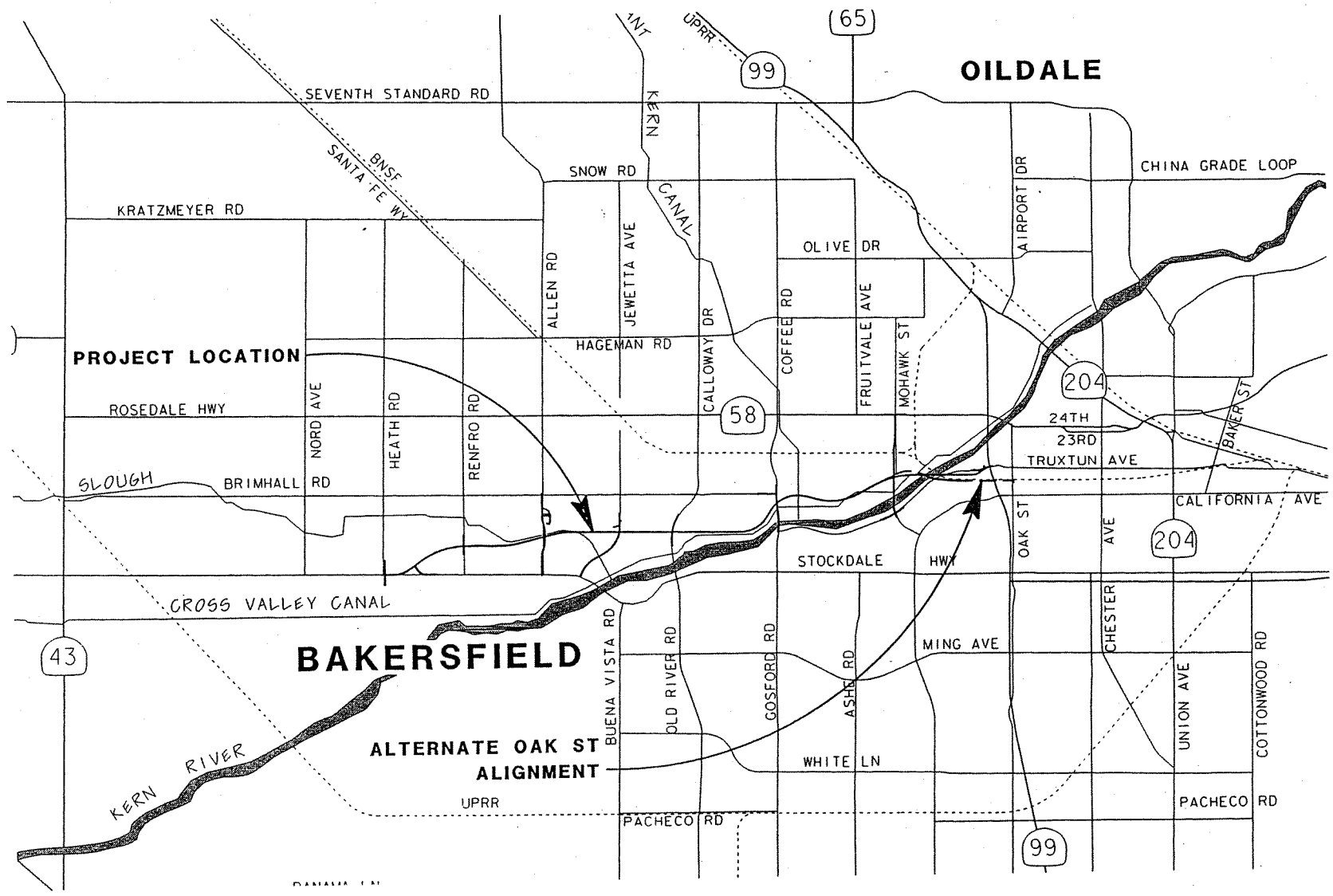
MITIGATION FEES

Scenario 1: 180.0 acres x $1,240/acre = $223,200 MBHCP fees required.

Scenario 2: 183.3 acres x $1,240/acre = $227,292 MBHCP fees required

Scenario 3: 183.5 acres x $1,240/acre = $227,540 MBHCP fees required

STAFF RECOMMENDATION: Approve, subject to concurrence from CDFG and USFWS



NOT TO SCALE

URS

WESTSIDE PARKWAY PE & ED

ALTERNATE OAK ST ALIGNMENT

FIGURE

GANDA

Garcia and Associates
104 South C Street, Suite G
Lompoc, CA 93436
Phone: (805) 740-1946 Fax: (805) 740-2046

To: Susan Jones, U. S. Fish and Wildlife Service (USFWS)
Michelle Selmon, California Department of Fish and Game (CDFG)

Copy: Charles Smith, URS

From: Tom Olson, Garcia and Associates

Date: September 17, 2003

RE: Westside Parkway Project
Tier I Biological Opinion

Susan and Michelle,

Please find enclosed one binder-clipped copy of the Tier I Biological Opinion issued May 22, 1999 for the Westside Parkway Project. The subject line on the first page identifies the Biological Opinion as: "Endangered Species Formal Consultation on the Proposed Corridor for State Route 58 between State Route 99 and Interstate 5, Kern County, California."

Keep in mind that there have been some changes to the project between Tier I and the current Tier II phase, including:

- It is no longer a Caltrans/FHWA project, but rather is now being implemented by the City of Bakersfield.

- The current alignment does not extend as far west as Interstate 5, but rather ends at Stockdale Highway near Heath Road.

- There are two east-end alternatives.

- There will be two crossings of the Kern River, including one of the east-end alternatives

and the extension of Mohawk Street across the river.

If you'd like me to email this Biological Opinion to you, please send me your email address. My copy was emailed to me by Gary Burton of USFWS. Call me at (805) 740-1946 if you have questions.

Regards,

Tom Olson

Tom Olson
Garcia and Associates
104 South C Street
Suite G
Lompoc, CA 93436
(805) 740-1946
(805) 717-1938
(805) 740-2046 fax

tolson@garciaandassociates.com

BAKERSFIELD

PUBLIC WORKS DEPARTMENT
1501 TRUXTUN AVENUE
BAKERSFIELD, CALIFORNIA 93301
(661) 326-3724

RAUL M. ROJAS, DIRECTOR • CITY ENGINEER

March 29, 2004

Ms. Susan Jones
U.S. Fish and Wildlife Service
2800 Cottage Way
Room 2605
Sacramento, CA 95825-1846

Via email, fax, and FedEx

Re: Westside Parkway Project
Bakersfield, CA
Terms and Conditions 4d and 4e
Biological Opinion 1-1-98-F-139, State Route (SR) 58

Dear Susan:

The purpose of this letter is to request your concurrence regarding our approach to fulfilling the Terms and Condition Items 4d and 4e, for Biological Opinion 1-1-98-F-139 (BO) for the Tier I project document for SR58. This document was concluded in 1999 with Caltrans as the project proponent, and involved a new alignment for SR58 between SR99 and Interstate 5 in Bakersfield, California. After the record of decision for this document was issued, it was determined by Caltrans that a connection to SR99 with this facility was not possible, limiting its use as a State Route. Therefore, the City of Bakersfield became the lead agency on the project identifying it as a City owned and operated facility. The City down-sized the project shortening it's length (westerly terminus now at Stockdale Highway/Heath Road, about half the length of the original project) and right-of-way width (now 210' from the original 300'), and renamed the facility the Westside Parkway. However, the Biological Opinion (BO) issued at the conclusion of the Tier I document is still in effect for the Westside Parkway.

The City of Bakersfield is currently conducting the NEPA and CEQA processes for the second tier of the two-tiered environmental documentation process for the Westside Parkway, and is also acquiring permits for the project. Currently, the City of Bakersfield is working with URS Corporation and Garcia and Associates on the Tier II document to address two of the terms and conditions of the BO, specifically Items 4d and 4e.

Term and Condition 4d states:

> *Studies shall be conducted before and after highway construction to determine the effects of highways on kit fox and the appropriateness of proposed conservation measures. A study plan shall be submitted to the Service for approval prior to the start of the studies. The FHWA shall:*

1. *Examine and document the movement of San Joaquin kit fox across entire length of the proposed Route 58 project area.*

2. *Collect data on kit fox vehicle strikes on highways within the range of the kit fox and assess the data to determine how to minimize vehicle strikes in the design and maintenance of the proposed project.*

3. *Conduct research on kit fox corridors, including assessing the effectiveness of using culverts for kit fox corridors, and if culverts are effective, determining where to use them, spacing, size, and the use of fences or other devices to control kit fox access to the highway. If the culverts included in the Project Description are found to be inappropriate, FHWA may consult with the Service on this topic.*

Term and Condition 4e states:

> *A study shall be conducted, at an appropriate time of the year, before construction of the Kern River overpass, to determine the status of least Bell's vireo on the Kern River from the outlet of Lake Isabella to Interstate 5. A study plan shall be submitted to the Service for approval prior to the start of the study.*

Note that Term and Condition 4e was subsequently revised; the current area to be studied for least Bell's vireos is from Hart Memorial Park to Interstate 5.

Because these two terms and conditions were not detailed in their requirements, biologist Tom Olson (Garcia and Associates) has been trying to contact you by telephone for clarification and to discuss our proposed approach (we understand that your agency's email system has been down for awhile). He has also had extensive conversations with Terry Marshall and Virginia VonBerg of Caltrans who concur with our proposed approach. The field season is fast approaching, so a decision was made to contact species experts and begin work on study plans for these two conditions.

We plan to work with Brian Cypher on a study to address Term and Condition 4d. As you are probably aware, Brian has designed and implemented numerous kit fox studies in the southern San Joaquin Valley. As such, he will be familiar with similar studies that have been completed in the past. There are likely existing data on kit fox corridors and vehicle strikes in the Westside Parkway project area, as well as culvert design and use by kit fox. Use of the existing data will allow us to focus on questions specific to the Westside Parkway project, such as recommendations for number, spacing, placement, and size of culverts.

Regarding Term and Condition 4e, we will work with a least Bell's vireo biologist to focus on areas of suitable habitat in the Hart Memorial Park-to-Interstate 5 reach of the Kern River. There are substantial portions of that reach in which the Kern River is primarily a sandy wash with little riparian vegetation. The study plan for the least Bell's vireo study will include a reconnaissance survey of the habitat along the entire reach, and more focused surveys in those areas with habitat components (such as a combination of dense willow shrubs up to 8-10 feet and occasional larger trees) that comprise suitable vireo habitat.

The City of Bakersfield is anxious to address these two terms and conditions. **Unless we hear otherwise from you by next Monday, April 5, 2004, we will begin work on the two study plans and will be submitting them to you soon.**

The contact information for Ted Wright, the City of Bakersfield Project Manager, is as follows:

Phone: (661) 326-3575
Fax: (661) 852-2120
E-Mail: twright@ci.bakersfield.ca.us

Should you have specific technical questions regarding the proposed kit fox and least Bell's vireo studies, please contact Tom Olson at the Lompoc office of Garcia and Associates at (805) 740-1946.

Sincerely,

CITY OF BAKERSFIELD

Raul M. Rojas
Public Works Director

By: Jacques R. LaRochelle
Jacques R. LaRochelle
Assistant Public Works Director

c: Ted Wright, City of Bakersfield
Jeff Chapman, URS Corporation
Charles Smith, URS Corporation
Tom Olson, Garcia and Associates

DEPARTMENT OF TRANSPORTATION
2015 EAST SHIELDS AVENUE, SUITE A-100
FRESNO, CA 93726-5428
PHONE (559) 243-8196
FAX (559) 243-8215
TTY (559) 488-4066

Flex your power!
Be energy efficient!

May 3, 2004

Ms. Susan Jones
San Joaquin Valley Branch Chief
Sacramento Fish and Wildlife Office
2800 Cottage Way, W-2605
Sacramento, CA 95825

06-KER-00-BKD
Local Assistance
Westside Parkway Project
EA 06-487800

SUBJECT: **Concurrence that the Biological Opinion for State Route 58 Adoption is adequate for the Westside Parkway Project**

Dear Ms. Jones,

Your office issued a Biological Opinion (1-1-98-F-139) for the State Route 58 Adoption project (Tier I) on March 22, 1999. This letter serves to seek the written concurrence of the U.S. Fish and Wildlife Service that potential affects to Federally listed species from the construction of the Westside Parkway project (eastern section of the preferred alternative) were adequately addressed in the biological opinion issued for the State Route 58 Adoption project.

The City of Bakersfield, in conjunction with the Federal Highway Administration, is preparing the Draft Tier II Environmental Assessment/Environmental Impact Report for the Westside Parkway project. The Tier II project impacts are similar to those of the eastern portion of the Tier I impacts and all mitigation measures outlined in the Terms and Conditions for the Tier I Biological Opinion either have been or will be implemented prior to construction. Due to the reduction in the standard width of alignment, the impact to habitat for the Tier II project will be less than the Tier I project impacts.

Project impacts are anticipated to be mitigated through the Metropolitan Bakersfield HCP. At this time the Tier II project will disturb 232.5 acres of potential habitat.

Please find enclosed two copies of the Tier II Addendum to the Tier I Natural Environment Study for the Westside Parkway project. Please contact Terry Marshall at (559) 243-8196 or Virginia VonBerg at (559) 243-8317 should you have any questions regarding this matter.

Sincerely,

TERRY MARSHALL
Senior Environmental Planner

Cc:

Mike Donahue, Caltrans
Joseph Vaughn, FHWA
Jacquest R. LaRochelle, City of Bakersfield
Ted Wright, City of Bakersfield
Jeff Chapman, URS
Tom Baily, URS
Tom Olson, Garcia and Associates

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846

In reply refer to:
1-1-04-F-0194

FEB 18 2005

Mr. Joseph Vaughn
Federal Highway Administration
Department of Transportation
600 Capitol Mall, Suite 4-100
Sacramento, California 95814

Subject: Amendment to Section 7 Biological Opinion on the Proposed Corridor for State Route 58 between State Route 99 and Interstate 5, Kern County, California

Dear Mr. Vaughn:

This letter constitutes an amendment to the biological opinion (BO) issued by the U.S. Fish and Wildlife Service (Service) on March 22, 1999 based on information provided in the Tier II Addendum to the Tier I Natural Environment Study Westside Parkway (Report). This amendment is in response to your request dated May 3, 2004, that was received in this office on May 5, 2004, for concurrence that potential effects to listed species from construction of the proposed project were adequately addressed in the BO issued for the Proposed Corridor for State Route 58 between State Route 99 and Interstate 5, Kern County, California (File # 1-1-98-F-0139).

According to your Report, the Tier II project effects are similar to those of the eastern portion of the Tier I effects and all compensation measures outlined in the Terms and Conditions for the Tier I BO either have been or will be implemented prior to construction. Due to the reduction in the standard width of the alignment, the effect to habitat for the Tier II project will be less than the Tier I project effects. Your Report stated that the project will reduce the proposed alignment from 15.6 miles to 8.1 miles in length and to reduce the standard width of the alignment from 298 feet to 210 feet. Our review of the proposed project indicates that the level of incidental take that would occur from the construction of the project as proposed in the Tier II Addendum to the Tier I Natural Environment Study Westside Parkway would not exceed that which was authorized in the BO.

Received
FEB 2 4 2005
FHWA

TAKE PRIDE IN AMERICA

Please change the Description of Proposed Action on page 4 of the March 22, 1999, BO from:

> The project as developed by Caltrans and the FHWA is to adopt an east-west transportation corridor for State Route 58 (Figure 1) that will:
>
> 1) provide continuity for State Route 58 in Kern County and
> 2) provide an alignment for future multi-modal transportation facilities that reduces congestion on the transportation network in the western Bakersfield metropolitan area (Caltrans 1998).
>
> The Act's implementing regulations require that the Service address the entire scope of the project, to the extent possible, not just acquisition of a right-of-way. Acquisition of a right-of-way is an irretrievable commitment of funds and the construction of the highway is interrelated and interdependent with acquisition of the right-of-way, as explained in our comments on the DEIS/EIR (Service 1998*c*). This Biological Opinion addresses build out of the road as much as possible at this stage in the design process, as well as the adoption of a highway alignment.
>
> The proposed project addresses a 16.9 mile section of the highway in Kern County, as shown on Figure 2. From west to east, the segment of Route 58 addressed by this project presently consists of a two-lane conventional highway from Interstate 5 to Allen Road, a four-lane conventional highway from Allen Road to Camino Del Rio Court, and a short six-lane segment between Camino Del Rio Court and Route 99. The existing transportation system in the project area is shown on Figure 3.
>
> The Selected Alternative
>
> The Cross Valley Canal Option is the selected route identified through the DEIS/DEIR process (Caltrans 1997; York personal communication 1998). This alignment begins at Interstate 5, north of the Cross Valley Canal, approximately two miles south of the Stockdale Highway interchange. It parallels the canal in a northeasterly direction to Enos Lane. It then shifts to the south, running parallel to the Cross Valley Canal east to Nord Road. At this point, the alignment bends northward through an urban area east of Heath Road and then crosses the Kern River just west of the existing railroad bridge and runs east, terminating at Route 99 near the present Route 99 overcrossing of Truxton Avenue. Six interchanges are envisioned with the following roads: Enos Lane (Route 43), Nord Road, Allen Road, the vicinity of Calloway Drive, Coffee Road, and Mohawk Street.
>
> The proposed freeway will connect on the eastern end of the project directly to the Route 58 East freeway by ramps running parallel to Route 99. Ramps would also be provided for southbound traffic on Route 99 to access the Route 58 freeways to the east and west without interfering with traffic exiting or accessing Route 99 from Rosedale Highway and California Avenue.

For purposes of preserving sufficient right-of-way to meet long-term (i.e., 20-year) transportation needs, the alignment will be 300 feet wide. This width provides flexibility in the design of future transportation facilities because it is wide enough to accommodate an eight-lane freeway and a median that could be used for additional lanes or other transportation facilities such as High Occupancy Vehicle (HOV) lanes, busways, and rail up to Route 99. All construction activities will occur within the 300-foot width. Access for construction vehicles will be from the six proposed interchanges with existing north-south roads.

to:

The Westside Parkway project would be constructed between Heath Road and SR99, a distance of approximately 13 kilometers (km) (8.1 miles), in the metropolitan Bakersfield area. Full access interchanges are proposed at Allen Road, Calloway Drive, Coffee Road, and Mohawk Street. At its westerly terminus, the Westside Parkway would tie into Stockdale Highway near Heath Road. At the project's easterly terminus, the Westside Parkway would intersect either with Truxton Avenue or with Oak Street.

The right of way required is generally 64 meters (210 feet) wide, expanding at grade-separations and interchanges to allow for ramps and more extensive grading and narrowing through the Rosedale Rio Bravo Water Storage District (RBWSD) property to 42 meters (138 feet) wide. This width provides flexibility in the design of the ultimate transportation facility because it is wide enough to accommodate an ultimate eight-lane facility.

The Westside Parkway would cross a number of major existing features, such as canals, (Friant-Kern, Carrier, and Cross Valley), roadways, and the Kern River. Grade separations are proposed at Renfro Road and Jewetta Avenue where the Westside Parkway would pass under these local roadways. The Mohawk Street interchange would be created by the extension of existing Mohawk Street. The proposed design would widen Mohawk Street to its full General Plan width of three lanes in each direction plus bicycle lanes from Rosedale Highway, across the Kern River and connecting to a planned parking lot north of Truxton Avenue.

All other sections, including all Terms and Conditions remain the same as in the March 22, 1999, biological opinion.

This concludes formal consultation on the Proposed Corridor for State Route 58 between State Route 99 and Interstate 5, Kern County, California. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or (4) a new species is listed or

critical habitat designated that may be affected by this action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending investigation.

Please contact Shannon Holbrook or Susan Jones (San Joaquin Valley Branch) of this office at (916) 414-6630, if you have any questions.

Sincerely,

for Ken Sanchez
Acting Field Supervisor

cc: Annette Tenneboe, CDFG, Fresno

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825

September 23, 2005

Document Number: 050923035255

Thomas Baily
URS Corporation
1333 Broadway, suite 800
Oakland, CA 94612

Subject: Species List for Westside Parkway

Dear: Mr. Baily

We are sending this official species list in response to your September 23, 2005 request for information about endangered and threatened species. The list covers the California counties and/or U.S. Geological Survey 7½ minute quad or quads you requested. You have stated that this list is not for consultation with the Fish & Wildlife Service.

Our database was developed primarily to assist Federal agencies that are consulting with us. Therefore, our lists include all of the sensitive species that have been found in a certain area *and also ones that may be affected by projects in the area*. For example, a fish may be on the list for a quad if it lives somewhere downstream from that quad. Birds are included even if they only migrate through an area. In other words, we include all of the species we want people to consider when they do something that affects the environment.

Please read Important Information About Your Species List (below). It explains how we made the list and describes your responsibilities under the Endangered Species Act.

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed, candidate and special concern species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be December 22, 2005.

Please contact us if your project may affect endangered or threatened species or if you have any questions about the attached list or your responsibilities under the Endangered Species Act. A list of Endangered Species Program contacts can be found at sacramento.fws.gov/es/branches.htm.

Endangered Species Division

TAKE PRIDE IN AMERICA

Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 050923034737
Database Last Updated: August 22, 2005

NOTE: The Fish & Wildlife Service has published its revised designation of critical habitat for 15 vernal pool species in California and Oregon. The rule becomes effective September 12.

The National Oceanic & Atmospheric Administration Marine Fisheries Service has released its final critical habitat designation for 19 evolutionarily significant units of salmon and steelhead in California and the Northwest.

We are in the process of revising our species lists to reflect these changes. Visit the Sacramento Fish & Wildlife Office home page at www.fws.gov/pacific/sacramento for more information about vernal pool critical habitat. Visit the Marine Fisheries web page at http://swr.nmfs.noaa.gov/salmon.htm for information about salmon and steelhead critical habitat.

Quad Lists

WEED PATCH (214B)

Listed Species

Invertebrates

Branchinecta lynchi - vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus - valley elderberry longhorn beetle (T)

Fish

Hypomesus transpacificus - delta smelt (T)

Amphibians

Rana aurora draytonii - California red-legged frog (T)

Reptiles

Gambelia (=Crotaphytus) sila - blunt-nosed leopard lizard (E)

Thamnophis gigas - giant garter snake (T)

Birds

Empidonax traillii extimus - southwestern willow flycatcher (E)

Gymnogyps californianus - California condor (E)

Haliaeetus leucocephalus - bald eagle (T)

Mammals

Vulpes macrotis mutica - San Joaquin kit fox (E)

Species of Concern

Invertebrates

Linderiella occidentalis - California linderiella fairy shrimp (SC)
Lytta molesta - molestan blister beetle (SC)

Fish

Pogonichthys macrolepidotus - Sacramento splittail (SC)
Spirinchus thaleichthys - longfin smelt (SC)

Amphibians

Ensatina eschscholtzii croceator - yellow-blotched ensatina (SC)
Spea hammondii (was Scaphiopus h.) - western spadefoot toad (SC)

Reptiles

Anniella pulchra pulchra - silvery legless lizard (SC)
Charina bottae umbratica - southern rubber boa (CA)
Clemmys marmorata marmorata - northwestern pond turtle (SC)
Clemmys marmorata pallida - southwestern pond turtle (SC)
Masticophis flagellum ruddocki - San Joaquin coachwhip (=whipsnake) (SC)
Phrynosoma coronatum frontale - California horned lizard (SC)

Birds

Agelaius tricolor - tricolored blackbird (SC)
Athene cunicularia hypugaea - western burrowing owl (SC)
Branta canadensis leucopareia - Aleutian Canada goose (D)
Buteo regalis - ferruginous hawk (SC)
Buteo Swainsoni - Swainson's hawk (CA)
Calypte costae - Costa's hummingbird (SC)
Carduelis lawrencei - Lawrence's goldfinch (SC)
Chaetura vauxi - Vaux's swift (SC)
Charadrius montanus - mountain plover (SC)
Elanus leucurus - white-tailed (=black shouldered) kite (SC)
Falco peregrinus anatum - American peregrine falcon (D)
Lanius ludovicianus - loggerhead shrike (SC)
Melanerpes lewis - Lewis' woodpecker (SC)
Numenius americanus - long-billed curlew (SC)
Plegadis chihi - white-faced ibis (SC)
Selasphorus rufus - rufous hummingbird (SC)
Strix occidentalis occidentalis - California spotted owl (SC)

Mammals

Ammospermophilus nelsoni - San Joaquin (=Nelson's) antelope squirrel (CA)
Dipodomys nitratoides brevinasus - short-nosed kangaroo rat (SC)

Euderma maculatum - spotted bat (SC)
Eumops perotis californicus - greater western mastiff-bat (SC)
Myotis ciliolabrum - small-footed myotis bat (SC)
Myotis evotis - long-eared myotis bat (SC)
Myotis thysanodes - fringed myotis bat (SC)
Myotis volans - long-legged myotis bat (SC)
Myotis yumanensis - Yuma myotis bat (SC)
Onychomys torridus ramona - Southern grasshopper mouse (SC)
Onychomys torridus tularensis - Tulare grasshopper mouse (SC)
Perognathus alticola inexpectatus - Tehachapi white-eared pocket mouse (SC)
Perognathus inornatus - San Joaquin pocket mouse (SC)

Plants

Eriastrum hooveri - Hoover's eriastrum (= woolly-star) (D)

CONNER (215A)

Listed Species

Invertebrates

Branchinecta lynchi - vernal pool fairy shrimp (T)
Desmocerus californicus dimorphus - valley elderberry longhorn beetle (T)

Fish

Hypomesus transpacificus - delta smelt (T)

Amphibians

Rana aurora draytonii - California red-legged frog (T)

Reptiles

Gambelia (=Crotaphytus) sila - blunt-nosed leopard lizard (E)
Thamnophis gigas - giant garter snake (T)

Birds

Haliaeetus leucocephalus - bald eagle (T)

Mammals

Dipodomys ingens - giant kangaroo rat (E)
Sorex ornatus relictus - Buena Vista Lake shrew (E)
Vulpes macrotis mutica - San Joaquin kit fox (E)

Species of Concern

Invertebrates

Linderiella occidentalis - California linderiella fairy shrimp (SC)
Lytta molesta - molestan blister beetle (SC)

Fish

Pogonichthys macrolepidotus - Sacramento splittail (SC)
Spirinchus thaleichthys - longfin smelt (SC)

Amphibians

Ensatina eschscholtzii croceator - yellow-blotched ensatina (SC)
Spea hammondii (was Scaphiopus h.) - western spadefoot toad (SC)

Reptiles

Anniella pulchra pulchra - silvery legless lizard (SC)
Charina bottae umbratica - southern rubber boa (CA)
Clemmys marmorata marmorata - northwestern pond turtle (SC)
Clemmys marmorata pallida - southwestern pond turtle (SC)
Masticophis flagellum ruddocki - San Joaquin coachwhip (=whipsnake) (SC)
Phrynosoma coronatum frontale - California horned lizard (SC)

Birds

Agelaius tricolor - tricolored blackbird (SC)
Athene cunicularia hypugaea - western burrowing owl (SC)
Branta canadensis leucopareia - Aleutian Canada goose (D)
Buteo regalis - ferruginous hawk (SC)
Buteo Swainsoni - Swainson's hawk (CA)
Calypte costae - Costa's hummingbird (SC)
Carduelis lawrencei - Lawrence's goldfinch (SC)
Chaetura vauxi - Vaux's swift (SC)
Charadrius montanus - mountain plover (SC)
Elanus leucurus - white-tailed (=black shouldered) kite (SC)
Falco peregrinus anatum - American peregrine falcon (D)
Lanius ludovicianus - loggerhead shrike (SC)
Melanerpes lewis - Lewis' woodpecker (SC)
Numenius americanus - long-billed curlew (SC)
Plegadis chihi - white-faced ibis (SC)
Selasphorus rufus - rufous hummingbird (SC)
Strix occidentalis occidentalis - California spotted owl (SC)

Mammals

Ammospermophilus nelsoni - San Joaquin (=Nelson's) antelope squirrel (CA)

Dipodomys nitratoides brevinasus - short-nosed kangaroo rat (SC)
Euderma maculatum - spotted bat (SC)
Eumops perotis californicus - greater western mastiff-bat (SC)
Myotis ciliolabrum - small-footed myotis bat (SC)
Myotis evotis - long-eared myotis bat (SC)
Myotis thysanodes - fringed myotis bat (SC)
Myotis volans - long-legged myotis bat (SC)
Myotis yumanensis - Yuma myotis bat (SC)
Onychomys torridus ramona - Southern grasshopper mouse (SC)
Onychomys torridus tularensis - Tulare grasshopper mouse (SC)
Perognathus inornatus - San Joaquin pocket mouse (SC)

MILLUX (215B)

Listed Species

Invertebrates

Branchinecta lynchi - vernal pool fairy shrimp (T)
Desmocerus californicus dimorphus - valley elderberry longhorn beetle (T)

Fish

Hypomesus transpacificus - delta smelt (T)

Amphibians

Rana aurora draytonii - California red-legged frog (T)

Reptiles

Gambelia (=Crotaphytus) sila - blunt-nosed leopard lizard (E)
Thamnophis gigas - giant garter snake (T)

Birds

Haliaeetus leucocephalus - bald eagle (T)

Mammals

Dipodomys ingens - giant kangaroo rat (E)
Sorex ornatus relictus - Buena Vista Lake shrew (E)
Vulpes macrotis mutica - San Joaquin kit fox (E)

Species of Concern

Invertebrates

Linderiella occidentalis - California linderiella fairy shrimp (SC)
Lytta molesta - molestan blister beetle (SC)

Fish

Pogonichthys macrolepidotus - Sacramento splittail (SC)
Spirinchus thaleichthys - longfin smelt (SC)

Amphibians

Ensatina eschscholtzii croceator - yellow-blotched ensatina (SC)
Spea hammondii (was Scaphiopus h.) - western spadefoot toad (SC)

Reptiles

Anniella pulchra pulchra - silvery legless lizard (SC)
Charina bottae umbratica - southern rubber boa (CA)
Clemmys marmorata marmorata - northwestern pond turtle (SC)
Clemmys marmorata pallida - southwestern pond turtle (SC)
Masticophis flagellum ruddocki - San Joaquin coachwhip (=whipsnake) (SC)
Phrynosoma coronatum frontale - California horned lizard (SC)

Birds

Agelaius tricolor - tricolored blackbird (SC)
Athene cunicularia hypugaea - western burrowing owl (SC)
Branta canadensis leucopareia - Aleutian Canada goose (D)
Buteo regalis - ferruginous hawk (SC)
Calypte costae - Costa's hummingbird (SC)
Carduelis lawrencei - Lawrence's goldfinch (SC)
Chaetura vauxi - Vaux's swift (SC)
Charadrius montanus - mountain plover (SC)
Elanus leucurus - white-tailed (=black shouldered) kite (SC)
Falco peregrinus anatum - American peregrine falcon (D)
Lanius ludovicianus - loggerhead shrike (SC)
Melanerpes lewis - Lewis' woodpecker (SC)
Numenius americanus - long-billed curlew (SC)
Plegadis chihi - white-faced ibis (SC)
Selasphorus rufus - rufous hummingbird (SC)
Strix occidentalis occidentalis - California spotted owl (SC)
Toxostoma redivivum - California thrasher (SC)

Mammals

Ammospermophilus nelsoni - San Joaquin (=Nelson's) antelope squirrel (CA)
Corynorhinus (=Plecotus) townsendii townsendii - Pacific western big-eared bat (SC)
Dipodomys nitratoides brevinasus - short-nosed kangaroo rat (SC)
Euderma maculatum - spotted bat (SC)

Eumops perotis californicus - greater western mastiff-bat (SC)
Myotis ciliolabrum - small-footed myotis bat (SC)
Myotis evotis - long-eared myotis bat (SC)
Myotis thysanodes - fringed myotis bat (SC)
Myotis volans - long-legged myotis bat (SC)
Myotis yumanensis - Yuma myotis bat (SC)
Onychomys torridus ramona - Southern grasshopper mouse (SC)
Onychomys torridus tularensis - Tulare grasshopper mouse (SC)
Perognathus inornatus - San Joaquin pocket mouse (SC)

Plants

Atriplex cordulata - heartscale (SC)
Calochortus striatus - alkali mariposa lily (SC)

OIL CENTER (239B)

Listed Species

Invertebrates

Branchinecta lynchi - vernal pool fairy shrimp (T)
Desmocerus californicus dimorphus - valley elderberry longhorn beetle (T)

Fish

Hypomesus transpacificus - delta smelt (T)

Amphibians

Rana aurora draytonii - California red-legged frog (T)

Reptiles

Gambelia (=Crotaphytus) sila - blunt-nosed leopard lizard (E)
Thamnophis gigas - giant garter snake (T)

Birds

Haliaeetus leucocephalus - bald eagle (T)

Mammals

Dipodomys nitratoides nitratoides - Tipton kangaroo rat (E)
Vulpes macrotis mutica - San Joaquin kit fox (E)

Plants

Opuntia treleasei - Bakersfield cactus (E)

Species of Concern

Invertebrates

Helminthoglypta callistoderma - Kern shoulderband snail (SC)
Linderiella occidentalis - California linderiella fairy shrimp (SC)
Lytta molesta - molestan blister beetle (SC)

Fish

Lampetra hubbsi - Kern brook lamprey (SC)
Pogonichthys macrolepidotus - Sacramento splittail (SC)
Spirinchus thaleichthys - longfin smelt (SC)

Amphibians

Ensatina eschscholtzii croceator - yellow-blotched ensatina (SC)
Spea hammondii (was Scaphiopus h.) - western spadefoot toad (SC)

Reptiles

Anniella pulchra pulchra - silvery legless lizard (SC)
Charina bottae umbratica - southern rubber boa (CA)
Clemmys marmorata marmorata - northwestern pond turtle (SC)
Clemmys marmorata pallida - southwestern pond turtle (SC)
Masticophis flagellum ruddocki - San Joaquin coachwhip (=whipsnake) (SC)
Phrynosoma coronatum frontale - California horned lizard (SC)

Birds

Agelaius tricolor - tricolored blackbird (SC)
Athene cunicularia hypugaea - western burrowing owl (SC)
Branta canadensis leucopareia - Aleutian Canada goose (D)
Buteo regalis - ferruginous hawk (SC)
Buteo Swainsoni - Swainson's hawk (CA)
Calypte costae - Costa's hummingbird (SC)
Carduelis lawrencei - Lawrence's goldfinch (SC)
Chaetura vauxi - Vaux's swift (SC)
Elanus leucurus - white-tailed (=black shouldered) kite (SC)
Empidonax traillii brewsteri - little willow flycatcher (CA)
Falco peregrinus anatum - American peregrine falcon (D)
Lanius ludovicianus - loggerhead shrike (SC)
Melanerpes lewis - Lewis' woodpecker (SC)
Numenius americanus - long-billed curlew (SC)
Plegadis chihi - white-faced ibis (SC)
Selasphorus rufus - rufous hummingbird (SC)

Mammals

Ammospermophilus nelsoni - San Joaquin (=Nelson's) antelope squirrel (CA)
Dipodomys nitratoides brevinasus - short-nosed kangaroo rat (SC)
Euderma maculatum - spotted bat (SC)
Eumops perotis californicus - greater western mastiff-bat (SC)
Myotis ciliolabrum - small-footed myotis bat (SC)
Myotis volans - long-legged myotis bat (SC)
Myotis yumanensis - Yuma myotis bat (SC)
Onychomys torridus ramona - Southern grasshopper mouse (SC)
Onychomys torridus tularensis - Tulare grasshopper mouse (SC)
Perognathus inornatus - San Joaquin pocket mouse (SC)

Plants

Mimulus pictus - calico monkeyflower (SC)
Monardella linoides ssp. oblonga - flax-like monardella (SC)
Tortula californica - California tortula moss (SLC)

LAMONT (239C)

Listed Species

Invertebrates

Branchinecta lynchi - vernal pool fairy shrimp (T)
Desmocerus californicus dimorphus - valley elderberry longhorn beetle (T)

Fish

Hypomesus transpacificus - delta smelt (T)

Amphibians

Rana aurora draytonii - California red-legged frog (T)

Reptiles

Gambelia (=Crotaphytus) sila - blunt-nosed leopard lizard (E)
Thamnophis gigas - giant garter snake (T)

Birds

Haliaeetus leucocephalus - bald eagle (T)

Mammals

Dipodomys nitratoides nitratoides - Tipton kangaroo rat (E)
Vulpes macrotis mutica - San Joaquin kit fox (E)

Species of Concern

Invertebrates

Linderiella occidentalis - California linderiella fairy shrimp (SC)
Lytta moesta - moestan blister beetle (SC)
Lytta molesta - molestan blister beetle (SC)
Lytta morrisoni - Morrison's blister beetle (SC)

Fish

Pogonichthys macrolepidotus - Sacramento splittail (SC)
Spirinchus thaleichthys - longfin smelt (SC)

Amphibians

Ensatina eschscholtzii croceator - yellow-blotched ensatina (SC)
Spea hammondii (was Scaphiopus h.) - western spadefoot toad (SC)

Reptiles

Anniella pulchra pulchra - silvery legless lizard (SC)
Charina bottae umbratica - southern rubber boa (CA)
Clemmys marmorata marmorata - northwestern pond turtle (SC)
Clemmys marmorata pallida - southwestern pond turtle (SC)
Masticophis flagellum ruddocki - San Joaquin coachwhip (=whipsnake) (SC)
Phrynosoma coronatum frontale - California horned lizard (SC)

Birds

Agelaius tricolor - tricolored blackbird (SC)
Athene cunicularia hypugaea - western burrowing owl (SC)
Branta canadensis leucopareia - Aleutian Canada goose (D)
Buteo regalis - ferruginous hawk (SC)
Buteo Swainsoni - Swainson's hawk (CA)
Calypte costae - Costa's hummingbird (SC)
Carduelis lawrencei - Lawrence's goldfinch (SC)
Chaetura vauxi - Vaux's swift (SC)
Elanus leucurus - white-tailed (=black shouldered) kite (SC)
Falco peregrinus anatum - American peregrine falcon (D)
Lanius ludovicianus - loggerhead shrike (SC)
Melanerpes lewis - Lewis' woodpecker (SC)
Numenius americanus - long-billed curlew (SC)
Plegadis chihi - white-faced ibis (SC)
Selasphorus rufus - rufous hummingbird (SC)

Mammals

Ammospermophilus nelsoni - San Joaquin (=Nelson's) antelope squirrel (CA)
Dipodomys nitratoides brevinasus - short-nosed kangaroo rat (SC)
Euderma maculatum - spotted bat (SC)
Eumops perotis californicus - greater western mastiff-bat (SC)
Myotis ciliolabrum - small-footed myotis bat (SC)
Myotis volans - long-legged myotis bat (SC)
Myotis yumanensis - Yuma myotis bat (SC)
Onychomys torridus ramona - Southern grasshopper mouse (SC)
Onychomys torridus tularensis - Tulare grasshopper mouse (SC)
Perognathus alticola inexpectatus - Tehachapi white-eared pocket mouse (SC)
Perognathus inornatus - San Joaquin pocket mouse (SC)

OILDALE (240A)

Listed Species

Invertebrates

Branchinecta lynchi - vernal pool fairy shrimp (T)
Desmocerus californicus dimorphus - valley elderberry longhorn beetle (T)

Fish

Hypomesus transpacificus - delta smelt (T)

Amphibians

Rana aurora draytonii - California red-legged frog (T)

Reptiles

Gambelia (=Crotaphytus) sila - blunt-nosed leopard lizard (E)
Thamnophis gigas - giant garter snake (T)

Birds

Haliaeetus leucocephalus - bald eagle (T)

Mammals

Dipodomys nitratoides nitratoides - Tipton kangaroo rat (E)
Vulpes macrotis mutica - San Joaquin kit fox (E)

Species of Concern

Invertebrates

Linderiella occidentalis - California linderiella fairy shrimp (SC)
Lytta molesta - molestan blister beetle (SC)

Fish

Lampetra hubbsi - Kern brook lamprey (SC)
Pogonichthys macrolepidotus - Sacramento splittail (SC)
Spirinchus thaleichthys - longfin smelt (SC)

Amphibians

Ensatina eschscholtzii croceator - yellow-blotched ensatina (SC)
Spea hammondii (was Scaphiopus h.) - western spadefoot toad (SC)

Reptiles

Anniella pulchra pulchra - silvery legless lizard (SC)
Charina bottae umbratica - southern rubber boa (CA)
Clemmys marmorata marmorata - northwestern pond turtle (SC)
Clemmys marmorata pallida - southwestern pond turtle (SC)
Masticophis flagellum ruddocki - San Joaquin coachwhip (=whipsnake) (SC)
Phrynosoma coronatum frontale - California horned lizard (SC)

Birds

Agelaius tricolor - tricolored blackbird (SC)
Athene cunicularia hypugaea - western burrowing owl (SC)
Branta canadensis leucopareia - Aleutian Canada goose (D)
Buteo regalis - ferruginous hawk (SC)
Buteo Swainsoni - Swainson's hawk (CA)
Calypte costae - Costa's hummingbird (SC)
Carduelis lawrencei - Lawrence's goldfinch (SC)
Chaetura vauxi - Vaux's swift (SC)
Charadrius montanus - mountain plover (SC)
Elanus leucurus - white-tailed (=black shouldered) kite (SC)
Empidonax traillii brewsteri - little willow flycatcher (CA)
Lanius ludovicianus - loggerhead shrike (SC)
Melanerpes lewis - Lewis' woodpecker (SC)
Numenius americanus - long-billed curlew (SC)
Plegadis chihi - white-faced ibis (SC)
Selasphorus rufus - rufous hummingbird (SC)

Mammals

Ammospermophilus nelsoni - San Joaquin (=Nelson's) antelope squirrel (CA)
Corynorhinus (=Plecotus) townsendii townsendii - Pacific western big-eared bat (SC)

Dipodomys nitratoides brevinasus - short-nosed kangaroo rat (SC)
Euderma maculatum - spotted bat (SC)
Eumops perotis californicus - greater western mastiff-bat (SC)
Myotis ciliolabrum - small-footed myotis bat (SC)
Myotis volans - long-legged myotis bat (SC)
Myotis yumanensis - Yuma myotis bat (SC)
Onychomys torridus ramona - Southern grasshopper mouse (SC)
Onychomys torridus tularensis - Tulare grasshopper mouse (SC)
Perognathus inornatus - San Joaquin pocket mouse (SC)

ROSEDALE (240B)

Listed Species

Invertebrates

Branchinecta lynchi - vernal pool fairy shrimp (T)
Desmocerus californicus dimorphus - valley elderberry longhorn beetle (T)

Fish

Hypomesus transpacificus - delta smelt (T)

Amphibians

Rana aurora draytonii - California red-legged frog (T)

Reptiles

Gambelia (=Crotaphytus) sila - blunt-nosed leopard lizard (E)
Thamnophis gigas - giant garter snake (T)

Birds

Haliaeetus leucocephalus - bald eagle (T)

Mammals

Dipodomys ingens - giant kangaroo rat (E)
Dipodomys nitratoides nitratoides - Tipton kangaroo rat (E)
Vulpes macrotis mutica - San Joaquin kit fox (E)

Species of Concern

Invertebrates

Linderiella occidentalis - California linderiella fairy shrimp (SC)
Lytta molesta - molestan blister beetle (SC)

Fish

Lampetra hubbsi - Kern brook lamprey (SC)
Pogonichthys macrolepidotus - Sacramento splittail (SC)
Spirinchus thaleichthys - longfin smelt (SC)

Amphibians

Spea hammondii (was Scaphiopus h.) - western spadefoot toad (SC)

Reptiles

Anniella pulchra pulchra - silvery legless lizard (SC)
Charina bottae umbratica - southern rubber boa (CA)
Clemmys marmorata marmorata - northwestern pond turtle (SC)
Clemmys marmorata pallida - southwestern pond turtle (SC)
Masticophis flagellum ruddocki - San Joaquin coachwhip (=whipsnake) (SC)
Phrynosoma coronatum frontale - California horned lizard (SC)

Birds

Agelaius tricolor - tricolored blackbird (SC)
Athene cunicularia hypugaea - western burrowing owl (SC)
Branta canadensis leucopareia - Aleutian Canada goose (D)
Buteo regalis - ferruginous hawk (SC)
Buteo Swainsoni - Swainson's hawk (CA)
Calypte costae - Costa's hummingbird (SC)
Carduelis lawrencei - Lawrence's goldfinch (SC)
Chaetura vauxi - Vaux's swift (SC)
Charadrius montanus - mountain plover (SC)
Elanus leucurus - white-tailed (=black shouldered) kite (SC)
Empidonax traillii brewsteri - little willow flycatcher (CA)
Falco peregrinus anatum - American peregrine falcon (D)
Lanius ludovicianus - loggerhead shrike (SC)
Melanerpes lewis - Lewis' woodpecker (SC)
Numenius americanus - long-billed curlew (SC)
Plegadis chihi - white-faced ibis (SC)
Selasphorus rufus - rufous hummingbird (SC)

Mammals

Ammospermophilus nelsoni - San Joaquin (=Nelson's) antelope squirrel (CA)
Corynorhinus (=Plecotus) townsendii townsendii - Pacific western big-eared bat (SC)
Dipodomys nitratoides brevinasus - short-nosed kangaroo rat (SC)
Euderma maculatum - spotted bat (SC)
Eumops perotis californicus - greater western mastiff-bat (SC)
Myotis ciliolabrum - small-footed myotis bat (SC)

Myotis volans - long-legged myotis bat (SC)
Myotis yumanensis - Yuma myotis bat (SC)
Onychomys torridus ramona - Southern grasshopper mouse (SC)
Onychomys torridus tularensis - Tulare grasshopper mouse (SC)
Perognathus inornatus - San Joaquin pocket mouse (SC)

Plants

Eriastrum hooveri - Hoover's eriastrum (= woolly-star) (D)
Stylocline masonii - Mason's nestraw (SC)

STEVENS (240C)

Listed Species

Invertebrates

Branchinecta lynchi - vernal pool fairy shrimp (T)
Desmocerus californicus dimorphus - valley elderberry longhorn beetle (T)

Fish

Hypomesus transpacificus - delta smelt (T)

Amphibians

Rana aurora draytonii - California red-legged frog (T)

Reptiles

Gambelia (=Crotaphytus) sila - blunt-nosed leopard lizard (E)
Thamnophis gigas - giant garter snake (T)

Birds

Haliaeetus leucocephalus - bald eagle (T)

Mammals

Dipodomys ingens - giant kangaroo rat (E)
Dipodomys nitratoides nitratoides - Tipton kangaroo rat (E)
Sorex ornatus relictus - Buena Vista Lake shrew (E)
Vulpes macrotis mutica - San Joaquin kit fox (E)

Plants

Monolopia congdonii (=Lembertia congdonii) - San Joaquin woolly-threads (E)

Species of Concern

Invertebrates

Linderiella occidentalis - California linderiella fairy shrimp (SC)
Lytta molesta - molestan blister beetle (SC)

Fish

Pogonichthys macrolepidotus - Sacramento splittail (SC)
Spirinchus thaleichthys - longfin smelt (SC)

Amphibians

Spea hammondii (was Scaphiopus h.) - western spadefoot toad (SC)

Reptiles

Anniella pulchra pulchra - silvery legless lizard (SC)
Charina bottae umbratica - southern rubber boa (CA)
Clemmys marmorata marmorata - northwestern pond turtle (SC)
Clemmys marmorata pallida - southwestern pond turtle (SC)
Masticophis flagellum ruddocki - San Joaquin coachwhip (=whipsnake) (SC)
Phrynosoma coronatum frontale - California horned lizard (SC)

Birds

Agelaius tricolor - tricolored blackbird (SC)
Athene cunicularia hypugaea - western burrowing owl (SC)
Branta canadensis leucopareia - Aleutian Canada goose (D)
Buteo regalis - ferruginous hawk (SC)
Buteo Swainsoni - Swainson's hawk (CA)
Calypte costae - Costa's hummingbird (SC)
Carduelis lawrencei - Lawrence's goldfinch (SC)
Chaetura vauxi - Vaux's swift (SC)
Charadrius montanus - mountain plover (SC)
Elanus leucurus - white-tailed (=black shouldered) kite (SC)
Empidonax traillii brewsteri - little willow flycatcher (CA)
Falco peregrinus anatum - American peregrine falcon (D)
Lanius ludovicianus - loggerhead shrike (SC)
Melanerpes lewis - Lewis' woodpecker (SC)
Numenius americanus - long-billed curlew (SC)
Plegadis chihi - white-faced ibis (SC)
Selasphorus rufus - rufous hummingbird (SC)

Mammals

Ammospermophilus nelsoni - San Joaquin (=Nelson's) antelope squirrel (CA)
Corynorhinus (=Plecotus) townsendii townsendii - Pacific western big-eared bat (SC)

Dipodomys nitratoides brevinasus - short-nosed kangaroo rat (SC)
Euderma maculatum - spotted bat (SC)
Eumops perotis californicus - greater western mastiff-bat (SC)
Myotis ciliolabrum - small-footed myotis bat (SC)
Myotis volans - long-legged myotis bat (SC)
Myotis yumanensis - Yuma myotis bat (SC)
Onychomys torridus ramona - Southern grasshopper mouse (SC)
Onychomys torridus tularensis - Tulare grasshopper mouse (SC)
Perognathus inornatus - San Joaquin pocket mouse (SC)

Plants

Delphinium recurvatum - recurved larkspur (SC)
Eriastrum hooveri - Hoover's eriastrum (= woolly-star) (D)

GOSFORD (240D)

Listed Species

Invertebrates

Branchinecta lynchi - vernal pool fairy shrimp (T)
Desmocerus californicus dimorphus - valley elderberry longhorn beetle (T)

Fish

Hypomesus transpacificus - delta smelt (T)

Amphibians

Rana aurora draytonii - California red-legged frog (T)

Reptiles

Gambelia (=Crotaphytus) sila - blunt-nosed leopard lizard (E)
Thamnophis gigas - giant garter snake (T)

Birds

Haliaeetus leucocephalus - bald eagle (T)

Mammals

Dipodomys ingens - giant kangaroo rat (E)
Dipodomys nitratoides nitratoides - Tipton kangaroo rat (E)
Sorex ornatus relictus - Buena Vista Lake shrew (E)
Vulpes macrotis mutica - San Joaquin kit fox (E)

Species of Concern

Invertebrates

Linderiella occidentalis - California linderiella fairy shrimp (SC)
Lytta molesta - molestan blister beetle (SC)

Fish

Pogonichthys macrolepidotus - Sacramento splittail (SC)
Spirinchus thaleichthys - longfin smelt (SC)

Amphibians

Ensatina eschscholtzii croceator - yellow-blotched ensatina (SC)
Spea hammondii (was Scaphiopus h.) - western spadefoot toad (SC)

Reptiles

Anniella pulchra pulchra - silvery legless lizard (SC)
Charina bottae umbratica - southern rubber boa (CA)
Clemmys marmorata marmorata - northwestern pond turtle (SC)
Clemmys marmorata pallida - southwestern pond turtle (SC)
Masticophis flagellum ruddocki - San Joaquin coachwhip (=whipsnake) (SC)
Phrynosoma coronatum frontale - California horned lizard (SC)

Birds

Agelaius tricolor - tricolored blackbird (SC)
Athene cunicularia hypugaea - western burrowing owl (SC)
Branta canadensis leucopareia - Aleutian Canada goose (D)
Buteo regalis - ferruginous hawk (SC)
Buteo Swainsoni - Swainson's hawk (CA)
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Chaetura vauxi - Vaux's swift (SC)
Charadrius montanus - mountain plover (SC)
Elanus leucurus - white-tailed (=black shouldered) kite (SC)
Empidonax traillii brewsteri - little willow flycatcher (CA)
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Melanerpes lewis - Lewis' woodpecker (SC)
Numenius americanus - long-billed curlew (SC)
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Selasphorus rufus - rufous hummingbird (SC)

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Myotis yumanensis - Yuma myotis bat (SC)
Onychomys torridus ramona - Southern grasshopper mouse (SC)
Onychomys torridus tularensis - Tulare grasshopper mouse (SC)
Perognathus inornatus - San Joaquin pocket mouse (SC)

Plants

Delphinium recurvatum - recurved larkspur (SC)
Stylocline masonii - Mason's nestraw (SC)

County Lists

No county species lists requested.

Key:

(E) *Endangered* - Listed (in the Federal Register) as being in danger of extinction.

(T) *Threatened* - Listed as likely to become endangered within the foreseeable future.

(P) *Proposed* - Officially proposed (in the Federal Register) for listing as endangered or threatened.

(NMFS) Species under the Jurisdiction of the National Marine Fisheries Service. Consult with them directly about these species.

Critical Habitat - Area essential to the conservation of a species.

(PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.

(C) *Candidate* - Candidate to become a proposed species.

(CA) Listed by the State of California but not by the Fish & Wildlife Service.

(D) *Delisted* - Species will be monitored for 5 years.

(SC) *Species of Concern*/(SLC) Species of Local Concern - Other species of concern to the Sacramento Fish & Wildlife Office.

(V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.

(X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, or may be affected by projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regard-less of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the quad or quads covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the nine surrounding quads through the California Native Plant Society's online Inventory of Rare and Endangered Plants.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list.

For plant surveys, we recommend using the Guidelines for Conducting and Reporting Botanical Inventories. The results of your surveys should be published in any environmental documents prepared for your project.

State-Listed Species

If a species has been listed as threatened or endangered by the State of California, but not by us nor by the National Marine Fisheries Service, it will appear on your list as a Species of Concern. However you should contact the California Department of Fish and Game Wildlife and Habitat Data Analysis Branch for official information about these species.

Your Responsibilities Under the Endangered Species Act

All plants and animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal consultation with the Service.

  During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

  Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compen-sates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our critical habitat page for maps.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

Your list may contain a section called Species of Concern. This is an informal term that refers to those species that the Sacramento Fish and Wildlife Office believes might be in need of concentrated conservation actions. Such conservation actions vary depending on the health of the populations and degree and types of threats. At one extreme, there may only need to be periodic monitoring of populations and threats to the species and its habitat. At the other extreme, a species may need to be listed as a Federal threatened or endangered species. Species of concern receive no legal protection and the use of the term does not necessarily mean that the species will eventually be proposed for listing as a threatened or endangered species.

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6580.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed, candidate and special concern species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be December 22, 2005.

Appendix E
SHPO Concurrence and Section 106 Compliance

STATE OF CALIFORNIA – THE RESOURCES AGENCY

ARNOLD SCHWARZENEGGER, *Governor*

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov
www.ohp.parks.ca.gov

Reply To: FHWA040315A

Mike Donahue, Chief
Caltrans South Sierra Analysis Branch
2015 East Shields Avenue, Suite A-100
Fresno, CA 93726-5428

Re: Determinations of Eligibility and Finding of Effect for the Proposed Westside Parkway Project, Bakersfield, CA [06-KER-00-BKD, LOCAL ASSISTANCE, WESTSIDE PARKWAY PROJECT, EA 06-487800]

Dear Mr. Donahue:

Thank you for your letter of April 12, 2004, in which you state that Caltrans, and not the City of Bakersfield, is initiating consultation for this undertaking. You are consulting with me about the subject undertaking in accordance with the *Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA).

The California Department of Transportation (Caltrans) is requesting my concurrence pursuant to Stipulation VIII.C.5 of the PA, that the Friant-Kern Canal was previously determined eligible for the National Register of Historic Places (NRHP) through a consensus determination between the FHWA and SHPO in August of 1997. Caltrans is also requesting concurrence that the following properties are not eligible for the NRHP:

- 2420 Mohawk Street
- 2424 Mohawk Street
- 2430 Mohawk Street
- Coffee Road Pole Barn
- Red Ribbon Ranch #1
- Red Ribbon Ranch #14
- Red Ribbon Ranch #17
- Red Ribbon Ranch Lease 1 #3
- Sweitzer #8
- Sawyer and Reid, Bethlehem #7
- Cross Valley Canal
- Carrier/Gates Canal
- Rio Bravo Canal
- BNSF Railroad Crossing

I concur with the foregoing determinations.

I acknowledge that Caltrans is notifying me, pursuant to stipulation X.B.2.b of the PA, of its finding of "No Adverse Effect with Standard Conditions" for this undertaking.

Thank you for considering historic properties during project planning. If you have any questions, please call Natalie Lindquist at (916) 654-0631 and e-mail at nlind@ohp.parks.ca.gov.

Sincerely,

N Lindquist for

Stephen D. Mikesell
Acting State Historic Preservation Officer

Appendix F
Section 4(f) Correspondence

BAKERSFIELD

ALL-AMERICA CITY ®
1990

Mr. Ted Wright
Civil Engineer IV
City of Bakersfield Public Works Department
Engineering Division
1501 Truxtun Avenue
Bakersfield, CA 93301

Re: Westside Parkway in Bakersfield, California

Dear Mr. Wright:

It is understood that the proposed Westside Parkway project includes an extension of Mohawk Street from Rosedale Highway across the Kern River to Truxtun Avenue. The extension of Mohawk Street across the Kern River Parkway has been foreseen for some time and is included in the Kern River Plan Element and the Kern River Parkway Plan on the alignment proposed for the Westside Parkway project.

Current uses of the Kern River Parkway in the area where the Mohawk Street alignment crosses the river consist of a 3.6-meter (12-foot) wide, undivided bike trail on top of the existing levee for the Kern River. It is understood that the bike path would be maintained open during construction of the Mohawk Street extension, and that the bike path would be permanently re-routed to the north at this location to avoid proposed bridge support structures needed for the Mohawk Street extension. The roadway would be elevated above the realigned bike path and would not interfere with its function, purpose, or continuity.

The proposed Westside Parkway would cross the Kern River Parkway near the BNSF railroad bridge over the Kern River. Depending on the alternative selected for the proposed project, the abutments for the parkway bridge across the river would be located in an area that is primarily privately owned (Truxtun Option) or entirely privately owned (Oak Option), neither of which are public recreation properties. A small portion of the Westside Parkway Truxtun Option extends into a parcel that is currently owned by the City of Bakersfield; however, this parcel was purchased by the City approximately 25 years ago for water rights and not recreational use. The City has leased the surface rights to this property for oil production since the purchase of the parcel. Therefore, the Westside Parkway would not take any Kern River Parkway property.

RECREATION AND PARKS
900 Truxtun Avenue • Suite 100 • Bakersfield • California • 93301
(661) 326-FUNN • Fax (661) 852-2140

Similar to the Mohawk Street extension, it is understood that the bike path at the crossing of the Westside Parkway would remain open during construction. It is also understood that the specific locations of abutments and support columns for the road bridges are not known at this time. If the design of the abutments and support columns were to impact the bike path, it is understood that the bike path would be relocated around them as part of the Westside Parkway project. The purpose, function, and continuity of the bike path would be maintained.

Based on these findings, the City of Bakersfield Parks and Recreation Department has determined that the proposed Westside Parkway project would not impair the activities, features, or attributes of the Kern River Parkway.

Sincerely,

Alan Christensen
Recreation & Parks Director

Appendix G
Socioeconomics and Environmental Justice

Transportation Relocation Assistance Program

Relocation Assistance Advisory Services

The City of Bakersfield would provide relocation advisory assistance to any person, business, farm, or non-profit organization displaced as a result of Bakersfield's acquisition of real property for public use. Bakersfield would assist residential displacees in obtaining comparable decent, safe, and sanitary replacement housing by providing current and continuing information on sales prices and rental rates of available housing. Non-residential displacees would receive information on comparable properties for lease or purchase.

Residential replacement dwellings would be in equal or better neighborhoods, at prices within the financial means of the individuals and families displaced, and reasonably accessible to their places of employment. Before any displacement occurs, displacees would be offered comparable replacement dwellings that are open to all persons regardless of race, color, religion, sex, or national origin, and are consistent with the requirements of Title VIII of the Civil Rights Act of 1968. This assistance would also include supplying information concerning federal- and state-assisted housing programs, and any other known services being offered by public and private agencies in the area.

Additional Information

No relocation payment received would be considered as income for the purpose of the Internal Revenue Code of 1954 or for the purposes of determining eligibility or the extent of eligibility of any person for assistance under the Social Security Act or any other federal law (except for any federal law providing low-income housing assistance).

Persons who are eligible for relocation payments and who are legally occupying the property required for the project would not be asked to move without being given at least 90 days advance notice, in writing. Occupants of any type of dwelling eligible for relocation payments would not be required to move unless at least one comparable "decent, safe, and sanitary" replacement residence, open to all persons regardless of race, color, religion, sex, or national origin, is available or has been made available to them by the state.

The information above is not intended to be a complete statement of all of Bakersfield's laws and regulations. At the time of the first written offer to purchase, owner-occupants are given a more detailed explanation of the City's relocation services. Tenant occupants of properties to be acquired are contacted immediately after the first written offer to

purchase, and also given a more detailed explanation of Bakersfield's relocation programs.

Important Notice

To avoid loss of possible benefits, no individual, family, business, farm, or non-profit organization should commit to purchase or rent a replacement property without first contacting the City of Bakersfield relocation advisor: Don Anderson, City of Bakersfield Real Property Manager.

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
1120 N STREET
P. O. BOX 942873
SACRAMENTO, CA 94273-0001
PHONE (916) 654-5266
FAX (916) 654-6608
TTY (916) 653-4086

Flex your power!
Be energy efficient!

January 14, 2005

TITLE VI
POLICY STATEMENT

The California Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, and age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

WILL KEMPTON
Director

Appendix H
Right of Way

Westside Parkway

Properties Acquired with Federal Funds

APN	SIZE	PURCHASE PRICE	COMMENTS	DATE ACQUIRED
408-210-16	1.92 AC.	$175,558.20		16-Jan-04
408-020-32	5.67 AC.	$60,690		8-Jan-01
409-010-01 PTN **409-010-04 PTN** **500-370-03 PTN** **Transaction Subtotal:**	18.67 AC.	$4,177,000		1-Jun-05
500-370-01 **500-370-28** **500-450-07** **500-560-01** **500-150-01** **501-010-39** **501-010-24** **Transaction Subtotal:**	90.77 AC.	$5,660,000		6-Aug-04
501-010-48 **501-010-43** **501-010-44** **501-010-45** **501-010-46** **501-010-47** **Transaction Subtotal:**	15.76 AC.	$4,807,000	CALTRANS ACQUIRED	18-Aug-03
501-010-49	1.49 AC.	$680,000	CALTRANS ACQUIRED	18-Aug-03
502-010-01	11.26 AC.		CALTRANS ACQUIRED	
502-010-04	5.09 AC.		CALTRANS ACQUIRED	
368-040-20	1.60 AC.	$253,610		30-Mar-04
TOTAL	152.23 AC	$15,813,858.20		

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VERDU
CALLOWAY DR
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BRIMHALL RD
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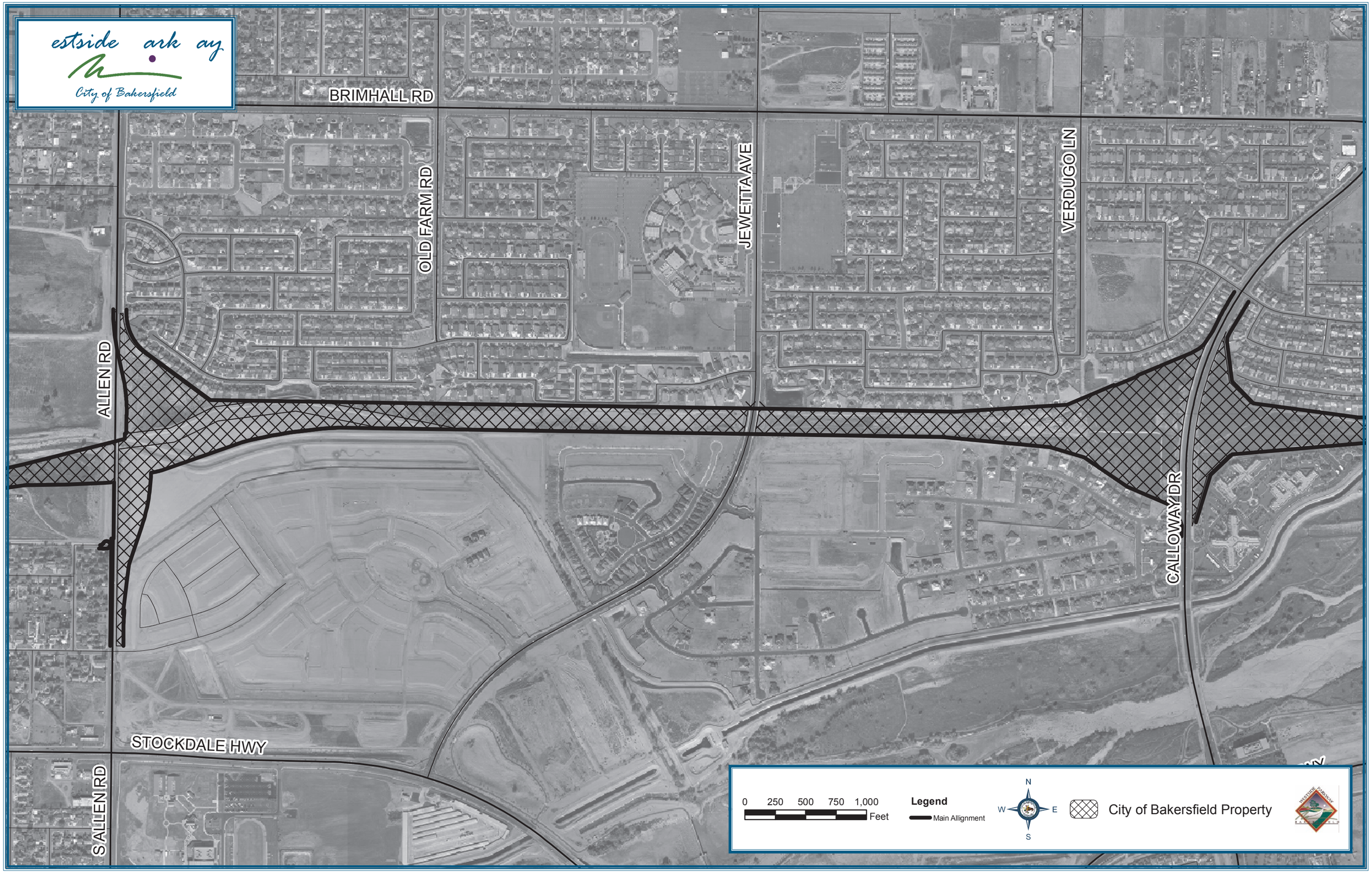
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City of Bakersfield
CALIFORNIA 58
FRUITVALE AVE
MOHAWK ST
CALIFORNIA 99
CALIFORNIA AVE
MARELLA WAY
MONTCLAIR ST
REAL RD
MOHAWK ST
0 310 620 930 1,240
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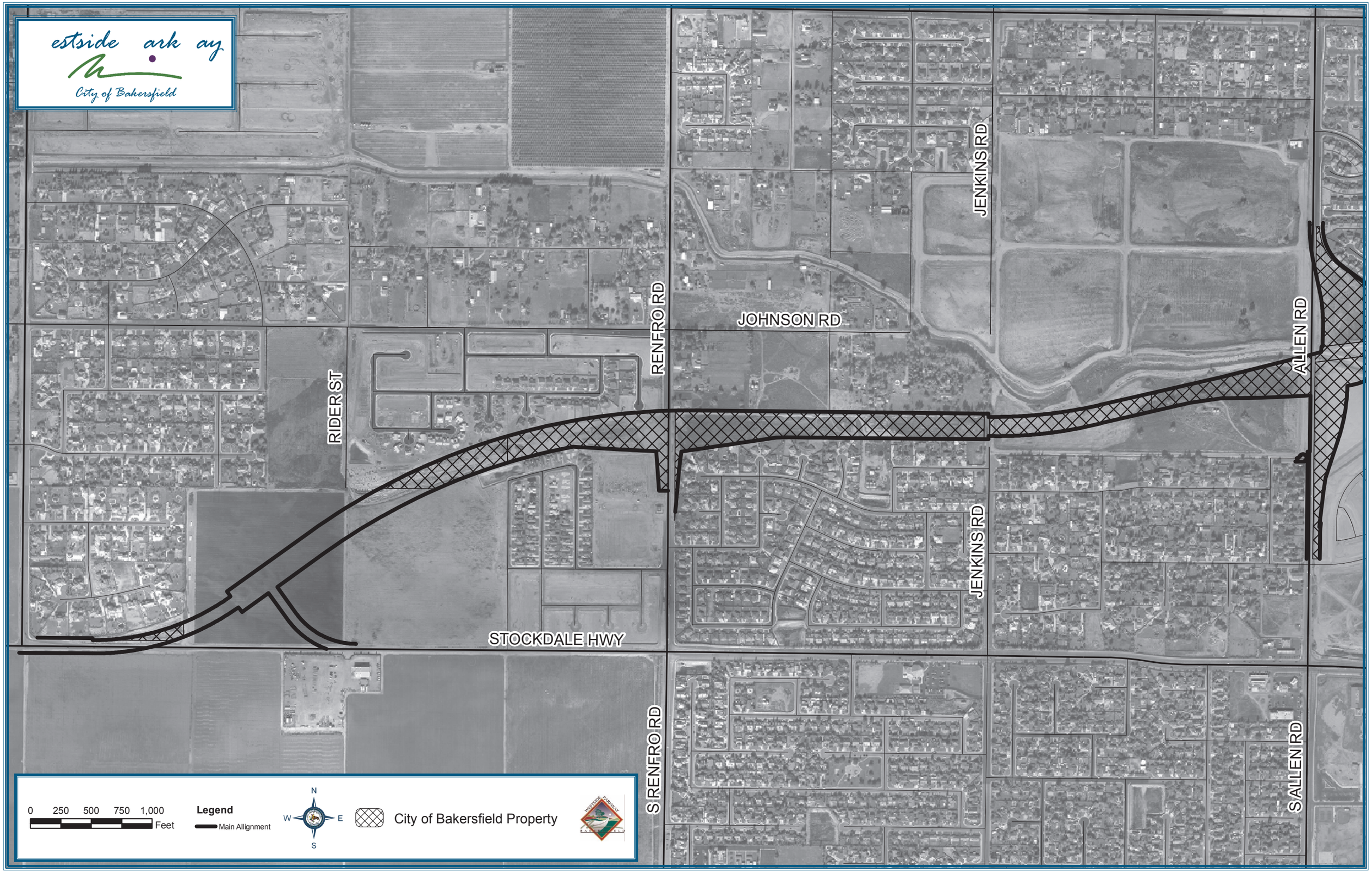
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JENKINS RD
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Appendix I
Public Notices, Public Comments, and Responses to Comments

B A K E R S F I E L D

NOTICE OF PUBLIC HEARING AND ENVIRONMENTAL IMPACT REPORT BEFORE THE PLANNING COMMISSION OF THE CITY OF BAKERSFIELD

NOTICE IS HEREBY GIVEN that a public hearing will be held to receive comments on the Draft EIR on April 20, 2006, at 5:30 PM or as soon thereafter as the matter may be heard, before the Planning Commission of the City of Bakersfield, in the Council Chambers of City Hall, located at 1501 Truxtun Avenue, Bakersfield, California 93301. This document is available for review at the following locations:

City of Bakersfield
Development Services Department
Planning Division
1715 Chester Avenue
Bakersfield, CA 93301

Beale Memorial Library
701 Truxtun Avenue
Bakersfield, CA 93301

1. Project Title: Amendment to the Westside Parkway Specific Plan Line (03-1163)

2. Project Location: The proposed project is located between Heath Road and State Route 99 (SR99) in the City of Bakersfield and unincorporated Kern County. The alignment generally is north of and parallels Stockdale Highway, the Cross Valley Canal and the Kern River.

3. Project Description: The proposed project is an amendment to an adopted Specific Plan Line for a new east-west freeway extending from Heath Road to a location near SR99, a distance of approximately 8.1 miles in the City of Bakersfield and unincorporated Kern County. The project includes the extension of Mohawk Street south from Rosedale Highway, across the Kern River to Truxtun Avenue. Interchanges are proposed at Allen Road, Calloway Drive, Coffee Road and Mohawk Street. Two options are being considered for the eastern terminus of the project; the Truxtun Option which connects directly into Truxtun Avenue west of SR99 and the Oak Option which connects to Oak Street east of SR99. Sufficient right of way is being acquired for the Westside Parkway to accommodate an ultimate eight-lane facility; however, at this time traffic projections warrant four lanes from Heath Road to Allen Road, six lanes from Allen Road to Coffee Road, eight lanes from Coffee Road to Mohawk Street and six lanes from Mohawk Street to the eastern terminus. The project requires an amendment to the Specific Plan Line adopted previously for the project known as the Kern River Freeway, which this project replaces.

4. Lead Agency/Contact Person:
City of Bakersfield
1501 Truxtun Avenue
Bakersfield, CA 93301
Contact: Marc Gauthier

NOTICE IS ALSO HEREBY GIVEN that copies of the EIR are on file and available to the public through the Development Services Department Planning Division or by contacting the person listed above or by e-mailing the department at devpln@ci.bakersfield.ca.us. Our website address is www.bakersfieldcity.us. If your property is rented or leased, we request that you provide your tenant(s) notice of this public hearing.

PUBLIC COMMENT regarding the proposed project and/or adequacy of the EIR, including requests for additional environmental review, will be accepted in writing on or before the hearing date indicated above at the Planning Department. **We would appreciate your comments by May 1, 2006.** As mandated by State law, the minimum public review period for this document is 45 days, which started on **March 15, 1006** and ends on **May 1, 2006**.

Testimony at future public hearings may be limited to those issues raised during the public review period either orally or submitted in writing by 5:00 PM the day the comment period closes.

DATED: March 13, 2006

POSTED: March 13, 2006
James D. Movius
Planning Director

1.0 STATE AGENCIES

STATE OF CALIFORNIA, RESOURCES AGENCY

ARNOLD SCHWARZENEGGER, GOVERNOR

DEPARTMENT OF CONSERVATION

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

4800 STOCKDALE HWY. • STE. 417 • BAKERSFIELD, CALIFORNIA 93309

PHONE 661 / 322-4031 • FAX 661 / 861-0279 • WEB SITE conservation.ca.gov

RECEIVED

MAR 29 2006

CITY OF BAKERSFIELD
PLANNING DEPARTMENT

March 28, 2006

Mr. Marc Gauthier
Bakersfield City Planning Department
1715 Chester Avenue
Bakersfield, CA 93301

Dear Mr. Gauthier:

Subject: Amendment to the Westside Parkway Specific Plan (03-1163)
Portions of Sections 26-28, 31-33 T29S R27E &
Portions of Sections 34-36 T29S R26E MDB&M

The Department of Conservation's Division of Oil, Gas, and Geothermal Resources (Division) has reviewed the proposed project. The Division supervises the drilling, maintenance, and abandonment of oil, gas, and geothermal wells in California. The Division offers the following comments for your consideration:

The proposed project is located within the administrative boundaries of the Fruitvale and Bellevue oil fields. It is difficult to determine the exact number of wells affected by the project. Table 1 attached lists the wells that are potentially within the project boundaries of the project. The Division is providing these locations so that they can be plotted on subsequent project maps and help in the planning process. Table 2 attached is a list of Operators of Record.

With regard to the active wells, please keep in mind the following development standards:

"15.66.080 Development Encroachment in Petroleum Areas
...the developer shall provide a plan showing how all existing petroleum related facilities will be protected and integrated into the proposed development so as said facilities will satisfy the development standards pursuant to this chapter including, but not limited to setbacks."

"15.66.040 Well Site Development Standards
A. Class 3 Permits--Development Standards:
1. Setbacks. No petroleum well shall be drilled nor shall any storage tank and other production related structures be located within:

1

a. Seventy-five (75) feet of the right-of-way of any dedicated public street, highway, railroad or private street, or adopted specific plan line of any street or highway;" (1)

Please understand that excavation and grading activities may disturb buried flowlines or pipelines in these oilfields. The Division recommends that the oil and gas operators listed in Table 2 be contacted for site plan review. (2)

The Division recommends that no structure be located over or in proximity of a previously plugged and abandoned well. If this cannot be avoided, please be aware that the State Oil and Gas Supervisor is authorized to order the reabandonment of a previously plugged and abandoned well when construction of any structure over or in the proximity of the well could result in a hazard (Section 3208.1 of the Public Resources Code). If reabandonment is required, the cost of operations is the responsibility of the owner of the property upon which the structure will be located. (3)

Regardless, if any abandoned or unrecorded wells are uncovered or damaged during excavation or grading, remedial plugging operations may be required. This office must be contacted to obtain information on the requirements for and approval to perform remedial operations. (4)

The DEIR Section 4.2.2 pertaining to Mineral Resources is incorrect. Reserves in the drainage radius of a particular well would be irredeemably lost. The loss per well would have to be determined on a well-by-well basis and could be on the order of $1 million per well. The DEIR should be revised to caution against the potential loss of a valuable resource. (5)

The Division disagrees with the last sentence of Section 6.2. The impact depends on how many wells are ultimately affected by the project versus how many wells were envisioned to be affected in the Metropolitan Bakersfield General Plan. The DEIR should stress a path that minimizes the number of wells affected by the project. (6)

If you have any questions, please call Tom Giallonardo at the Bakersfield district office: 4800 Stockdale Highway, Suite 417, Bakersfield, CA 93309; phone (661) 334-3663.

Sincerely,

Daniel J. Tuttle

Daniel J. Tuttle
Senior Oil and Gas Engineer

Cc: Table 2 Operators of Record

Table 1
Westside Parkway
Well Summary

API #	OPERATOR	LEASE	WELL #	SEC	TWN	RGE	APPROXIMATE LOCATION	Latitude	Longitude	FIELD	ACTIVE
02908460	Chevron U.S.A. Inc.	K.C.L. Fruitvale	1	26	29S	27E	Fr N/4 cor 1917S 1266E	35.377989	-119.042399	Fruitvale	N
02908459	Chevron U.S.A. Inc.	KCL	1	26	29S	27E	Fr SW cor 1438N 1734E	35.372792	-119.049730	Fruitvale	N
02906982	Chevron U.S.A. Inc.	KCL-A 2	8	26	29S	27E	Fr SW cor 992N 330E	35.371450	-119.054550	Fruitvale	N
02906983	Chevron U.S.A. Inc.	KCL-D	1	26	29S	27E	Fr SW cor 330N 395E	35.369795	-119.054329	Fruitvale	N
02908427	Chevron U.S.A. Inc.	Kern County Lease No. 5	4	26	29S	27E	Fr NE cor 500S 211W	35.381760	-119.038377	Fruitvale	N
02906984	Chevron U.S.A. Inc.	Texas Co. Fee	1	26	29S	27E	Fr NW cor 2305S 330E	35.376930	-119.054470	Fruitvale	N
02906752	Christiana Oil Corp.		46-26	26	29S	27E	Fr SW cor 1695N 2310E	35.373446	-119.047825	Fruitvale	N
02908210	Kaar Oil Co.	Nickel	1	26	29S	27E	Fr ctr 691N 561W	35.377905	-119.048506	Fruitvale	N
02906761	O. O. Co., Inc.	Kernland	1	26	29S	27E	Fr SW cor 330N 330E	35.369583	-119.054466	Fruitvale	N
02906762	O. O. Co., Inc.	Kernland	2	26	29S	27E	Fr SW cor 310N 345E	35.369534	-119.054537	Fruitvale	Y
02908436	Oryx Energy Co.	K.C.L.	2	26	29S	27E	Fr N/4 cor 1830S 192E	35.378185	-119.046080	Fruitvale	N
02908336	Pacific Oil & Gas Dev. Corp.	O	1	26	29S	27E	Fr NW cor 813S 1083E	35.381062	-119.051935	Fruitvale	N
02908339	Petrolia Corp.	Texaco	2	26	29S	27E	Fr W/4 cor 230S 330E	35.375530	-119.054543	Fruitvale	N
03019033	San Joaquin Facilities Mgmt.	Brossard	1	26	29S	27E	Fr NW cor 2141S 1601E	35.377323	-119.050267	Fruitvale	Y
02908461	San Joaquin Facilities Mgmt.	Nickel Fee	1	26	29S	27E	Fr SW cor 1464N 102E	35.372774	-119.055328	Fruitvale	Y
02908349	Santa Fe Minerals, Inc.	K.C.L.	64A-26	26	29S	27E	Fr ctr 280N 1076E	35.376745	-119.042985	Fruitvale	N
02908350	Santa Fe Minerals, Inc.	K.C.L.	64X-26	26	29S	27E	Fr ctr 76N 865E	35.376208	-119.043728	Fruitvale	N
02908495	Union Oil Co. of Calif.	Oak Street	A-1	26	29S	27E	Fr E/4 cor 103N 633W	35.376267	-119.039964	Fruitvale	N
02908496	Union Oil Co. of Calif.	Oak Street	A-2	26	29S	27E	Fr E/4 cor 88N 633W	35.376139	-119.039965	Fruitvale	N
02908341	Capital Production Co.	Dillon	1	27	29S	27E	Fr NW cor 3647S 1104E	35.373377	-119.069745	Fruitvale	N
02906831	Capital Production Co.	Strip	1	27	29S	27E	Fr W/4 cor 1337S 1155E	35.372535	-119.069490	Fruitvale	N
02900386	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	16	27	29S	27E	Fr SE cor 992N 330W	35.371450	-119.056770	Fruitvale	Y
02900549	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	15	27	29S	27E	Fr SE cor 334N 2332W	35.369621	-119.063575	Fruitvale	Y
02900638	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	22	27	29S	27E	Fr SE cor 1652N 1670W	35.373267	-119.061354	Fruitvale	Y
02900712	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	35	27	29S	27E	Fr SE cor 2016N 1329W	35.374260	-119.060120	Fruitvale	Y
02900809	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	3	27	29S	27E	Fr NE cor 1038S 157W	35.380410	-119.056100	Fruitvale	N
02906996	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	1	27	29S	27E	Fr NW cor 2305S 2333E	35.376880	-119.065636	Fruitvale	Y
02906997	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	2	27	29S	27E	Fr NE cor 330S 990W	35.382403	-119.058881	Fruitvale	Y
02906998	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	4	27	29S	27E	Fr NE cor 839S 157W	35.380960	-119.056110	Fruitvale	N
02906999	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	5	27	29S	27E	Fr NE cor 990S 990W	35.380540	-119.058900	Fruitvale	N

Table 1
Westside Parkway
Well Summary

API #	OPERATOR	LEASE	WELL #	SEC	TWN	RGE	APPROXIMATE LOCATION	Latitude	Longitude	FIELD	ACTIVE
02908000	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	5-A	27	29S	27E	Fr NE cor 990S 1090W	35.380536	-119.059197	Fruitvale	Y
02908101	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	6	27	29S	27E	Fr NE cor 1650S 990W	35.378710	-119.058968	Fruitvale	Y
02908102	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	6-A	27	29S	27E	Fr NE cor 1650S 1065W	35.378690	-119.059135	Fruitvale	Y
02908103	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	7	27	29S	27E	Fr NE cor 2305S 990W	35.376939	-119.058927	Fruitvale	Y
02908104	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	7-A	27	29S	27E	Fr NE cor 2305S 1090W	35.376926	-119.059199	Fruitvale	Y
02908105	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	8	27	29S	27E	Fr SE cor 2323N 1669W	35.375052	-119.061159	Fruitvale	Y
02908106	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	9	27	29S	27E	Fr SE cor 2323N 2332W	35.375100	-119.063480	Fruitvale	N
02908107	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	10	27	29S	27E	Fr NE cor 2922S 990W	35.375240	-119.058900	Fruitvale	Y
02908108	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	11	27	29S	27E	Fr SE cor 330N 990W	35.369622	-119.058956	Fruitvale	Y
02908109	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	12	27	29S	27E	Fr SW cor 1921N 1506E	35.374003	-119.068503	Fruitvale	Y
02908110	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	13	27	29S	27E	Fr SE cor 1654N 999W	35.373367	-119.058998	Fruitvale	Y
02908111	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	14	27	29S	27E	Fr SE cor 1654N 2332W	35.373340	-119.063440	Fruitvale	Y
02908112	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	16-A	27	29S	27E	Fr SE cor 1050N 380W	35.371543	-119.056909	Fruitvale	Y
02908113	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	17	27	29S	27E	Fr SE cor 992N 1670W	35.371378	-119.061245	Fruitvale	Y
02908114	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	18	27	29S	27E	Fr SE cor 2323N 2996W	35.375122	-119.065771	Fruitvale	Y
02908115	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	19	27	29S	27E	Fr SE cor 992N 2996W	35.371450	-119.065710	Fruitvale	Y
02908116	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	20	27	29S	27E	Fr SE cor 2407N 3664W	35.375277	-119.067914	Fruitvale	Y
02908117	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	21	27	29S	27E	Fr SW cor 2987N 1632E	35.376897	-119.067941	Fruitvale	Y
02908118	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	23	27	29S	27E	Fr SE cor 992N 2332W	35.371416	-119.063531	Fruitvale	Y
02908119	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	24	27	29S	27E	Fr SE cor 1653N 2996W	35.373225	-119.065691	Fruitvale	Y
02908120	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	25	27	29S	27E	Fr SE cor 334N 2996W	35.369613	-119.065786	Fruitvale	Y
02908121	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	26	27	29S	27E	Fr SE cor 632N 1970W	35.370410	-119.062196	Fruitvale	Y
02908122	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	27	27	29S	27E	Fr NE cor 2971S 330W	35.375107	-119.056775	Fruitvale	Y
02908123	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	28	27	29S	27E	Fr NE cor 3521S 330W	35.373590	-119.056680	Fruitvale	N
02908124	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	28-A	27	29S	27E	Fr NE cor 3446S 405W	35.373748	-119.057004	Fruitvale	Y
02908125	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	29	27	29S	27E	Fr NE cor 2305S 330W	35.376944	-119.056840	Fruitvale	Y
02908126	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	30	27	29S	27E	Fr NE cor 1650S 330W	35.378771	-119.056726	Fruitvale	Y
02908127	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	31	27	29S	27E	Fr SE cor 395N 330W	35.369794	-119.056816	Fruitvale	Y
02908128	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	32	27	29S	27E	Fr NE cor 1978S 660W	35.377801	-119.057861	Fruitvale	Y
02908129	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	32-A	27	29S	27E	Fr NE cor 1978S 710W	35.377847	-119.057997	Fruitvale	Y

Table 1
Westside Parkway
Well Summary

API #	OPERATOR	LEASE	WELL #	SEC	TWN	RGE	APPROXIMATE LOCATION	Latitude	Longitude	FIELD	ACTIVE
02908130	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	33	27	29S	27E	Fr NE cor 2638S 655W	35.375983	-119.057852	Fruitvale	Y
02908131	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	34	27	29S	27E	Fr NE cor 3248S 631W	35.374328	-119.057802	Fruitvale	Y
02908132	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	36	27	29S	27E	Fr SE cor 1988N 2051W	35.374200	-119.062583	Fruitvale	Y
02908133	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	37	27	29S	27E	Fr SE cor 1323N 1374W	35.372360	-119.060270	Fruitvale	N
02908134	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	37-A	27	29S	27E	Fr SE cor 1383N 1384W	35.372636	-119.060257	Fruitvale	Y
02908135	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	38	27	29S	27E	Fr NE cor 1300S 1100W	35.379690	-119.059270	Fruitvale	N
02908136	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	39	27	29S	27E	Fr SE cor 661N 660W	35.370547	-119.057874	Fruitvale	Y
02908137	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	40	27	29S	27E	Fr SE cor 330N 1340W	35.369659	-119.060150	Fruitvale	Y
02908138	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	41	27	29S	27E	Fr SE cor 1535N 789W	35.372992	-119.058114	Fruitvale	Y
02908139	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	42	27	29S	27E	Fr SE cor 1191N 1076W	35.372031	-119.059385	Fruitvale	Y
02908140	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	43	27	29S	27E	Fr SE cor 2706N 1188W	35.376200	-119.059567	Fruitvale	Y
02908141	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	44	27	29S	27E	Fr NW cor 2470S 1980E	35.376428	-119.066859	Fruitvale	Y
02908142	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	45	27	29S	27E	Fr SE cor 577N 1212W	35.370283	-119.059740	Fruitvale	Y
02908143	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	46	27	29S	27E	Fr NE cor 3296S 2576W	35.374229	-119.064327	Fruitvale	Y
02908144	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	47	27	29S	27E	Fr NE cor 3944S 2000W	35.372430	-119.062290	Fruitvale	N
02908145	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	48	27	29S	27E	Fr SE cor 1226N 154W	35.372090	-119.056180	Fruitvale	N
02908146	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	49	27	29S	27E	Fr SE cor 1977N 1000W	35.374172	-119.058913	Fruitvale	Y
02908147	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	50	27	29S	27E	Fr NE cor 2640S 308W	35.376027	-119.056690	Fruitvale	Y
02908148	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	50-A	27	29S	27E	Fr NE cor 2600S 348W	35.376120	-119.056750	Fruitvale	N
02908149	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	51	27	29S	27E	Fr SE cor 650N 150W	35.370510	-119.056160	Fruitvale	N
02908150	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	51-A	27	29S	27E	Fr SE cor 650N 185W	35.370510	-119.056280	Fruitvale	N
02908151	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	52	27	29S	27E	Fr SE cor 2050N 150W	35.374350	-119.056160	Fruitvale	Y
02908152	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	52-A	27	29S	27E	Fr SE cor 2050N 185W	35.374369	-119.056277	Fruitvale	Y
02908153	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	53	27	29S	27E	Fr NE cor 1000S 500W	35.380526	-119.057300	Fruitvale	Y
02908154	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	53-A	27	29S	27E	Fr NE cor 1035S 535W	35.380400	-119.057423	Fruitvale	Y
02908155	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	54	27	29S	27E	Fr NE cor 1240S 690W	35.379762	-119.057948	Fruitvale	Y
02908156	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	55	27	29S	27E	Fr NE cor 1850S 1240W	35.378186	-119.059707	Fruitvale	Y
02908157	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	56	27	29S	27E	Fr NE cor 708S 1240W	35.381466	-119.059660	Fruitvale	N
02942010	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	10-A	27	29S	27E	Fr NE cor 2892S 940W	35.375307	-119.058696	Fruitvale	Y
02954305	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	59	27	29S	27E	Fr NE cor 2200S 560W	35.377220	-119.057489	Fruitvale	Y

Table 1
Westside Parkway
Well Summary

API #	OPERATOR	LEASE	WELL #	SEC	TWN	RGE	APPROXIMATE LOCATION	Latitude	Longitude	FIELD	ACTIVE
02957906	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	60	27	29S	27E	Fr NE cor 1550S 1250W	35.379010	-119.059684	Fruitvale	Y
02957907	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	61	27	29S	27E	Fr NE cor 420S 1250W	35.382110	-119.059770	Fruitvale	Y
02957908	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	62	27	29S	27E	Fr ctr 191S 652E	35.375550	-119.062370	Fruitvale	N
02958378	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	63	27	29S	27E	Fr NE cor 730S 1078W	35.381260	-119.059190	Fruitvale	Y
02958379	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	64	27	29S	27E	Fr NE cor 1865S 459W	35.378156	-119.057155	Fruitvale	Y
02958738	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	65	27	29S	27E	Fr N/4 cor 1433S 2204E	35.379355	-119.057134	Fruitvale	Y
02958739	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	66	27	29S	27E	Fr NE cor 2860S 1820W	35.380410	-119.057920	Fruitvale	N
02958740	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	67	27	29S	27E	Fr NE cor 3630S 750W	35.378620	-119.057950	Fruitvale	Y
02958741	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	68	27	29S	27E	Fr NE cor 3380S 120W	35.376599	-119.056626	Fruitvale	Y
02960359	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	69	27	29S	27E	Fr NE cor 2731S 619W	35.375754	-119.057707	Fruitvale	Y
02961052	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	70	27	29S	27E	Fr E/4 cor 600N 700W	35.377660	-119.058030	Fruitvale	N
02961053	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	71	27	29S	27E	Fr E/4 cor 130S 150W	35.375640	-119.056130	Fruitvale	N
02961054	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	73	27	29S	27E	Fr NE cor 900S 150W	35.380790	-119.056080	Fruitvale	N
02966605	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	72	27	29S	27E	Fr SE cor 2023N 1813W	35.374280	-119.061740	Fruitvale	N
02972596	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	2A	27	29S	27E	Fr NE cor 200S 1150W	35.382736	-119.059438	Fruitvale	Y
02972604	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	73A	27	29S	27E	Fr NE cor 900S 200W	35.380790	-119.056250	Fruitvale	N
03000308	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	74	27	29S	27E	Fr NE cor 1650S 220W	35.378712	-119.056338	Fruitvale	Y
03000407	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	75	27	29S	27E	Fr E/4 cor 2150S 1000W	35.377343	-119.055968	Fruitvale	Y
03002619	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	76	27	29S	27E	Fr ctr 200N 2550E	35.376551	-119.055943	Fruitvale	Y
03012704	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	77	27	29S	27E	Fr E/4 cor 768S 236W	35.373841	-119.056467	Fruitvale	Y
03016988	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	78M	27	29S	27E	Fr E/4 cor 850S 340W	35.373657	-119.056790	Fruitvale	Y
03016989	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	79MK	27	29S	27E	Fr E/4 cor 836S 280W	35.373706	-119.056605	Fruitvale	Y
03018960	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	80	27	29S	27E	Fr E/4 cor 719S 110W	35.374002	-119.055988	Fruitvale	Y
03022038	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	81	27	29S	27E	Fr E/4 cor 840S 200W	35.373733	-119.056357	Fruitvale	Y
03025686	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	84	27	29S	27E	Fr NE cor 310W 1210S	35.379682	-119.057123	Fruitvale	Y
03025687	San Joaquin Facilities Mgmt.	Red Ribbon Ranch	83	27	29S	27E	Fr NE cor 1240W 738S	35.381340	-119.059725	Fruitvale	Y
02908342	Sunray Petroleum, Inc.	Dillon	2	27	29S	27E	Fr NW cor 2693S 1160E	35.375892	-119.069589	Fruitvale	Y
02906781	Sunray Petroleum, Inc.	E & H Dillon	1	27	29S	27E	Fr W/4 cor 543S 1090E	35.374621	-119.069786	Fruitvale	Y
02906810	Sunray Petroleum, Inc.	Red Ribbon Lease 1	1	27	29S	27E	Fr SW cor 990N 1794E	35.371432	-119.067522	Fruitvale	Y
02906811	Sunray Petroleum, Inc.	Red Ribbon Lease 1	2	27	29S	27E	Fr SW cor 990N 1134E	35.371473	-119.069714	Fruitvale	Y

Table 1
Westside Parkway
Well Summary

API #	OPERATOR	LEASE	WELL #	SEC	TWN	RGE	APPROXIMATE LOCATION	Latitude	Longitude	FIELD	ACTIVE
02906812	Sunray Petroleum, Inc.	Red Ribbon Lease 1	3	27	29S	27E	Fr SW cor 330N 1794E	35.369643	-119.067522	Fruitvale	Y
02906813	Sunray Petroleum, Inc.	Red Ribbon Lease 1	4	27	29S	27E	Fr SW cor 330N 1134E	35.369659	-119.069764	Fruitvale	Y
02906814	Sunray Petroleum, Inc.	Red Ribbon Lease 1	5	27	29S	27E	Fr SW cor 990N 330E	35.371444	-119.072404	Fruitvale	Y
02906815	Sunray Petroleum, Inc.	Red Ribbon Lease 1	6	27	29S	27E	Fr SW cor 660N 1464E	35.370576	-119.068688	Fruitvale	Y
02906816	Sunray Petroleum, Inc.	Red Ribbon Lease 1	7	27	29S	27E	Fr SW cor 660N 732E	35.370594	-119.071115	Fruitvale	Y
02906706	Ajax Oil & Development Co.	Ajax-Schulz	1	28	29S	27E	Fr SW cor 1270N 1570E	35.372380	-119.085917	Fruitvale	N
02906718	Bakersfield Oil Co.	Hill	1	28	29S	27E	Fr W/4 cor 330S 1653E	35.375189	-119.085720	Fruitvale	N
02906719	Bakersfield Oil Co.	Hill	3	28	29S	27E	Fr W/4 cor 330S 2313E	35.375158	-119.083442	Fruitvale	N
02908418	Big West of California, LLC	KCL	56-28	28	29S	27E	Fr ctr 990S 510E	35.373383	-119.080679	Fruitvale	N
02947916	Big West of California, LLC	Water Injection Well	2	28	29S	27E	Fr ctr 708S 613E	35.374181	-119.080327	Fruitvale	N
02962134	Northern Michigan Expl. Co.	Tenneco	2	28	29S	27E	Fr SE cor 1372N 2245W	35.372379	-119.080905	Fruitvale	N
02908428	Stanford Petroleum Corp.	Scheel	1	28	29S	27E	Fr SW cor 1070N 1570E	35.371848	-119.085966	Fruitvale	N
02906817	Sunray Petroleum, Inc.	Armstrong	1	28	29S	27E	Fr NW cor 1200S 110E	35.379919	-119.091048	Fruitvale	Y
02906819	Sunray Petroleum, Inc.	Duke	1	28	29S	27E	Fr W/4 cor 1040N 435E	35.379002	-119.089697	Fruitvale	Y
02906824	Sunray Petroleum, Inc.	Smoot	3	28	29S	27E	Fr W/4 cor 710N 810E	35.378071	-119.088516	Fruitvale	Y
02962637	Sunray Petroleum, Inc.	Sunland-Smoot	1	28	29S	27E	Fr W/4 cor 851S 1259E	35.373754	-119.087232	Fruitvale	Y
02962133	Sunray Petroleum, Inc.	Tenneco	1	28	29S	27E	Fr SE cor 1365N 2145W	35.372549	-119.080848	Fruitvale	Y
02944440	ARCO Western Energy	Jastro	S33-31	31	29S	27E	Fr NW cor 1650S 1650E	35.364445	-119.121384		N
02930970	Shell Western E & P Inc.	Bellevue A	36-31	31	29S	27E	Fr NW cor 3639S 1682E	35.359044	-119.121327		N
02930971	Shell Western E & P Inc.	K.C.L.	1	31	29S	27E	Fr N/4 cor 741S 450E	35.366899	-119.116354		N
02930972	Shell Western E & P Inc.	Underwood	1	31	29S	27E	Fr NE cor 100S 1100W	35.368698	-119.112673		N
02930951	Chevron U.S.A. Inc.	KCL-A Stockdale	2	33	29S	27E	Fr SE cor 368N 1720W	35.355358	-119.079287		N
02965217	Commander Oil Co., Ltd.	Nomeco	1	33	29S	27E	Fr NE cor 327S 855W	35.368040	-119.076269		N
02930947	Golden Bear Oil Co.	K.C.L.	82-33	33	29S	27E	Fr NE cor 990S 330W	35.366262	-119.074543		N
02930948	Golden Bear Oil Co.	K.C.L.	87-33	33	29S	27E	Fr SE cor 990N 330W	35.357107	-119.074535		N
02904241	Ancora-Verde Corp.	Ancora-Humble	66X-34	34	29S	26E	Fr SE cor 150N 150W	35.358583	-119.167306	Bellevue	N
02965222	Atlantic Oil Co.	Karpe	2	34	29S	26E	Fr E/4 cor 1015N 1827W	35.364648	-119.168600	Bellevue	N
02904201	Atlantic Oil Co.	Zacheisz	1	34	29S	26E	Fr SE cor 990N 990W	35.357153	-119.165771	Bellevue	N
02904220	Benjamin D. Leverett	Zacheisz	77X	34	29S	26E	Fr SE cor 920N 920W	35.356963	-119.165520	Bellevue	N
02904221	Benjamin D. Leverett	Zacheisz	88	34	29S	26E	Fr SE cor 490N 400W	35.355826	-119.163605	Bellevue	N

Table 1
Westside Parkway
Well Summary

API #	OPERATOR	LEASE	WELL #	SEC	TWN	RGE	APPROXIMATE LOCATION	Latitude	Longitude	FIELD	ACTIVE
02904211	Chevron U.S.A. Inc.	Karpe 2	53	34	29S	26E	Fr NE cor 1790S 2310W	35.364149	-119.170267	Bellevue	N
02904212	Chevron U.S.A. Inc.	Karpe 2	73	34	29S	26E	Fr NE cor 1790S 990W	35.364095	-119.165725	Bellevue	N
02942823	Grover Collins	Romanoski	1	34	29S	26E	Fr SW cor 500N 330E	35.355886	-119.179225	Bellevue	N
02904208	Mobil Expl. & Prod. N.A., Inc.	Karpe	84A-34	34	29S	26E	Fr NE cor 2200S 200W	35.362998	-119.163205	Bellevue	N
02904209	Mobil Oil Corp.	Papoff	85-34	34	29S	26E	Fr E/4 cor 330W 330S	35.360818	-119.163691	Bellevue	N
02968398	Nahama & Weagant Energy Co	Mobil	1	34	29S	26E	Fr ctr 200S 105W	35.361195	-119.171664	Bellevue	N
02930929	Occidental Petroleum Corp.	Nordling	43	34	29S	26E	Fr N/4 cor 1750S 350W	35.364154	-119.172386	Bellevue	N
02969534	R.J. Bellevue, Inc.	Argonaut	1	34	29S	26E	Fr E/4 cor 200S 1850W	35.361179	-119.168557	Bellevue	Y
02960586	R.J. Bellevue, Inc.	Brandt	1	34	29S	26E	Fr NE cor 1000S 2200W	35.366206	-119.169723	Bellevue	N
02966906	R.J. Bellevue, Inc.	Brandt	2	34	29S	26E	Fr NE cor 1000S 1700W	35.366237	-119.168091	Bellevue	Y
02967360	R.J. Bellevue, Inc.	Brandt	3	34	29S	26E	Fr NE cor 550S 1500W	35.367618	-119.167403	Bellevue	Y
02971057	R.J. Bellevue, Inc.	Brandt	4	34	29S	26E	Fr NE cor 1000S 1600W	35.366246	-119.167536	Bellevue	Y
02962579	R.J. Bellevue, Inc.	Karpe	1	34	29S	26E	Fr E/4 cor 1015N 1937W	35.364509	-119.168835	Bellevue	Y
02968717	R.J. Bellevue, Inc.	Karpe	3	34	29S	26E	Fr E/4 cor 990N 1827W	35.364456	-119.168391	Bellevue	Y
02965543	R.J. Bellevue, Inc.	Weaver	1	34	29S	26E	Fr NW cor 2490E 1470S	35.364893	-119.171699	Bellevue	Y
02968041	R.J. Bellevue, Inc.	Weaver	2	34	29S	26E	Fr NW cor 2109S 2502E	35.363175	-119.171727	Bellevue	Y
02904222	Strickler-Taylor Assoc.	Karpe	68-34	34	29S	26E	Fr SE cor 400N 1620W	35.355585	-119.167921	Bellevue	N
02904213	Chevron U.S.A. Inc.	Borland-Olney	67	35	29S	26E	Fr S/4 cor 990N 990E	35.357353	-119.149899	Bellevue	N
02904214	Chevron U.S.A. Inc.	Robbins Community	45	35	29S	26E	Fr ctr 330S 360W	35.360934	-119.154508	Bellevue	N
02904215	Chevron U.S.A. Inc.	Valmar Community	35-35	35	29S	26E	Fr SW cor 2520N 1630E	35.361610	-119.156673	Bellevue	N
02904216	Chevron U.S.A. Inc.	Valmar Community	35a-35	35	29S	26E	Fr SW cor 2520N 1590E	35.361609	-119.156968	Bellevue	N
02958788	Dole Enterprises, Inc.	Bellevue	1-35	35	29S	26E	Fr NW cor 1960S 1065E	35.364189	-119.158948	Bellevue	N
02960092	Dole Enterprises, Inc.	Bellevue	2-35	35	29S	26E	Fr NW cor 1200S 1414E	35.365813	-119.157624	Bellevue	N
02904203	Exxon Mobil Corporation	Homer A. Sledge et al	1	35	29S	26E	Fr NW cor 330S 1650E	35.368095	-119.156830	Bellevue	N
02904204	Exxon Mobil Corporation	Homer A. Sledge et al	2	35	29S	26E	Fr N/4 cor 990S 600W	35.366276	-119.155479	Bellevue	N
02904205	Exxon Mobil Corporation	Homer A. Sledge et al	3-1	35	29S	26E	Fr N/4 cor 330S 350W	35.368087	-119.154648	Bellevue	N
02904206	Exxon Mobil Corporation	Homer A. Sledge et al	3-2	35	29S	26E	Fr N/4 cor 330S 371W	35.368087	-119.154719	Bellevue	N
02966599	Gordon Dole	Mission	74X-35	35	29S	26E	Fr SE cor 900W 2050N	35.360110	-119.147945	Bellevue	Y
02904223	Matrix Oil Corporation	Berchtold	25-35	35	29S	26E	Fr SW cor 330N 989E	35.360762	-119.158984	Bellevue	Y
02904224	Matrix Oil Corporation	Houghton	28-35	35	29S	26E	Fr SW cor 330N 990E	35.355144	-119.158872	Bellevue	Y

Table 1
Westside Parkway
Well Summary

API #	OPERATOR	LEASE	WELL #	SEC	TWN	RGE	APPROXIMATE LOCATION	Latitude	Longitude	FIELD	ACTIVE
02904226	Matrix Oil Corporation	Houghton	36-35	35	29S	26E	Fr W/4 cor 990S 1650E	35.358956	-119.156766	Bellevue	Y
02904230	Matrix Oil Corporation	Houghton	58-35	35	29S	26E	Fr S/4 cor 500N 330E	35.355810	-119.152350	Bellevue	Y
02942840	Matrix Oil Corporation	Houghton	46X-35	35	29S	26E	Fr S/4 cor 1675N 75W	35.359004	-119.153977	Bellevue	Y
02904225	Maxoil Inc.	Houghton	27-35	35	29S	26E	Fr SW cor 990N 990E	35.357320	-119.158966	Bellevue	N
02904227	Maxoil Inc.	Houghton	47-35	35	29S	26E	Fr S/4 cor 990N 330W	35.357237	-119.154545	Bellevue	N
02904228	Maxoil Inc.	Houghton	56-35	35	29S	26E	Fr ctr 990S 330E	35.359161	-119.152151	Bellevue	N
02904229	Maxoil Inc.	Houghton	38-35	35	29S	26E	Fr S/4 cor 330N 990W	35.355608	-119.156625	Bellevue	N
02964442	Mission Resources	Bellevue	3-35	35	29S	26E	Fr NW cor 1420E 400S	35.367905	-119.157587	Bellevue	N
02930924	Marathon Oil Co.	K.C.L. (34-36)	G-1	36	29S	26E	Fr NW cor 2310S 1640E	35.362784	-119.138874		N
02930926	Mobil Oil Corp.	Pioneer	82-36	36	29S	26E	Fr NE cor 990S 330W	35.366501	-119.127889		N
02971627	Nahama & Weagant Energy Co	Bellevue Deep	1	36	29S	26E	Fr NW cor 1750S 150E	35.364374	-119.143921		N
02985636	Nahama & Weagant Energy Co	Jewetta	1-36	36	29S	26E	Fr NE cor 1825W 330S	35.368194	-119.132851		N
02930931	Richard S. Rheem, Opr.	KCL	54-36	36	29S	26E	Fr E/4 cor 330N 2310W	35.362871	-119.134566		N

Coordinates are NAD 27 US Continental

Table 2
Westside Parkway
Active Operators

R.J. Bellevue, Inc.
1400 Easton Dr #152
Bakersfield, CA 93309
Mr. Tom Ladd, (661) 327-1122

Gordon Dole
12850 Allen Lane
Bakersfield, CA 93312
Mr. Gordon Dole, (661) 589-8088

Matrix Oil Corporation
920 Garden Street, Suite B
Santa Barbara, CA 93101
Mr. Johnny Jordan, (805) 884-9000

O. O. Co., Inc.
18400 Highway 65
Bakersfield, CA 93308
Mr. Timothy J. Lewy, (661) 392-1713

San Joaquin Facilities Mgmt.
5400 Rosedale Highway
Bakersfield, CA 93308
Mr. Michael W. Kranyak, (661) 631-8713

Sunray Petroleum, Inc.
P.O. Box 82275
Bakersfield, CA 93380-2275
Mr. Larry Rowland, (661) 615-6010

RESPONSES TO DEPARTMENT OF CONSERVATION, DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES COMMENTS

1. Where possible, the Westside Parkway would be designed in accordance with Bakersfield Municipal Code 15.66.080 and 15.66.040. Where it is not possible to avoid existing petroleum wells, they would be abandoned in accordance with Department of Conservation, Division of Oil, Gas and Geothermal Resources requirements and guidance. This information has been included in Section 4.2.2.2 of the EA/FEIR.

2. The City of Bakersfield would contact the active oil and gas operators listed in Table 2 provided by the Department of Conservation, as appropriate, to review the Westside Parkway design plans related to their respective facilities. Section 3.2.4 of the EA/FEIR has been revised to reference Tables 1 and 2 provided by the Department of Conservation. The Department's letter is included in Appendix I of the EA/FEIR. Section 4.2.2.2 of the EA/FEIR has been modified to indicate the coordination that would be done by the City of Bakersfield with oil and gas operators.

3. The proximity of previously plugged and abandoned wells would be compared to the locations of proposed Westside Parkway structures. If conflicts cannot be avoided, the Department of Conservation, Division of Oil, Gas, and Geothermal Resources would be contacted to determine appropriate measures to ensure that previously plugged and abandoned wells are not damaged. It is understood these measures may involve re-abandonment. Section 4.2.2.1 of the EA/FEIR has been modified to identify this potential impact and Section 4.2.2.2 has been modified to include mitigation for the impact.

4. If abandoned or unrecorded oil wells are damaged during construction of the Westside Parkway, the Department of Conservation, Division of Oil, Gas and Geothermal Resources would be contacted to obtain information regarding requirements and approval to perform remedial action. This commitment has been included in Section 4.2.2.2 of the EA/FEIR.

5. Section 4.2.2.1 of the EA/EIR has been modified to note that conflicts with individual oil wells may result in irredeemably lost oil reserves within the drainage radius of a particular well. Section 4.2.2.2 of the EA/FEIR provides mitigation measures to minimize this potential impact.

6. The City of Bakersfield has designed the Westside Parkway project to minimize the number of conflicts that the project has with existing oil wells. The Metropolitan Bakersfield General Plan does not specifically itemize the number of oil wells anticipated to be impacted by proposed development throughout the City. Therefore, it would not be possible to compare the number of wells impacted by the Westside Parkway versus the General Plan. However, it is

reasonable to say that construction of the Westside Parkway should not impact any more wells than build-out of the City's entire General Plan.

State of California - The Resources Agency
DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
San Joaquin Valley and Southern Sierra Region
1234 East Shaw Avenue
Fresno, California 93710
(559) 243-4014

ARNOLD SCHWARZENEGGER, Governor

RECEIVED
MAY 1 2006 MG
CITY OF BAKERSFIELD
PLANNING DEPARTMENT

April 27, 2006

Marc Gauthier
City of Bakersfield
Development Services Department
1715 Chester Avenue
Bakersfield, California 93301

Dear Mr. Gauthier:

Westside Parkway Tier 2 Environmental Impact Report (EIR)
SCH#2002121014

The Department of Fish and Game (Department) has reviewed the Tier 2 Draft EIR (DEIR) prepared for the above Project. Approval of the Project would result in construction of 8.1 miles of a new east-west freeway within the City of Bakersfield. The proposed alignment extends from approximately State Route 99 west to Stockdale Highway at Heath Road. The Project also includes the extension of Mohawk Street south from Rosedale Highway, across the Kern River, to Truxtun Avenue. The Mohawk Street extension would require construction of a new bridge across the Kern River. Sufficient right-of-way is being acquired to accommodate an eight lane facility, although fewer lanes will be initially required. Two alternatives are considered in the DEIR; freeway construction and no alternative. Two options are being considered for the freeway construction alternative, the Truxtun Option and the Oak Option. These options provide a different alignment for the portion of the Westside Parkway east of Mohawk Street. Construction of the Truxtun Option would result in impacts to 105.5 acres of non-native grassland, 82.8 acres of agricultural land, and 1.3 acres of Great Valley cottonwood riparian forest. Construction of the Oak Option would result in impacts to 105.8 acres of non-native grassland, 82.8 acres of agricultural land, and 1 acre of Great Valley Cottonwood forest.

Based on our review of the DEIR, we have identified two primary areas of concern:

1. Although mitigation for Project-related impacts to habitat and certain special status species will occur via participation in the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP), we do not feel that the potential Project-related impacts to the urban San Joaquin kit fox (*Vulpes macrotis mutica*) population has been adequately considered under the California Environmental Quality Act (CEQA). Specifically, without additional minimization measures, the Project could result in an impermeable barrier to north-south movement of kit fox, which could ultimately result in significant impacts to the overall regional kit fox population. (1)

2. The State-threatened Swainson's hawk (*Buteo swainsoni*) is known to nest "near" the Project area (DEIR page 3-53). However, Swainson's hawk is not a covered species under the MBHCP and associated 2081. As a result, there is no existing incidental take authority for this species, even if mitigation through the MBHCP occurs. As a result, take of this species must either be avoided, or a separate Incidental Take Permit would need to be acquired prior to Project implementation. (2)

Our specific comments follow:

Trustee Agency Authority: The Department is a Trustee Agency with the responsibility under CEQA for commenting on projects that could impact plant and wildlife resources. Pursuant to Fish and Game Code Section 1802, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. As a Trustee Agency for fish and wildlife resources, the Department is responsible for providing, as available, biological expertise to review and comment on environmental documents and impacts arising from project activities as those terms are used under CEQA.

Responsible Agency Authority: The Department has regulatory authority over projects that could result in the "take" of any species listed by the State as threatened or endangered pursuant to Fish and Game Code Section 2081. CEQA requires a Mandatory Finding of Significance if a project is likely to substantially impact threatened or endangered species (Sections 21001{c}, 21083, Guidelines Sections 15380, 15064, 15065). Impacts must be avoided or mitigated to less than significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with Fish and Game Code Section 2080. State-listed species known to occur in the Project area vicinity include the State-threatened and Federally-endangered San Joaquin kit fox and the State-threatened Swainson's hawk. Our comments on the potential for Project-related impacts to these species follow in subsequent portions of this letter.

The Department also has regulatory authority with regard to activities occurring in streams and/or lakes that could adversely affect any fish or wildlife resource. For any activity that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) of a river or stream, or use material from a streambed, the Department may require a Stream Alteration Agreement (SAA), pursuant to Section 1600 et seq. of the Fish and Game Code. Issuance of a SAA is subject to CEQA review, and the Department, as a Responsible Agency under CEQA, would consider the CEQA document for the Project. The CEQA document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for completion of the SAA.

The DEIR correctly states that a SAA will be needed for portions of the Project which will impact the bed, bank, and channel of the Kern River. The Department recommends early consultation well in advance of ground disturbing activities to allow adequate time for review of a SAA application and issuance of the SAA. (3)

Fully Protected Species: The Department has jurisdiction over Fully Protected Species of birds, mammals, amphibians and reptiles, and fish pursuant to Fish and Game Code Sections 3511, 4700, 5050, and 5515. Take of any Fully Protected Species is prohibited and the Department cannot authorize their take. One Fully Protected Species, the blunt-nosed leopard lizard (BNLL), has historically occurred in the Project area. Page ES-5 of the DEIR states that, "Take minimization measures for the blunt-nosed leopard lizard specific to the Westside Parkway project would be developed with input from that agency [The Department of Fish and Game]." These take minimization measures have not yet been discussed with the Department. We recommend consultation on this topic at <u>least</u> one year prior to construction so that there is ample time to conduct protocol-level surveys, if deemed necessary by the Department. (4)

Bird Protection: The Department has jurisdiction over actions which may result in the disturbance or destruction of active nest sites or the unauthorized "take" of birds. Sections of the Fish and Game Code that protect birds, their eggs and nests include Section 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory non-game bird). Specific remarks on potential Project-related impacts to birds are included in the following comments.

Potential Project Impacts and Recommendations

San Joaquin Kit Fox: The DEIR repeatedly identifies the Kern River as a travel and movement corridor for kit fox. At the time of the preparation and issuance of the MBHCP and 2081, it was thought that kit fox within the City of Bakersfield primarily utilized the Kern River Corridor. However, subsequent studies conducted on Bakersfield's urban kit fox population indicate that while the Kern River Corridor is occasionally used by individual kit foxes, the adjacent parkland and open spaces are more commonly utilized. This is due in part because the Kern River Corridor poses a greater predation risk to kit fox; larger predators such as bobcat, the non-native red fox, and coyote utilize the more brushy and riparian vegetation types present in the river corridor. Several dead radio-collared foxes have been found in the Kern River Corridor area, which have been killed by such predators (Cypher 2006).

Based on recent long-term biological studies, the urban kit fox population within the City of Bakersfield is estimated at 200-400 individuals (Cypher 2006). Instead of kit fox distribution being limited to the Kern River Corridor like once thought, it is now well established that kit fox utilize almost any open space within Bakersfield, including but not limited to canals, vacant lots, commercial and light industrial developments, railroad, power, and other utility right-of-ways

(ROWs), parks, golf courses, schools, and stormwater retention basins/sumps. Residential developments are used to a much lesser extent, likely because of the movement barriers posed by multiple and frequent fencing.

The kit fox population in Bakersfield appears to currently be doing well; urban foxes have a higher average litter size than foxes in nearby wildland settings (Cypher 2006). This difference in the average number of offspring is likely due to the human-related food that urban foxes tend to include in their diets. Because of the high numbers of kit fox in Bakersfield, as well as the larger average litter size, the urban kit fox population is likely contributing to the overall kit fox population in the southern San Joaquin Valley. As a result, impacts to the urban foxes should be minimized in order to avoid regional impacts to a rare species. Although the MBHCP and 2081 confer take authority for individual foxes, Section 21002 of CEQA states that *"public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects."* In addition, CEQA Guidelines Section 15093 requires "*when the lead agency approves a project which will result in the occurrence of significant effects which are identified in the Final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the Final EIR and/or information in the record. The statement of overriding consideration shall be supported by substantial evidence in the record.*" Participation in the MBHCP will not constitute adequate mitigation for kit fox under CEQA and will not in of itself reduce impacts to less than significant levels. There are several feasible mitigation measures that could substantially reduce the Project-related impacts to San Joaquin kit fox, which were not identified in the DEIR. Additional mitigation and minimization measures are warranted; some suggestions are included below.
In addition to participation in the MBHCP, the following mitigation and minimization measures should be implemented.

1. Page 2-28 of the DEIR states that stormwater runoff from the Project would be retained in retention basins within or near the Project's right of way. Since these may ultimately be used by kit fox as denning and foraging habitat, as are stormwater basins elsewhere in the City of Bakersfield, we recommend that kit-fox friendly maintenance be required in these areas (e.g. mowing instead of discing of weedy vegetation, etc.). (5)

2. Existing stormwater detention basins/sumps located throughout the City of Bakersfield should be managed using kit fox friendly maintenance practices, so that these can double as kit fox refugia throughout the City. Current basin maintenance practices can unfortunately result in impacts to occupied kit fox dens. We recommend that the City initiate a program to modify maintenance practices in these areas where feasible. Vegetation should be mowed, rather than disced, especially on sump edges where kit fox dens are more likely to occur. In instances where discing or other ground disturbing maintenance activities are necessary, a qualified biologist or trained maintenance worker should search for dens in advance of ground disturbing activities and employ standard techniques to avoid impacts to occupied dens. (6)

3. The United States Fish and Wildlife Service (USFWS) Biological Opinion issued for this Project required that studies be conducted on: 1) kit fox movement along the State Route 58 alignment; 2) kit fox vehicle strikes on highways; and 3) the effectiveness of culverts for kit fox movement corridors (DEIR page 4-29). These studies have not yet been conducted, but are necessary to adequately determine the potential Project-related impacts to kit fox, as well as, appropriate mitigation and minimization measures. We concur with the DEIR (page 4-31) that these studies should be initiated prior to Project implementation. Final Project design should not occur until the findings can be incorporated, as structural accommodations (large culverts, etc.) will likely be needed in certain locations. (7)

4. In general, SR 99 to Calloway appears to currently be used by kit fox as a north-south corridor. At a minimum, substantial kit fox crossing structures should be installed every 1/10 of a mile. These structures should be at least 3 meters wide and 1 meter tall (Cypher 2006). These crossings should be designed and constructed in a way that would allow them to continue to function when additional lanes are added to the Westside Parkway over time. (8)

5. In areas where there will be road undercrossings beneath the Westside Parkway, a wide landscaped shoulder with low vegetative structure should be included in the opening. (9)

6. All landscaped areas along the Westside Parkway, new or modified feeder roads, and drainage sumps should be managed in kit fox friendly ways and should have artificial kit fox dens installed at regular intervals. While it could be argued that kit fox should not be "encouraged" in these areas, kit fox within the City of Bakersfield have demonstrated that they would likely use these areas nonetheless. Installation of artificial kit fox dens in these areas could reduce the potential for inadvertent entrapment and could reduce the risk of predation. In addition, it could reduce the potential for den construction and digging in undesirable locations. (10)

Swainson's Hawk: This State-threatened species is known to nest "near" the Project area along the Kern River. The EIR should clarify how close these nests are to the proposed Project footprint. As indicated previously, this is not a covered species in the MBHCP or 2081. As a result, Project-related take (as defined in Section 86 of the Fish and Game Code), must be completely avoided or a separate State Incidental Take Permit pursuant to Section 2081 of the Fish and Game Code would be warranted. (11)

The DEIR discusses impacts to riparian vegetation along the Kern River, but the approximate number and size of willows and cottonwoods to be removed are not identified. Removal of this riparian vegetation is a potentially significant impact that should be mitigated (see below). The Department considers removal of known raptor nest trees, even outside of the nesting season, to be a significant impact under CEQA, and in the case of Swainson's hawk could also result in take under the California Endangered Species Act (CESA). This is especially true with species

such as Swainson's hawk that exhibit high site fidelity to their nest and nest trees year after year. To avoid such impacts, surveys for nesting raptors should be conducted following the survey methodology developed by the Swainson's Hawk Technical Advisory Committee (SWHA TAC 2000) prior to any disturbance within 5 miles of a potential nest tree (CDFG 1994). Impacts to known nest trees should be avoided at all times of year. If avoidance of a known nest tree is not feasible, consultation with the Department is warranted prior to taking any action and a determination of take potential under CESA or under Fish and Game Code Sections 3503.5 and 3513 will be made. (11)

Regardless of nesting status, riparian trees that must be removed should be replaced with an appropriate native tree species planting at a ratio of 3:1 in an area that will be protected in perpetuity. This mitigation is needed to offset impacts to potential nesting habitat along the Kern River Corridor, which is already quite limited in distribution. (12)

We concur with the DEIR that impacts to potential Swainson's hawk foraging habitat should be mitigated, regardless of whether or not "take" will occur. However, utilization of the MBHCP will not necessarily provide appropriate foraging habitat. Swainson's hawks generally forage within 10 miles of their nest tree, and more commonly within 5 miles of their nest tree. Mitigation for impacts to Swainson's hawk foraging habitat should occur within a minimum distance of 10 miles from the Kern River nest trees. In addition to fee title acquisition of grassland habitat, mitigation could occur by the purchase of conservation or suitable agricultural easements. Suitable agricultural easements would include areas limited to production of crops such as alfalfa, dry land and irrigated pasture, and cereal grain crops. Certain low-growing row or field crops are appropriate as well. Vineyards, orchards, cotton fields, and other dense vegetation do not provide adequate foraging habitat. (13)

Burrowing Owl: Burrowing owl burrows and burrowing owls are present in the Project area vicinity. If any Project-related ground disturbing activities will occur during the burrowing owl nesting season (approximately February 1 through August 31), implementation of avoidance measures is required. The Department's Staff Report on Burrowing Owl Mitigation (CDFG 1995) recommends that impacts to occupied burrows be avoided by implementation of a no-construction buffer zone of a minimum distance of 250 feet, unless a qualified biologist approved by the Department verifies through non-invasive methods that either: 1) the birds have not begun egg laying and incubation; or 2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival. Failure to implement this buffer zone could cause adult burrowing owls to abandon the nest, cause eggs or young to be directly impacted (crushed), and/or result in reproductive failure. Impacts of this nature are violations of Fish and Game Code Sections 3503, 3503.5, 3513, and the Federal Migratory Bird Treaty Act (MBTA). (14)

The Department's Staff Report on Burrowing Owl Mitigation (CDFG 1995) also recommends that a minimum of 6.4 acres of foraging habitat per pair or unpaired resident burrowing owl should be acquired and permanently protected to offset the loss of foraging and burrow habitat.

This mitigation may be addressed through the lands secured by participation in the MBHCP, depending upon how much acreage is secured and how many burrowing owls would be impacted by the proposed Project. (14)

There is an opportunity to implement the Project and develop suitable measures to accommodate kit fox and other special status species inhabiting areas within the City of Bakersfield, and we would like to work with the City to help develop these measures. If you have any questions or would like to discuss these issues, please contact Julie Vance, Senior Environmental Scientist, at the address or telephone number (extension 222) provided on this letterhead. (15)

Sincerely,

for W. E. Loudermilk
Regional Manager

cc: See Page Eight

cc: Susan Jones
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Sacramento, California 95825

United States Corps of Engineers
San Joaquin Valley Office
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Sacramento, California 95814-2922

California Regional Water
Quality Control Board
Central Valley Region
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Annette Tenneboe, DFG

Annette Jennings, DFG

Stephen Juarez, DFG

Michelle Selmon, DFG

Clarence Mayott, DFG

Literature Cited

CDFG. 1994. Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (*Buteo swainsoni*) in the Central Valley of California.

_____. 1995. Staff Report on Burrowing Owl Mitigation. California Department of Fish and Game.

Cypher, B. L. 2006. Personal Communication to Julie Vance, CDFG.

SWHA TAC. 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee.

RESPONSES TO CALIFORNIA DEPARTMENT OF FISH AND GAME COMMENTS

1. As discussed in Section 4.3.1.2 of the EA/EIR, the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) only addresses compensatory mitigation for the loss of San Joaquin kit fox habitat. Mitigation for an impermeable barrier to north-south movement of kit fox is addressed in the U.S. Fish and Wildlife Service Biological Opinion for the adopted State Route 58 alignment, a portion of which will be occupied by the Westside Parkway. The Biological Opinion includes terms and conditions that require installation of facilities across the Westside Parkway to allow for the north-south movement of kit fox. The Biological Opinion was amended in 2005 to include the Westside Parkway. The Biological Opinion and its amendments are contained in Appendix D of theEA/EIR.

2. Swainson's hawk has been observed nesting in the riparian habitat adjacent to the Kern River. The nesting site closest to the Westside Parkway was observed by Sam Fitton, a biologist with the U.S. Bureau of Land Management, in 1992 in T30S, R26E, SE ¼ of Section 9 (Stevens quad), about two miles south of the western terminus of the Westside Parkway. Much of the agricultural land adjacent to the Kern River in this area has been developed for housing. Based on information provided by Ms. Julie Vance of the California Department of Fish and Game in Fresno and Mr. Dick Anderson, formerly of the California Energy Commission, very few Swainson's hawks appear to nest in the southern San Joaquin Valley. Mr. Anderson estimates that less than 10 pairs per year nest south of Corcoron (personal communication, June 22, 2006). In 2005, the entire Central Valley was included in a Swainson's hawk inventory which consisted of surveys of random sample sites. No nesting pairs were observed in the southern San Joaquin Valley during this inventory.

   The Westside Parkway and Mohawk Street would cross the Kern River in a highly urbanized area of Bakersfield where there is no foraging habitat for Swainson's hawk within miles. No other segment of the freeway is located within the riparian corridor of the Kern River. The project would not result in any incidental take of Swainson's hawk. To ensure that the project does not impact this species, no construction activities that may cause nest abandonment or forced fledging will be initiated within 0.4 kilometer (0.25 mile) of an active Swainson's hawk nest between March 1 and August 15. As indicated in Section 4.3.1.2 of the EA/EIR, a pre-construction survey would be conducted for Swainson's hawk. This survey would be conducted in accordance with the methodology developed by the Swainson's Hawk Technical Advisory Committee within one week from the start of ground-disturbing activities that occur during the nesting season (March 1 – August 15). If an active nest is found prior to construction, the City of Bakersfield would consult with the California Department of Fish and Game (CDFG) about appropriate mitigation.

If construction or other project-related activities that may cause nest abandonment or forced fledging of Swainson's hawk were necessary within the buffer zone of 0.4 kilometer (0.25 mile), a qualified wildlife biologist would evaluate existing conditions around the nest site to determine the minimum distance necessary to ensure that "take" of a Swainson's hawk is avoided. The minimum buffer would depend on the level of noise or construction disturbance, line of site between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. These factors would be analyzed in coordination with CDFG to make an appropriate decision on minimum buffer distances. In addition, the biologist would monitor the nest site weekly to ensure that the minimum buffer is maintained until the young are fledged.

Section 4.3.1.2 of the EA/EIR has been modified to further clarify Swainson's hawk mitigation.

3. As indicated in Table 2.7-1 of the EA/EIR, the City of Bakersfield will submit an application for a Streambed Alteration Agreement to CDFG during final engineering design of the project. This will occur well in advance of ground disturbing activities.

4. The City of Bakersfield appreciates this advice and will initiate consultation with CDFG regarding blunt-nosed leopard lizards at least one year prior to construction.

5. The retention basins proposed for the project would be operated and maintained in the same manner as other storm water retention basins in the City of Bakersfield. The objective of those basins is to receive storm water and allow it to percolate into the groundwater aquifer. It is important that the storm water from a rainfall event percolate relatively quickly in order to maintain the capacity of the basins for any following rainfall event. If the City had to rely on evaporation to dispose of the storm water, the retention basins would be impractically large. Because relatively rapid percolation is an important design concept for the retention basins, it is important that they remain permeable. With time, fine soil particles carried in storm water tend to seal the bottom of the basins. It is then necessary to remove this fine material using bulldozers, excavators or loaders.

   The City cleans storm water basins on an as needed basis when time allows. There is not set schedule for this maintenance activity. However, the basins are cleaned roughly every five years. Pre-maintenance surveys are conducted to determine the presence of kit fox dens. If dens are present, they are avoided during basin cleaning. Basins in designated parks are mowed and not cleaned.

   Vegetation growth is controlled in basins that are not in designated parks each year by the use of herbicides. Herbicides are used for several reasons. Because of cost, mowing the basins would not include picking up cut material. This material would decompose and accelerate the sealing of the bottom of the basin, resulting

in the need for more frequent clearing. In addition, mosquito abatement prefers not to have vegetation present in the basins because mosquito eggs can carry over a dry season on that vegetation.

The mitigation measure suggested in this comment would defeat the purpose of a retention basin to receive storm water and have it efficiently percolate into the groundwater aquifer. If the City instituted the practice of mowing the basins and not cleaning them when needed, it would be necessary to construct substantially more basins to control storm water runoff. This is not a practicable mitigation measure.

6. This mitigation measure suggests a change in retention basin maintenance practices throughout the City of Bakersfield. This measure has no nexus with the proposed project and CDFG has not provided substantial information indicating that this mitigation measure is proportionate to project-related impacts to kit fox. As indicated in the response to comment 5 above, surveys are currently being conducted to determine the presence of kit fox dens prior to initiating maintenance activities, and the suggested maintenance approach is not practicable.

7. The City of Bakersfield has received a proposal from a qualified biologist for the kit fox movement study along the Westside Parkway alignment (referred to as the State Route 58 alignment in the Biological Opinion and this comment). That study will be implemented by the City and the data used in conjunction with the other studies mentioned in this comment to design the Westside Parkway to allow for north-south movement of kit fox across the alignment, as appropriate. Caltrans has completed the study on vehicle strikes of kit fox, and is currently conducting a study on the effectiveness of culverts for kit fox movement corridors.

8. The area from Calloway Drive east to about Coffee Road in the vicinity of the Westside Parkway is unlikely to provide a corridor for north-south movement of kit fox because of substantial residential development as shown in Figures 2.3-1d and 2.3-1e of the EA/EIR. As indicated in the comment letter from CDFG: "Residential developments are used to a much lesser extent, likely because of the movement barriers posed by multiple and frequent fencing."

   From just west of Coffee Road to just west of Mohawk Street and from just east of Mohawk Street to its eastern terminus, the Westside Parkway will be elevated (see Figures 2.3-1e, 2.3-1f, 2.3-2a, 2.3-2c, 2.3-3a, and 2.3-3c of the EA/EIR). Most of these elevated sections will be on embankments except for structures over Coffee Road, Truxtun Avenue, the Friant-Kern Canal, Kern River and Carrier Canal. The structures over these roads, canals and the river will provide for north-south movement of kit fox. The Biological Opinion requires the installation of three two-foot diameter culverts along embankment sections of the freeway east of the Friant-Kern Canal to further facilitate north-south movement of kit fox (see

page 8 of the Biological Opinion in Appendix D of the EA/EIR). The suggested installation frequency and size of culverts provided in this comment are speculative and not based on substantial evidence of their effectiveness. As indicated in the EA/EIR, the Biological Opinion, and the response to comment 1 above, the City of Bakersfield will use the results of the kit fox studies required by the Biological Opinion to design appropriate facilities to allow north-south kit fox movement in this area. These designs will be reviewed with the U.S. Fish and Wildlife Service and CDFG prior to project construction.

9. As shown in Figures 2.3-1a through 2.3-1f, 2.3-2a through 2.3-2c, and 2.3-3a through 2.3-3c, the only road under crossings of the Westside Parkway will be at Coffee Road and Truxtun Avenue. The shoulders of these road under crossings will be as wide as the right of way allows and the vegetative structure will be low.

10. This proposed mitigation is not practicable. Promoting kit fox habitat within the Westside Parkway right of way would result in conflicts between required highway maintenance activities and the provisions of the federal Endangered Species Act. This would make it infeasible to maintain the right of way.

11. Please see the response to comment 2 above. The Westside Parkway would impact no Swainson's hawk nesting trees. There are no nesting trees within the freeway alignment or adjacent to the alignment.

    As discussed in Section 4.3.1.2 of the EA/EIR, the City of Bakersfield would either mitigate for riparian habitat impacts through the Metropolitan Bakersfield Habitat Conservation Plan on a fee-per-acre basis or through preservation of riparian habitat at a ratio of 3:1 (i.e., preservation of 3 acres for every acre disturbed).

12. Refer to the response to comment 11 above.

13. There is no Swainson's hawk foraging habitat along the Westside Parkway alignment east of Calloway Drive, and almost all foraging habitat west of Calloway Drive has recently been developed or will be developed within the next few years. The City of Bakersfield will work with the Metropolitan Bakersfield Habitat Conservation Implementation Trust Group to ensure that mitigation fees for the loss of agricultural land resulting from project implementation goes to habitat acquisition suitable for Swainson's hawk foraging habitat.

14. As indicated in Section 4.3.1.2 of the EA/EIR, pre-construction surveys would be conducted for burrowing owls. These surveys would be done in suitable habitat within 75 meters (250 feet) of the project footprint. The surveys would be conducted in accordance with the protocol provided in the Staff Report on Burrowing Owl Mitigation. Occupied burrows would not be disturbed during the nesting season (February 1 – August 31). When destruction of occupied burrows is unavoidable during the non-nesting season (September 1 – January 31), suitable

burrows would be enhanced (enlarged or cleared of debris) or new burrows created (installing artificial burrows) at a ratio of 2:1 on protected lands approved by CDFG. Newly created burrows would follow guidelines established by CDFG. If owls must be moved away from the project area, passive relocation techniques (such as installing one-way doors at burrow entrances) would be used instead of trapping. At least one week would be necessary to accomplish passive relocation and allow owls to acclimate to alternative burrows. If owls must be moved away from the project area, the City of Bakersfield would work with CDFG to find an appropriate permanent relocation site. This mitigation measure has been clarified in Section 4.3.1.2 of the EA/EIR.

As indicated in Section 4.3.1.2 of the EA/EIR, the total compensation for the Westside Parkway would be 163.1 hectares (402.9 acres). This includes 128.1 (Truxtun Option) to 128.4 (Oak Option) hectares of the type of habitat used for foraging by burrowing owls. Based on the ratio stated in this comment, this would provide mitigation for up to 20 paired or unpaired resident burrowing owls. It is expected that this would be adequate to compensate for project habitat impacts. In the event that pre-construction surveys indicate that there are more burrowing owls in the right of way, an additional appropriate mitigation fee would be paid by the City.

15. The City of Bakersfield would comply with the provisions of the Biological Opinion designed to protect federal threatened and endangered species. The EA/EIR includes mitigation for Swainson's hawk and burrowing owl.

San Joaquin Valley
Air Pollution Control District

RECEIVED
MAY 3 2006
CITY OF BAKERSFIELD
PLANNING DEPARTMENT

May 1, 2006

Reference No.: C20060675

Marc Gauthier
City of Bakersfield
Development Services Department, Planning Division
1715 Chester Ave.
Bakersfield, CA 93301

Subject: Westside Parkway EA/DEIR

Dear Mr. Gauthier,

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the project referenced above and offers the following comments:

The air quality discussion in the document adequately describes the regulatory and environmental setting for the project. The District concurs with the conclusion that the project would result in a significant cumulative impact due to the added construction emissions and from the growth in travel accommodated by the parkway. There are two areas where the document does not address impacts and potential mitigation. These are described below. 1

The oxides of nitrogen (NOx) emissions from the diesel powered construction equipment used for a project of this size are likely to be significant. The District's Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI) states that although construction emissions are temporary, large projects may exceed District thresholds from construction emissions alone. However, a new District regulation is in place that will reduce this impact. District Rule 9510 – Indirect Source Review requires transportation projects such as this one to reduce emissions of NOx and fine particulate matter (PM10) by 20 percent and 45 percent respectively. Compliance with Rule 9510 is needed to meet commitments in the 2003 PM10 Plan and the 2004 Extreme Ozone Attainment Demonstration Plan that are required to meet federal standards on schedule. 2

A second issue is related to the diesel particulate emissions during construction of the parkway. During construction, diesel powered equipment should be equipped with PM control devices when available for the make and model of equipment in use. Equipment staging areas should be placed as far from residences and other sensitive receptors as possible to limit exposure. The project contractors should be required to shut off all diesel engines when not in use to reduce emissions from idling.

Rule 9510 requires a 45 percent PM10 reduction compared to the statewide fleet average. If the reductions are obtained onsite, it will help to mitigate local impacts from diesel particulate. If the reductions are obtained through payment of the mitigation fee to the District, they will help reduce regional impacts from particulates, but the local impact will remain. (2)

If you have any questions or require further information, please call me at (559) 230-5800 or email dave.mitchell@valleyair.org.

Sincerely,

Dave Mitchell

Dave Mitchell
Planning Manager

RESPONSES TO SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT COMMENTS

1. Section 6.5 of the EA/EIR states: "The Westside Parkway would serve as a major thoroughfare used widely by existing and new developments in nearby areas, reducing the time and length of vehicular trips, which would result in improved air quality. Cumulative air quality impacts from potential growth identified in the Metropolitan Bakersfield General Plan would remain adverse and unavoidable; however, these impacts would not be a result of the Westside Parkway."

2. Section 4.2.6.2 of the EA/EIR provides a quantitative estimate of worst-case peak-day construction equipment emissions. Additional analysis of construction-related air quality impacts is not warranted.

   Section 4.3.1 of the SJVAPCD's Guide for Assessing and Mitigating Air Quality Impacts states that a project's construction phase produces many types of emissions, but PM_{10} is the pollutant of greatest concern. The section goes on to state that the SJVAPCD's approach to CEQA analyses of construction PM_{10} impacts is to require implementation of effective and comprehensive control measures rather than to require detailed quantification of emissions. The SJVAPCD has determined that compliance with the District's Regulation VIII for all sites and implementation of all other control measures indicated in Tables 6-2 and 6-3 of the Guide for Assessing and Mitigating Air Quality Impacts (as appropriate, depending on the size and location of the project site) will constitute sufficient mitigation to reduce PM_{10} impacts to a level considered less-than-significant under CEQA. All of the control measures recommended in Tables 6-2 and 6-3 are included as mitigation for the Westside Parkway project in Section 4.2.6.3 of the EA/EIR.

   Section 6 of the Guide for Assessing and Mitigating Air Quality Impacts acknowledges that the discussion of construction impacts and mitigation focuses primarily on PM_{10}. This section goes on to recommend that Lead Agencies seeking to reduce emissions from construction equipment exhaust should also consider the mitigation measures in Table 6-4 of the Guide. All of those mitigation measures were also included in Section 4.2.6.3 of the EA/EIR.

   Based on the estimates provided in Table 4.2-4 of the EA/EIR, the Westside Parkway would exceed the thresholds for compliance with District Rule 9510. This would require the City of Bakersfield to submit an Air Impact Assessment application to the SJVAPCD. This application would be used by the District in coordination with the City to identify all reasonable measures for reducing on-site emissions of NO_x and PM_{10}, and establish a monitoring and report schedule to ensure implementation of those measures. In accordance with District Rule 9510, the City of Bakersfield may propose an Off-Site Fee Deferral Schedule (FDS) in-lieu of onsite emission reductions. Table 2.7-1 of the EA/EIR has been modified to incorporate the need for an Air Impact Assessment in project permits and

approvals. Further discussion of Rule 9510 has also been added to Sections 4.2.6.2 and 4.2.6.3 of the EA/FEIR.

2.0 LOCAL AND REGIONAL AGENCIES

North of the River
recreation and park district

RECEIVED
APR 4 2006 MG
CITY OF BAKERSFIELD
PLANNING DEPARTMENT

April 3, 2006

Mr. Marc Gauthier
City of Bakersfield
1501 Truxtun Avenue
Bakersfield, California 93301

SUBJECT: Amendment to the Westside Parkway Specific Plan Line (03-1163)

Dear Mr. Gauthier:

North of the River Recreation and Park District (NOR) has reviewed the referenced project. Mondavi Park abuts the proposed freeway alignment. It appears that barriers are proposed that would protect children playing in the park. Most of the park is protected by the City of Bakersfield Storm Water Retention Basin. (1)

As proposed, the project doesn't appear to be a concern to park and recreation services provided by NOR.

Sincerely,

Colon G. Bywater

Colon G. Bywater
Planning and Construction Director

CGB:bc

RESPONSES TO NORTH OF THE RIVER RECREATION AND PARK DISTRICT COMMENTS

1. Comment noted.

Golden Empire Transit District

A Pollution Solution

April 26, 2006

Marc Gauthier
City of Bakersfield
1501 Truxtun Avenue
Bakersfield, CA 93301

RE: Westside Parkway Draft EIR

Dear Mr. Gauthier:

We have reviewed the Environmental Assessment/Draft Environmental Impact Report for the Westside Parkway. As noted in the report, all available information indicates that the Mass Transit Alternative would remove a relatively minor number of trips from the transportation network. The report also evaluates the effectiveness of light rail in the western Bakersfield metropolitan area and the demographic profile indicates that light rail would not be an appropriate mode of mass transit. We agree that mass transit may become a more important component of the transportation network in future years and the draft EIR acknowledges this by noting the following:

1.) The Westside Parkway facility would allow for bus and carpool usage and the development of parking lots along the alignment would allow for those who chose not to drive their vehicles into town, to leave them at various locations in west Bakersfield and ride transit.
2.) Sufficient right of way would be acquired up to SR 99 to provide multimodal opportunities for future mass transit uses including HOV lanes, dedicated busways, express bus or bus rapid transit.

The inclusion of the preceding statements in this report provides for mass transit to play a future role in this project, and therefore contribute in a positive way to the environment. We agree that with the report's statement that the alignment alternatives do not preclude future uses for mass transit. Thank you for the opportunity to comment. (1)

Sincerely,

Emery M. Rendes

Emery M. Rendes
Transit Planner

1830 Golden State Avenue Bakersfield, California 93301-1012 (661) 324-9874 FAX (661) 869-6394

RESPONSES TO GOLDEN EMPIRE TRANSIT DISTRICT COMMENTS

1. Comments noted.

May 5, 2006

50.3 - city

Mr. Marc Gauthier
City of Bakersfield
Development Services Department
Planning Division
1715 Chester Avenue
Bakersfield, CA 93301

RE: Tier 2 Environmental Assessment/Draft Environmental Impact Report
Westside Parkway

Dear Mr. Gauthier:

The Kern County Water Agency (Agency) has reviewed the above-referenced subject in regard to groundwater and surface water quality, levels, water supply and right-of-way considerations. The Agency is responding to this request for comments in fulfilling its duties with respect to potential impacts to the Agency-owned and operated Cross Valley Canal (CVC), as well as other water-related issues.

The Agency owns and operates the CVC, a 21-mile long canal that was built to convey State Water Project (SWP) water from the California Aqueduct, located on the west side of the San Joaquin Valley, into urban Bakersfield. The CVC is an important local and statewide water management facility which provides a unique resource to serve and meet the beneficial needs of the urban and agricultural community in Kern County. It also serves as a switching yard for state and federal water as further explained below. Water conveyed in the CVC for delivery to the Henry C. Garnett Water Purification Plant (HCGWPP) serves industrial and municipal drinking water to about one-third of the urban metropolitan Bakersfield area. The CVC is also an important facility for conveyance of Kern River and Central Valley Project water. Water from these water sources may be delivered to the HCGWPP either directly or by exchange. In addition to supplying a source of drinking water, the CVC is used to convey water to a number of agricultural water districts including, Rosedale Rio-Bravo Water Storage District, Arvin-Edison Water Storage District, Cawelo Water District and Kern Delta Water District. Over the last ten years, the CVC has delivered an average of 222,000 acre-feet (af) of water per year, with a maximum of 402,000 af in 2005, and a minimum of 112,000 af in 2004.

Furthermore, the CVC conveys SWP water from the Aqueduct, Central Valley Project water from the Friant-Kern Canal and Kern River water to a number of groundwater banking and recharge facilities, including the City of Bakersfield's 2800-Acres Project, the Berrenda Mesa Project, the Kern Water Bank, and the Agency's Pioneer Project (see Attachment 1). During drought conditions, water recovery wells located within the various projects are used to pump water from underground storage for delivery to the CVC and ultimately for urban Bakersfield's drinking water supplies and to meet the needs of the local

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agricultural community. In these dry years, this recovered water may be the sole source of a drinking water supply to the HCGWPP.

Lastly, as you may be aware, the Agency is in the process of expanding the CVC using local funding and grant funds received under the California Safe Drinking Water and Water Conveyance Infrastructure Improvement Act of 2000 (Proposition 13). A part of the expansion is to construct an intertie between the CVC and the Friant-Kern Canal near Coffee Road, thus creating additional water management flexibility and opportunities for Kern County.

The Agency understands that the process for construction of this much-needed transportation facility has been ongoing for many years. Over the years, Agency staff has participated on the Project Development Team for the Westside Parkway (Parkway) in an effort to address the water-related issues important to the Agency. The Parkway will impact the operation and maintenance of the CVC through the City of Bakersfield's acquisition of rights-of-way and construction.

The Agency comments on the Parkway fall into four categories:

1. Access to the Cross Valley Canal - The Agency requires continued acceptable access to all portions of the CVC to sustain reliable operations, maintenance and replacement activities and to provide access to the CVC for any other legal purposes. (1)

2. Drainage/runoff: Construction and operation of the Parkway must avoid conditions that potentially impact the CVC by allowing the transfer of contaminants from the Parkway into the CVC right-of-way. (2)

3. Protective Barriers: Since the CVC conveys raw water to the HCGWPP to serve about one-third of urban Bakersfield's drinking water supplies, the design of the Parkway must provide for protective barriers on all canal crossings to avoid any accidental spills of hazardous material from road traffic into the CVC (e.g., petroleum products, hazardous waste and other hazardous materials). (3)

4. Flood Control/Kern River channel: Construction of the two Kern River crossings must not create a condition in the Kern River channel where the water surface levels would be greater than without the project. (4)

General Comments

The Agency understands that construction of the Parkway, as currently configured, will require a relocation of a portion of the CVC. The relocation is shown on Figure 2.3-3a of the Tier 2 Environmental Assessment/Draft Environmental Impact Report Westside Parkway (EIR). The proposed relocated portion of the CVC would pass through the former storage pile of petroleum waste ("Coke Plant"), just south of the Flying J oil refinery. The Agency's concerns are:

1. The relocation of the CVC must not result in an extended service outage. Any prolonged outage resulting in a shutdown of the HCGWPP could jeopardize the health of the citizens of Bakersfield served by the HCGWPP. The Agency would be happy to work with the City and its contractors in scheduling an outage that minimizes the down time and avoids potential impacts to CVC users. (5)

2. The Coke Plant is known to have soil contamination from years of processing oil related products. Although the plant no longer operates, soil contamination still exists at the site, consisting of polynuclear aromatic compounds that may be carcinogenic and heavy metals. Relocating the CVC through this facility may subject contractors and Agency personnel to potential contamination as yet undefined, as the Agency understands that certain hydrocarbons such as benzene and xylene may also be found in the soil. Although the EIR states that remedial action is underway, with oversight by the Department of Toxic Substance Control, no time frame for clean-up was provided. Furthermore, relocation of the CVC through this area must not subject the water conveyed through the CVC to any risk of contamination. (6)

3. All costs, e.g., acquisition of rights-of-way, planning, design and construction, related to relocation of the CVC for construction of the Parkway shall be at the expense of the City of Bakersfield, under the direction of the Agency. (7)

Specific Comments

Specific comments are organized by Parkway components starting from the west end and working east. The following identified components of the Parkway are of special concern to the Agency as they have the potential to impact access to the CVC, expose the CVC to contaminants, increase the risk for accidents impacting the CVC, and expose the CVC to increased flood damage.

1. Figure 2.3-1e shows the Parkway alignment as it passes along the north side of the CVC between Coffee Road and Calloway Drive. This section of the Parkway alignment parallels the north side of the CVC for approximately 1,000 meters. The Agency has three concerns:

    a. Contaminant Control. The Parkway must be constructed in such a manner as to avoid the potential for motor vehicle based contaminants, e.g., fuel, lubricants, brake and tire dust, etc, or contaminants from cargo being transported along the Parkway making its way into the CVC. This could occur from precipitation event runoff from the Parkway, a large spill or an accident involving one or more motor vehicles. Spill containment and proper drainage away from the CVC is critical to ensure a safe and healthy water supply for the urban area. (8)

    b. Barrier Construction. Similar to contaminant control, barrier construction along this portion of the Parkway must control motor vehicle accidents and other incidents within the Parkway right-of-way. This will ensure that accidental mishaps avoid the potential of introducing contaminants into the CVC. (9)

    c. Access. The Project must not restrict access by Agency vehicles to the CVC for maintenance, operation and other legal purposes during and after the construction period. (10)

2. Figure 2.3-1f shows the Parkway interchange at Coffee Road. This includes: a) an overpass of the Friant-Kern Canal; b) an off-ramp to Brimhall Road; c) an on-ramp from northbound Coffee Road to the eastbound Parkway; d) an overpass of the CVC for an on-ramp from southbound Coffee Road to the eastbound Parkway; e) an overpass of the CVC for an off-ramp from the eastbound Parkway to Coffee Road.

a. Contaminant Control. The Parkway overpasses must be constructed in such a manner as to avoid the potential for motor vehicle based contaminants, e.g., fuel, lubricants, brake and tire dust, etc, or contaminants from cargo being transported along the Parkway overpass making its way into the CVC. This could occur from precipitation event runoff from the Parkway, a large spill or an accident involving numerous motor vehicles. Spill containment and proper drainage away from the CVC is critical to ensuring a safe and healthy management of the CVC. (11)

b. Barrier Construction. Similar to contaminant control, barrier construction along the CVC Parkway overpass must control motor vehicle accidents and other incidents over the CVC. This will ensure that accidental or otherwise mishaps avoid the potential of introducing contaminants into the CVC. (12)

c. Access. The CVC Parkway overpasses must provide and not reduce access by motor vehicle to the CVC for maintenance, operation and other legal purposes during and after construction period. This access must not be reduced as compared to pre-Project conditions as determined by the Agency. Of particular concern is the apparent removal of the Agency's access to CVC Pumping Plant No. 6 via Coffee Road through construction of the two Coffee Road on-and off-ramps. These appear to block our current north side access to the Pumping Plant. (13)

3. Figure 2.3-2a shows the Mohawk Parkway exchange component. Specific Agency concerns include the: a) relocation of the CVC discussed above; b) the Mohawk Street overpass of the CVC; and c) the Parkway overpass of the CVC between the railroad tracks and the Mohawk Street exchange.

a. Contaminant Control. The Mohawk Street overpasses must be constructed in such a manner as to avoid or minimize the potential for motor vehicle based contaminants, e.g., fuel, lubricants, brake and tire dust, etc., or contaminants from cargo being transported along the Parkway overpass making its way into the CVC. This could occur from precipitation event runoff from the Parkway, a large spill or an accident involving numerous motor vehicles. Spill containment and proper drainage away from the CVC is critical to ensuring a safe and healthy management of the CVC. (14)

b. Barrier Construction. Similar to contaminant control, barrier construction along the CVC Mohawk Street overpass must control motor vehicle accidents and other incidents over the CVC. This will ensure that accidental or otherwise mishaps avoid the potential of introducing contaminants into the CVC. (15)

c. Access. The CVC Parkway overpass and the Mohawk Street overpass must provide and not reduce access by motor vehicles and equipment to the CVC for maintenance, operation and other legal purposes during and after construction period. This access must not be reduced as compared to pre-Project conditions as determined by the Agency. Of particular concern is the Mohawk Street overpass. Construction must occur as to not block movement along the CVC maintenance roads. Since repair and maintenance could include the use of large equipment such as cranes, concrete mixers, excavators and other large equipment, it is particularly important to maintain adequate clearance under any proposed crossings. (16)

d. Flood Control/Kern River Channel. The Parkway and Mohawk overpasses of the Kern River will require placement of pylons and other large structural objects to construct the overpass. Placement of the supports in the Kern River channel has the potential to raise the channel surface water levels upstream when water is flowing. Depending on the channel flows, higher surface water levels in the river channel have the potential to impact the levee that protects the CVC where the Kern River parallels the CVC upstream of the overpasses. The hydraulic study provided by the City indicates that water surface elevations would be increased by 0.26 feet above pre-construction activities. Accordingly, we would require that the City raise the southern CVC levee, east of the Parkway – Kern River crossing commensurately. 17

4. Figure 2.3-3a shows the Westside Parkway Oak Option. There is a water turnout from the south side of the CVC that conveys water to the Kern River Channel and to Truxtun Lakes, located approximately 225 meters east of the CVC siphon. Truxtun Lakes are used by the City to provide groundwater recharge, recreational benefits and for aesthetics along Truxtun Avenue. It appears the relocation of the CVC may impact this turnout. The City's plans should include the relocation of any impacted turnouts. 18

Thank you for the opportunity to comment on this important document. Please do not hesitate to contact Jon Parnell, Cross Valley Canal Manager (634-1475) or Kane Totzke, Environmental Specialist (634-1468) with questions regarding this matter.

Sincerely,

James M. Beck
General Manager

attachment

RESPONSES TO KERN COUNTY WATER AGENCY (KCWA) COMMENTS

1. Working with the Kern County Water Agency (KCWA), the City of Bakersfield intends to design, construct and operate the Westside Parkway in a manner that allows the KCWA continued access to all points of the Cross Valley Canal (CVC). These mutually planned accesses should maintain reliable access for KCWA operations, maintenance and replacement activities, as well as other legal purposes that require access.

2. Construction and operation of the Westside Parkway would be conducted such that runoff from the Westside Parkway would not be directed toward the CVC right of way. As discussed in Section 4.2.5 of the EA/EIR, storm water runoff from the constructed Westside Parkway would be collected in storm drain systems within the Westside Parkway right of way and in most cases discharged to on-site retention basins similar to many other roadway projects throughout the City of Bakersfield. During construction of the Westside Parkway, storm water best management practices (BMPs) would be used to meet or exceed storm water quality management requirements.

3. Bridges that cross the CVC would include bridge railings similar to other bridge crossings of the CVC. These railings are designed to maintain errant vehicles within the roadbed and to prevent them from leaving the roadway at bridge crossings.

4. The proposed bridge crossings of the Kern River occur at the Mohawk Street extension and at the mainline Westside Parkway crossing of the river east of Mohawk Street. As discussed in Section 4.2.4.1 of the EA/EIR, hydraulic studies for these two crossings show that the addition of the two proposed bridge structures are estimated to increase the river's 100-year flood peak water surface elevations by a maximum of approximately 0.04 meter (0.13 foot) upstream from the Mohawk Street bridge and approximately 0.05 to 0.07 meter (0.16 to 0.23 foot) upstream from the mainline crossing. Therefore, the floodway, defined by encroaching into the existing floodplain by 0.3 meter (one foot) would be minimally affected by the two proposed bridges. It would not be possible to construct the bridge crossings of the Kern River without resulting in some minor impact on the upstream hydraulic grade lines of the river. Existing bridges over the Kern River (Stockdale Highway, Calloway Drive and Coffee Road) have had similar localized impacts on the water surface levels.

5. The City of Bakersfield has been working with, and intends to continue to work with, the KCWA to schedule construction activities that may affect the CVC's operations such that there are no extended downtimes in which the CVC is out of service.

6. There is a segment of the CVC that conflicts with the proposed alignment of the Westside Parkway in the area south of the Flying J oil refinery. However, no

specific relocation alignment of the CVC in this area has been shown in the EA/EIR. A relocated alignment of the CVC that is parallel to and directly adjacent to the Westside Parkway would cross the former "Coke Plant" site. Remedial activities at this site have been completed by the owner meeting the requirements of the Department of Toxic Substances Control, and soil sampling performed in the area in 2000 on behalf of the City of Bakersfield detected no analytes of concern at concentrations at or above regulatory standards and/or published recommended USEPA Preliminary Remediation Goals with the exception of arsenic and Total Recoverable Petroleum Hydrocarbons in one sample (see Section 3.2.8 of the EA/EIR). Construction contractors, City of Bakersfield and KCWA staff working in this area would need to adhere to a site health and safety plan that would be reviewed and approved by the City and the KCWA. This type of health and safety plan is common for construction projects in urban areas and would include pre-construction soil sampling, air monitoring, as appropriate, and personal protective equipment at the safety level appropriate for the types of contaminants identified from the soil sampling. Design of any CVC facilities within this former property would be prepared to prevent contamination to CVC water from the property through which it is conveyed. For example, the CVC in this area is located above grade. The relocation of the CVC may also be above grade. These designs would be prepared in coordination with KCWA staff and would be subject to KCWA approval.

This discussion of CVC relocation design and worker safety has been added to Section 4.2.5.1 of the EA/FEIR.

7. Costs for relocating the CVC (such as acquisition of right of way, planning, design and construction of relocated facilities) would be the subject of a cooperative agreement between the City of Bakersfield and the KCWA. This commitment has been added to Section 4.2.5.1 of the EA/FEIR.

8. The segment of the Westside Parkway between Calloway Drive and Coffee Road, where the Westside Parkway parallels the CVC, has been planned to minimize the potential for runoff or other materials from traveling from the Westside Parkway south to the CVC right of way. This segment of the Westside Parkway is planned to be partially depressed below grade. Therefore, surface runoff from the Westside Parkway in this area would not be able to flow directly off the Westside Parkway right of way south toward the CVC right of way. As discussed in Section 4.2.5.1 of the EA/EIR, collisions and spills that may potentially occur on the Westside Parkway would not be able to impact the CVC right of way because there would be a raised dike between the Westside Parkway roadbed and the CVC water surface.

9. The planned profile of the Westside Parkway, within the segment where the project would parallel the CVC, has been designed to provide a grade differential between the two facilities. This partially depressed segment of the Westside Parkway would aid in control of vehicles within the Westside Parkway roadbed.

If additional barrier separation elements are necessary in this area, the City would discuss the use of concrete barriers or metal beam guard railing at locations where errant vehicles may potentially traverse out of the roadbed and beyond the Westside Parkway right of way.

The utilities discussion in Section 4.4.7.1 of the EA/FEIR has been updated to include the information on provisions for KCWA access to the CVC.

10. The City of Bakersfield intends to continue ongoing discussions and coordination with the KCWA in maintaining appropriate established access rights along the CVC. The Westside Parkway would be an access-controlled facility and would therefore have fencing and other barriers to restrict access by the general public into the roadway right of way. The City would work with the KCWA to ensure that access for maintenance, operation and other legal purposes is maintained along the CVC. During construction of the Westside Parkway, access to the CVC would be coordinated with the KCWA to the satisfaction of the KCWA to meet the maintenance and operational needs related to the CVC.

11. As discussed in Sections 2.3.3.2 and 4.2.5.1 of the EA/EIR, storm water runoff that flows onto or originates on bridges that cross the CVC and the Friant-Kern Canal would be contained within the roadway cross section for transport across and beyond the limits of the bridges. Runoff would not be allowed to discharge over the sides of bridges or through bridge railings on the bridge decks. Similarly, potential spills resulting from collisions or other factors would be contained within the confines of the bridge and roadway cross section.

12. Bridges that cross the CVC and the Friant-Kern Canal would include bridge railings similar to other roadway bridges over canals in the area. These railings are designed to maintain errant vehicles within the roadbed and to prevent them from leaving the roadway at bridge crossings. This would minimize the potential for spills and vehicles to leave the roadway bridges and enter either of these canals.

13. Refer to the response to comment 10 above. In addition to access along the CVC, the City of Bakersfield understands that the area around the CVC Pumping Plant No. 6 and the future CVC/Friant-Kern Canal interconnect is of special concern to the KCWA. The proposed Coffee Road interchange would provide access to the CVC Pumping Plant No. 6 via a planned east leg of the intersection of the eastbound Westside Parkway exit ramp to Coffee Road. Since there is a north-south crossing of the CVC at Pumping Plant No. 6, it was intended that access to the north side of the Pumping Plant would be via the southerly intersection on Coffee Road and then across the CVC to the north side of the facility. If a separate north side access is required, it may be possible to design an access from the northbound to eastbound Westside Parkway entrance ramp. Planning discussions for this access would need to be initiated with the KCWA to

coordinate the access with the proposed inter-tie construction between the CVC and Friant-Kern Canal.

14. Refer to the response to comment 11 above.

15. Refer to the response to comment 12 above.

16. Refer to the response to comment 10 above. In addition, the Mohawk Street bridge over the CVC has been planned to span the CVC right of way and to allow a minimum of 15 feet of vertical clearance over the CVC maintenance roads on both sides of the CVC. During construction of the Mohawk Street extension, access to the CVC would be coordinated with the KCWA to the satisfaction of the KCWA to meet the maintenance and operational needs related to the CVC.

17. The area where the Kern River and CVC are parallel and in close proximity to each other appears to be located northeast of the existing State Route 99 and State Route 178 (24th Street) bridges over the Kern River. This reach of the Kern River is nearly a mile and half upstream from the proposed mainline Westside Parkway bridge crossing of the Kern River. Calculated water surface elevations in the vicinity of the State Route 99 bridge over the Kern River are predicted to be approximately 0.03 to 0.05 meter (1.25 to 2 inches) above the water surface elevations in the no build alternative. The City of Bakersfield would discuss the need for and appropriateness of any CVC/Kern River levee improvements as the final design of the river bridges is developed.

18. Comment noted. The City of Bakersfield intends to develop protection and/or relocation concepts in coordination with the KCWA that address all affected CVC facilities and appurtenant structures such as the referenced water turnout.

3.0 ORGANIZATIONS

Kern **R**iver
Parkway **C**ommittee
P.O. Box 1861 • Bakersfield, CA 93303

BAKERSFIELD CITY PLANNING DEPT.
JENNIE ENG
1715 CHESTER AVE.
BAKERSFIELD, CA. 93301

APRIL 11, 2006

ATTACHED ARE OUR COMMENTS FOR THE PROPOSED WESTSIDE FREEWAY THAT WE WOULD LIKE TO BE INCLUDED IN THE E.I.R.

① INAPPROPRIATE NAME FOR PROJECT.

The name "Parkway" is already a prominent feature in the city, The KERN RIVER PARKWAY.
SAFETY: IT would be a safety issue to have two "parkways" when reporting emergencies thus leaving the city liable. ①
We urge an alternative name such as Avenue, Avenida (Spanish for Avenue); Boulevard; Thoroughfare; Expressway; By way; etc.
Example: Avenida de Los Arboles.

② The project must be MULTI-modal. Besides Providing for Cars the must be provisions for express buses with permanent, comfortable stops. ②
CLASS I bike paths must be included on Both sides of the corridor to accommodate bikes as well as pedestrians. ③

③ NOISE ABATEMENT MUST BE DESIGNED INTO The Plan. ④
Thick Native tree plantings, six rows deep ⑤

Kern River
Parkway Committee
P.O. Box 1861 • Bakersfield, CA 93303

for sound barries must be included.
Appropriate sound walls / baffles should protect adjacent neighbor-hoods AND The KERN RIVER PARKWAY. (6)
Any bridges should have walls high enough to reduce noise on The KERN RIVER PARKWAY.

(4) AIR Quality. The impact of another major traffic corridor will have a negative impact on overall air quality. Therefore, the planting of trees is to reduce pollution is a necessity. (7)
Also, the development of the corridor as a multi-modal Transportation corridor is important. (8)

(5) All river crossings must have as little impact on the KERN RIVER PARKWAY AS POSSIBLE
Any crossing must be direct, at a 90° angle. (9)
Sound and light glare must be mitigated. (10)
Access to the Kern River Bicycle path must be provided for. (11)

(6) Any property that will be isolated between the proposed project route and the Kern River should be aquired as open-space / habitat for inclusion in the KERN River Parkway. (12)

Kern River
Parkway Committee
P.O. Box 1861 • Bakersfield, CA 93303

⑥ Cont'd.

These areas should be identified in the EIR. There should be no direct access for any development on these parcels (if any) that would impact traffic flow on the new traffic corridor. (13)

Thank you for the opportunity to comment on this important project.

Bill Cooper,
Chairman

Bill Cooper
661 393-0763
205-3879

Kern River
Parkway Committee
P.O. Box 1861 • Bakersfield, CA 93303

RESPONSES TO KERN RIVER PARKWAY COMMITTEE COMMENTS

1. The name of any new street or road in the City of Bakersfield must be reviewed and approved by the City's emergency services departments, who in turn coordinate with the local ambulance service. The Police and Fire departments have reviewed the proposed name for the freeway and do not believe that it would result in any problems providing emergency services to locations on the freeway or within the Kern River Parkway.

2. The Westside Parkway project does accommodate multimodal transportation uses. Lanes on the Westside Parkway can be used concurrently or exclusively by potential future alternative modes of transportation. For example, the Golden Empire Transit District (GET) may determine that new or revised bus routes should utilize the Westside Parkway for portions of their bus routes. These could include regular, express or even bus rapid transit routes. If single occupant vehicle usage is determined to be responsible for future congestion on the facility, the City of Bakersfield may consider conversion of existing lanes to high occupancy vehicle (carpool) lanes. However, at this time, future forecasted traffic volumes do not indicate that carpool lanes will be required to meet the purpose and need of the current project.

3. As indicated in Section 3.4.4.4 of the EA/FEIR, the Kern River Parkway has a Class I bike path along the south side of the Kern River. This bike path stretches from Enos Lane to near Manor Street, nearly twice the length of the Westside Parkway project. The Westside Parkway is planned to be a high-capacity, high speed facility that would not be conducive to bicycle use. The Kern River Parkway bike path provides a parallel and far superior bicycle facility than the Westside Parkway could provide. The Kern River Parkway bike path would be much safer than a bike path adjacent to or anywhere within the Westside Parkway right of way. The Bikeway Master Plan in the Metropolitan Bakersfield General Plan does not identify the Westside Parkway corridor to include a designated bicycle route.

   Placement of bicycle paths along the Westside Parkway would provide essentially the same level of access from west Bakersfield to the Central Business District as existing Class I and Class II bicycle facilities in western Bakersfield. The Westside Parkway would be within a mile of the Kern River Parkway Bicycle Trail for much of its length. On its eastern terminus the Westside Parkway would be about three-quarters of a mile from the Trail. The Westside Parkway would intersect with the Trail between Truxtun Avenue and Mohawk Street. At its western terminus, the Westside Parkway would be approximately 1.5 miles from the Trail. However, from Coffee Road, where the Westside Parkway and the Kern River Parkway Bicycle Trail begin to diverge, bike lanes along Stockdale Highway and Brimhall Road would continue to parallel the proposed freeway, approximately one-half mile to the south and north, respectively.

As indicated in Section 2.3.3.1 of the EA/EIR, sidewalks and paved areas for bicycle lanes (Class II and Class III Bikeways) would be provided on all streets that cross over and under the Westside Parkway. The paved area would be striped for bicycle lanes where bikeways currently exist. In addition, crosswalks would be provided at freeway on- and off-ramps to provide pedestrian pathways through interchange areas where pedestrian traffic is expected. All non-motorized facilities would be designed and built to comply with the Americans with Disabilities Act requirements.

4. Noise abatement is discussed in the EA/EIR in Section 4.4.5.2.2. The City of Bakersfield intends to provide noise abatement where impacts to sensitive noise receptors, as defined by Caltrans and FHWA guidance, exceed noise abatement criteria.

5. The City of Bakersfield intends to provide appropriate landscaping to the extent feasible on side slopes, within interchanges and in certain locations within the median. Trees are expected to be utilized in planting designs where they can be implemented in a safe and maintainable way. Figures 2.3-5 and 2.3-6 in the EA/EIR provide conceptual landscape plans for the Westside Parkway.

6. The Kern River Parkway itself is not defined as a land use that is typically considered a noise sensitive use that requires noise abatement. Use of the Kern River Parkway is not dependent upon a particularly low level of noise, for example play fields, jogging, etc. Truxtun Avenue, Stockdale Highway and other roads in the area already contribute some level of ambient noise currently along the Kern River Parkway. Currently, none of the roads that cross the Kern River Parkway (Calloway Drive, Coffee Road, State Route 99 and the future Allen Road bridge crossing) include any specific noise abatement features and it is not intended to include noise walls or other abatement on new bridges that cross the Kern River Parkway.

7. The City of Bakersfield is planning to include a substantial amount of tree plantings throughout the entire Westside Parkway project. See also the response to comment 5 above.

   As discussed in Section 4.2.6.2 of the EA/EIR, the proposed project is projected to improve air quality. The principal pollutants emitted by vehicles are nitrogen oxides (NO_x), reactive organic gases (ROG), carbon monoxide (CO), and fine particulate matter (PM_{10}). NO_x and ROG emissions are generated from vehicle trips; therefore, they are a function of vehicle miles traveled (VMT) and the efficient movement of vehicles. The regional VMT are expected to remain the same with or without implementation of the proposed Westside Parkway. The project would improve the efficient operations of vehicles in west Bakersfield. This improvement in operating efficiency would reduce regional vehicle emissions of NO_x and ROG.

One-hour and eight-hour CO concentrations at major intersections and interchanges along the Westside Parkway were estimated based on computer modeling. These estimates indicate that traffic on the proposed freeway would not result in exceedances of CO standards designed to protect human health and the environment.

PM_{10} emissions associated with motor vehicles are generated from fuel combustion, tire wear, and entrained dust. The proposed project would generate relatively few new vehicle trips relative to the No Action Alternative and VMT is expected to remain essentially the same in the region under the project alternatives and the No Action Alternative; therefore, at worst, PM_{10} emissions would remain the same as the No Action Alternative. Since PM_{10} emissions are directly correlated with vehicle speed and idling time, and the operation of the Westside Parkway would improve level of service at local intersections and reduce idling time, it can be concluded that the project would reduce PM_{10}.

8. See the response to comment 2 above.

9. The proposed crossings of the Kern River and associated Kern River Parkway have been planned to cross the river on alignments that are as close to perpendicular as possible for several reasons. Ninety-degree crossings will minimize the impacts to the Kern River Parkway and will minimize the cost of necessary bridge structures. Due to physical constraints and highway geometric design criteria, completely perpendicular crossings are not always feasible. The Mohawk Street crossing crosses at nearly 90 degrees. The mainline Westside Parkway (Oak Option) crosses at nearly 90 degrees. The mainline Westside Parkway (Truxtun Option) crosses the river at a somewhat skew angle to minimize conflicts with the nearby railroad, existing oil wells, canals and other constraints while connecting with Truxtun Avenue west of State Route 99. The skewed crossing of the Kern River Parkway required by the Truxtun Option is one of many comparison elements of the two alternatives.

10. Sound mitigation is discussed in the response to comment 4 above. Light and glare would be mitigated in a manner consistent with other roadways in the City of Bakersfield. Where safety lighting is needed on the Westside Parkway, directional lighting and deflector shields would be used where the freeway passes through residential areas. This mitigation has been included in Section 4.4.3.2 of the EA/FEIR.

11. As indicated in Section 2.3.3.1 of the EA/EIR, local roadways that cross the Kern River Parkway and connect with the Westside Parkway; including Allen Road, Calloway Drive, Coffee Road and Mohawk Street; are all planned to have connections from the local roadways to the Kern River Bike Path. These connections would provide for both north-south bicycle circulation and connectivity to the area's primary east-west bicycle facility within the Kern River Parkway.

12. There are no known parcels that would be isolated between the Westside Parkway and the Kern River. In a few cases, partial acquisitions of properties needed for the Westside Parkway may result in remnant lands not needed for the transportation facility. These remnants would probably occur primarily in the area south of the Flying J oil refinery. Where possible, these parcels would remain as open space and they would be incorporated into the Kern River Parkway. These parcels would not be conducive to private ownership or development since they would be inaccessible.

13. The Westside Parkway is planned to be an access-controlled facility with generally free-flowing traffic conditions. That means that access to the Westside Parkway would only be allowed via grade-separated interchanges and no access would be granted from adjacent developed parcels.

RECEIVED
APR 14 2006
CITY OF BAKERSFIELD
PLANNING DEPARTMENT

To: City of Bakersfield Planning Department
4/12/06
Ref: NOP and Future DEIR for Westside Expressway aka Westside Parkway
Attn: Mark Gautier

Planning Department;

The Kern River Bikepath Committee would like to offer the following comments regarding the NOP and DEIR for the proposed Westside Expressway:

We would like to see this Transportation corridor be a "Multimodal" system. We suggest developing a 12 foot wide Class I Bike path of both sides of the Expressway to carry bicyclists from Downtown Bakersfield westerly to Allen Road and Stockdale. This bike path segment should have access constructed at overcrossings, bridges, and City bus stop sites. The Expressway should have express loading ramps for Bus commuters. Bridges crossing the Kern River and Kern River Parkway should have bicycle ramps to interconnect to the Kern River Bike Path. The Bike path shall be properly signed to protect public safety and promote non-motorized commuting. 1 2 3 4

We feel that the Expressway shall be heavily landscaped using five rows of trees properly spaced and canopied. Two rows of trees shall separate the Automobile lanes of the Expressway from the Bicycle Path. The trees along the Parkway shall follow a California and Valley River planting theme. The above landscaping shall be partnered with appropriate sound baffles and visual barriers to reduce automobile noise and negative light impacts on River Parkway users and wildlife. These bicycle path and landscaping elements described above shall be on both sides of the proposed Expressway. 5

Expressway bridges occurring over the Kern River should be 90 degrees or perpendicular at the point of river crossing. This will minimize destruction and taking of river primary and secondary floodplain and habitat area of the River Corridor. Please use open , pillar type bridge supports so that danger to public safety and visual impact is minimized. River bridges shall leave abundant room for horse trail and bike trail users in the Parkway. 6 7 8

The proposed name, "Westside Parkway" is confusing and creates a potential threat to public safety. During potential and inevitable instances of auto crashes, bicycle collision, robberies, and bodily harm the name, Parkway can be confused with the other paralleling Parkway. If police, ambulance drivers, and firemen are called to 911 alarms, this confusion can lead to a threat of public safety. We suggest any of the following names: John C Fremont Expressway, Westside Boulevard, or Avenidos de los Arboles. 9
Think of this scenario. A would be victim of a violent crime calls 911 for help.The victim says, "send me help right now to the Parkway, help, help". The 911 operator asks, "Which Parkway are you on, the Westside Parkway or the Kern River Parkway?". The victim screams, "You know, the Parkway near Gosford, help, help." Click

Sincerely,
Ruth Shiel
706-1096

Rich O'Neil
President, Kern River Bikepath Committee
PO Box 1861
Bakersfield, CA. 93301

RESPONSES TO KERN RIVER BIKEPATH COMMITTEE COMMENTS

1. The Westside Parkway project does accommodate multimodal transportation uses. Lanes on the Westside Parkway can be used concurrently or exclusively by potential future alternative modes of transportation. For example, the Golden Empire Transit District (GET) may determine that new or revised bus routes should utilize the Westside Parkway for portions of their bus routes. These could include regular, express or even bus rapid transit routes. If single occupant vehicle usage is determined to be responsible for future congestion on the facility, the City of Bakersfield may consider conversion of existing lanes to high occupancy vehicle (carpool) lanes. However, at this time, future forecasted traffic volumes do not indicate that carpool lanes would be required to meet the purpose and need of the current project.

2. The Bikeway Master Plan in the Metropolitan Bakersfield General Plan does not identify the Westside Parkway corridor to include a designated bicycle route. Placement of bicycle paths along the Westside Parkway would provide essentially the same level of access from west Bakersfield to the Central Business District as existing Class I and Class II bicycle facilities in western Bakersfield. The Westside Parkway would be within a mile of the Kern River Parkway Bicycle Trail for much of its length. On its eastern terminus the Westside Parkway would be about three-quarters of a mile from the Trail. The Westside Parkway would intersect with the Trail between Truxtun Avenue and Mohawk Street. At its western terminus, the Westside Parkway would be approximately 1.5 miles from the Trail. However, from Coffee Road, where the Westside Parkway and the Kern River Parkway Bicycle Trail begin to diverge, bike lanes along Stockdale Highway and Brimhall Road would continue to parallel the proposed freeway, approximately one-half mile to the south and north, respectively.

   As indicated in Section 2.3.3.1 of the EA/EIR, sidewalks and paved areas for bicycle lanes (Class II and Class III Bikeways) would be provided on all streets that cross over and under the Westside Parkway. The paved area would be striped for bicycle lanes where bikeways currently exist. In addition, crosswalks would be provided at freeway on- and off-ramps to provide pedestrian pathways through interchange areas where pedestrian traffic is expected. All non-motorized facilities would be designed and built to comply with the Americans with Disabilities Act requirements.

3. As noted in the response to comment 1 above, GET may choose to establish a bus route along the Westside Parkway. If so planned, bus stops would be located at interchanges and local streets that cross the Westside Parkway. It would not be safe to have bus stops directly on the Westside Parkway mainline travel way. In addition, bus stops located at the interchanges would provide opportunities for bus transfers to north-south bus routes and would allow for pedestrians to enter and exit the bus stops in a safe and controlled manner.

4. Local roadways that cross the Kern River Parkway and connect with the Westside Parkway; including Allen Road, Calloway Drive, Coffee Road and Mohawk Street; are all planned to have connections from the local roadways to the Kern River Bike Path. These connections would provide for both north-south bicycle circulation and connectivity to the area's primary east-west bicycle facility within the Kern River Parkway.

5. The City of Bakersfield intends to provide appropriate landscaping to the extent feasible on side slopes, within interchanges and in certain locations within the median. Trees are expected to be utilized in planting designs where they can be implemented in a safe and maintainable way. Noise abatement is discussed in the EA/EIR in Section 4.4.5.2. The City of Bakersfield also intends to provide noise abatement where impacts to sensitive noise receptors, as defined by Caltrans and FHWA guidance, exceed noise abatement criteria. Landscaping would be utilized to the extent possible to screen physical elements of the project such as walls. Figures 2.3-5 and 2.3-6 of the EA/EIR provide conceptual landscape plans for the Westside Parkway.

6. The proposed crossings of the Kern River and associated Kern River Parkway have been planned to cross the river on alignments that are as close to perpendicular as possible for several reasons. Ninety-degree crossings would minimize the impacts to the Kern River Parkway and would minimize the cost of necessary bridge structures. Due to physical constraints and highway geometric design criteria, completely perpendicular crossings are not always feasible. The Mohawk Street crossing crosses at nearly 90 degrees. The mainline Westside Parkway (Oak Option) crosses at nearly 90 degrees. The mainline Westside Parkway (Truxtun Option) crosses the river at a somewhat skew angle to minimize conflicts with the nearby railroad, existing oil wells, canals and other constraints while connecting with Truxtun Avenue west of State Route 99. The skewed crossing of the Kern River Parkway required by the Truxtun Option is one of many comparison elements of the two alternatives.

7. The bridge supports planned for the two river crossings are intended to utilize pier arrangements that are consistent with other bridges across the Kern River. These bridges are supported on individual piers that allow for a more open visual condition.

8. The river crossings have been planned to provide adequate horizontal and vertical clearances for both horse and bicycle trails that exist along the Kern River.

9. The name of any new street or road in the City of Bakersfield must be reviewed and approved by the City's emergency services departments, who in turn coordinate with the local ambulance service. The Police and Fire departments have reviewed the proposed name for the freeway and do not believe that it would result in any problems providing emergency services to locations on the freeway or within the Kern River Parkway.

AUTOMOBILE CLUB OF SOUTHERN CALIFORNIA

RECEIVED
APR 24 2006 MG
CITY OF BAKERSFIELD
PLANNING DEPARTMENT

April 18, 2006

Mr. Marc Gauthier
City of Bakersfield
1501 Truxtun Avenue
Bakersfield, CA 93301

Dear Mr. Gauthier:

The Automobile Club of Southern California supports the general concept of a new east-west freeway to connect parts of unincorporated Kern County to the Downtown Central Business District in Bakersfield. We believe that the proposed Westside Parkway Project is needed to maintain and improve mobility and safety for current and future residents, businesses, and visitors in Kern County. (1)

Traffic congestion in Kern County is severe now, and it's getting worse every year. Continuing growth in the County's population and increased travel through the Central Bakersfield Business District requires new and improved transportation facilities, like the Westside Parkway Project. Without this project, traffic volumes are likely to increase dramatically. This increase in traffic congestion will result in more air pollution, a lower quality of life, and diminished economic potential for Kern County. (2)

In supporting the general Westside Parkway Project, we are not recommending a specific alignment. Additionally, whichever final project and alignment is selected, complete and adequate measures must be taken to minimize the impact on the environment, including natural areas, native plant and animal species, and water quality. (3)

California's mobility is declining in the face of reduced transportation investments, growing population and commerce, and wear and tear on our streets and freeways. If we fail to adequately maintain, improve, and expand our transportation network, our whole economy and quality of life will be at risk. Maintaining and improving mobility and safety in southern California calls for maximum and efficient utilization of limited public and private resources. The proposed creation of a new east-west corridor through the Downtown Central Business District of Bakersfield is a strong step in the direction of maintaining and improving our quality of life and economic prosperity.

The Auto Club urges the City of Bakersfield to continue its successful track record of mitigating construction activities and project impacts. We look forward to our continuing partnership with the City and other transportation interests to move this project forward and to improve mobility and safety in Kern County. Please let me know if you have any questions or need any additional information. Thank you for your attention to this important matter.

Sincerely,

Linda Heald

Linda Heald
District Manager

Cc: Jack LaRochelle, Assistant Public Works Director

BAKERSFIELD DISTRICT OFFICE
1500 Commercial Way • Bakersfield, California 93309-0625
(661) 327-4661

RESPONSES TO AUTOMOBILE CLUB OF SOUTHERN CALIFORNIA COMMENTS

1. Comment noted.

2. Comment noted.

3. It is understood that the Automobile Club of Southern California is supportive of the Westside Parkway project in concept, but that no particular alignment alternative is recommended or preferred by the Auto Club. Complete and adequate measures, as described in the EA/EIR document, are included in the proposed project to minimize impacts on the environment.

SIERRA CLUB KERN-KAWEAH CHAPTER

Kern-Kaweah Chapter
2815 La Cresta Drive
Bakersfield, CA 93305-1719
http://kernkaweah.sierraclub.org/

Executive Committee
Lorraine Unger, Chair
Georgette Theotig, Vice Chair
Harry Love, Secretary
Janet Wood, Treasurer
Richard Garcia
Chester Arthur
Ara Marderosian
Arthur Unger
Gordon Nipp
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Keith Dilday, Treasurer
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Dennis Burge, Chair
Steve Smith, Vice Chair
Jean Bennett, Secretary
Jeanie Haye, Conservation
Dolph Amster, Treasurer

Marc Gautheir and Planning Commission
Bakersfield Planning Department
1501 Truxtun Ave
Bakersfield, CA 93301

April 20, 2006

Here are our comments on the Draft EIR for the Westside Parkway (03-1163)

We refer to this project as the Kern River Freeway. We do not call it Westside Parkway because that could be confused with the existent Kern River Parkway. The Kern River Parkway had orioles April 9 which I hope will tolerate this freeway. (1)

The Kern River Freeway was the wrong way when the Kern Kaweah Chapter Of The Sierra Club spoke up against it over 20 years ago and it is more obviously the wrong way tonight. This freeway facilitates suburban sprawl onto farmland. The fact that most of the USA, and even most of California, relies on private motor vehicles is no excuse for squeezing eight lanes through the center of town. If we continue to rely on private motorized vehicles, how long will it take before eight lanes are congested and we need to rely on concentric rings of freeways? (2)

The CD the DEIR is on is helpful, especially after I stumbled on its ability to display a table of contents item when the cursor points to the item. (3)

We are pleased that the Kern River Freeway will someday accommodate potential future multimodal transportation facilities. We urge that light rail be built instead of this Kern River Freeway, that parking be available along the western stretches of the light rail line and that bus service from the light rail into the surrounding center city be established. (4)

In case the Kern River Freeway is built, we suggest its harm be reduced with several common sense measures.

TRUCKS

Prohibiting trucks on these narrower lanes ~~will~~ would decrease collisions and eliminate large spills over our drinking water. (5)

BUSES

There should be places at least every half mile where buses can pull off the Parkway and be boarded. Parking near some of these bus stops should be provided. These bus stops should have roofed shelters. The shelters may forgo walls in order to enhance police view of the interior. (6)

LIGHT RAIL

Land for light rail should be set aside. Grade level light rail may be cheaper to build, but it takes more space and is more likely to be flooded. Please consider putting light rail in now, before a portion of this road is widened to the planned eight lanes. (7)

BICYCLE PATHS

Land for Class one bicycle paths should be set aside on both sides of the freeway. Riding on these paths should be discouraged until motor vehicle pollution is so small that the air near the freeway is fit to breathe. (8)

FREEWAY PLANTINGS

Trees will lessen the noise, emissions and perhaps the air pollution that houses and users of the Kern River Parkway near the Freeway will have to bear. Will native plants be cheaper to maintain? We suggest valley oaks (Quercus lobata) because they have spreading branches and require less water than sycamores or cottonwoods. When the oak trunks get tall, smaller bushes will need to be planted. The trees may hide sound walls and retaining walls. Should the slopes on the sides of any recessed freeway be terraced to minimize erosion? Please acquire property that is isolated by the freeway and plant it with xerics and/or natives. If traffic casualties and emergency personnel will not use these properties, include lots of Bakersfield cactus which is now in bloom. (9)

Thank you for the opportunity to comment,

Arthur Unger

Arthur Unger
2815 La Cresta Drive
Bakersfield CA 93305-1719
(661) 323 5569
alunger@juno.com

RESPONSES TO KERN-KAWEAH CHAPTER OF SIERRA CLUB COMMENTS

1. The name of any new street or road in the City of Bakersfield must be reviewed and approved by the City's emergency services departments, who in turn coordinate with the local ambulance service. The Police and Fire departments have reviewed the proposed name for the freeway and do not believe that it would result in any problems providing emergency services to locations on the freeway or within the Kern River Parkway.

2. The Westside Parkway does not facilitate urban development of farmland. That development has already occurred. As clearly shown in Figure 2.3-1 of the EA/EIR, an aerial photograph of the project area from spring 2005 shows almost solid urban development along the entire alignment of the Westside Parkway. Since that aerial photograph was taken, more development has occurred in the project area.

   The need for the Westside Parkway is described in Section 1.5 of the EA/EIR and its ability to reduce traffic congestion and improve the connectivity of Bakersfield's existing transportation network are discussed in Section 4.4.4. The planning horizon for this project is 2030. Therefore, the project would meet traffic demand in the area for at least 20 years. It is not possible to reasonably forecast traffic demands beyond that timeframe.

3. Comment noted.

4. Mass transit, including bus system improvements and light rail, are evaluated in Section 2.4.4 of the EA/EIR. As indicated in that section, none of the mass transit options would directly improve connectivity of the existing transportation network in Bakersfield nor would they substantially reduce traffic congestion over the planning period for this project (i.e., 2030). No information has been provided in the comments on the Draft EA/EIR that changes this conclusion.

5. As stated in Section 2.3.1.1.3 of the EA/EIR, the lanes for the Westside Parkway would be 3.6 meters (12 feet) wide. This is the standard width for modern highway lanes throughout the United States. The highway would not have narrow lanes.

   As discussed in Section 4.2.5.1, the Westside Parkway would be designed to minimize the potential for groundwater contamination from potential spills of hazardous materials resulting from traffic accidents. A spill on the proposed freeway of any large magnitude would also generate immediate response actions by local agencies to report, contain and mitigate the incident. Based on the history of prior incidents in the area, spills have had no impact or minimal impact to groundwater because of the immediate response and clean-up that has prevented contaminant migration to the groundwater.

6. Although improvements to the bus system were rejected as a standalone alternative for the project, planning of the proposed transportation corridor has been coordinated with GET to ensure that sufficient right of way was available to allow future mass transit options. Current bus ridership in the western Bakersfield metropolitan area averages about 3,000 people/day. This is not sufficient traffic to justify the expenditure of public funds for the improvements suggested in this comment. As population in the area increases, these improvements may be warranted in the future.

7. As discussed in Section 2.4.4.2.2 of the EA/EIR, the western Bakersfield metropolitan area does not have a demographic profile in terms of population size and density to support light rail. Light rail is generally suitable where nonresidential concentrations of 35 to 50 million square feet are served and residential densities of nine or more dwelling units per acre exist in the line's service area. The Bakersfield metropolitan area falls short of these thresholds with only 26 million square feet of nonresidential uses in a 408 square mile area and average residential density of 0.5 dwelling unit per acre.

   Mass transit may become a more important component of the transportation network in future years. Transportation studies prepared by GET recommend an expansion of the existing bus system operating fleet for several key transportation corridors and addition of new routes. For these reasons, the Westside Parkway does not preclude future uses for mass transit. Sufficient right of way has been acquired to provide multimodal opportunities for future mass transit uses including HOV lanes, dedicated bus ways, express bus or bus rapid transit.

8. As indicated in Section 2.3.3.1 of the EA/EIR, sidewalks and paved areas for bicycle lanes (Class II and Class III Bikeways) would be provided on all streets that cross over and under the Westside Parkway. The paved area would be striped for bicycle lanes where bikeways currently exist. In addition, crosswalks would be provided at freeway on- and off-ramps to provide pedestrian pathways through interchange areas where pedestrian traffic is expected. All non-motorized facilities would be designed and built to comply with the Americans with Disabilities Act requirements.

   The Kern River Parkway already includes a Class I bike path along the south side of the Kern River. This bike path stretches from Enos Lane to near Manor Street, nearly twice the length of the Westside Parkway project. The Westside Parkway is planned to be a high-capacity, high speed facility that will not be conducive to bicycle use. The Kern River Parkway bike path provides a parallel and far superior bicycle facility than the Westside Parkway could provide. The Kern River Parkway bike path would be much safer than a bike path adjacent to or anywhere within the Westside Parkway right of way. The Metropolitan Bakersfield General Plan does not identify the Westside Parkway corridor to include a designated bicycle route.

9. As discussed in Section 2.3.3.3 of the EA/EIR, the proposed project would be landscaped to create a park-like transportation corridor. A conceptual parkway landscape design is provided in Figure 2.3-5. A project theme and conceptual landscaping plan for the project is under development. The suggestions made in this comment regarding plantings will be considered in the development of this plan.

   There are no known parcels that would be isolated between the Westside Parkway and the Kern River. In a few cases, partial acquisitions of properties needed for the Westside Parkway may result in remnant lands not needed for the transportation facility. These remnants would probably occur primarily in the area south of the Flying J oil refinery. Where possible, these parcels would remain as open space and they would be incorporated into the Kern River Parkway. These parcels would not be conducive to private ownership or development since they would be inaccessible.

CLEAN WATER & AIR MATTER
(CWAM)
370 ACACIA AVENUE
BAKERSFIELD, CALIFORNIA 93305
Ph/fax – 661-859-0107

RECEIVED
MAY 0 5 2006
CITY OF BAKERSFIELD
PLANNING DEPARTMENT

May 5, 2006

Mr. Marc Gauthier
City of Bakersfield
Development Services Department
Planning Division
1715 Chester Avenue
Bakersfield, California 93301

Dear Mr. Gauthier:

Thank you for the opportunity to comment on the Tier 2 Environmental Assessment/Draft Environmental Impact Report (document) for the Westside Parkway (project).

SIZE/PIECEMEALING

The current proposal has shortened the project length to approximately 8.1 miles and narrowed it to 210 feet, but does not seemingly address the full build-out as previously specified to connect with Interstate 5 and Highway 99. Is the project intended to still connect to the north/south freeways in Kern County? Will another document be created to address the additional environmental issues pertinent to full build-out? Why is the whole project not considered? (1)

The original design width (300 feet) allowed for multi-modal transportation facilities including an "eight lane freeway and a median that could be used for additional lanes or other transportation facilities such as High Occupancy Vehicles (HOV) lanes, busways, and rail up to Route 99" [from USFWS letter from Ken Sanchez to Joseph Vaughn, FHA 2/18/05). Does the narrower width eliminate the multi-modal aspect of the project? If not, please explain. (2)

BIOLOGY

The project states in the cumulative impact section, Natural Environment 6.7, that it has the potential to rely on three Habitat Conservation Plans (HCP) as a method of mitigation, yet does not specify at this time this as the chosen method or if it will mitigate habitat (and potential species loss) by preserving land near the project area as described in the Biological Opinion. Mitigation measures must be specific in nature and not left for future consideration, thereby rendering any actual dialogue between the public and decision makers moot. (3)

Unfortunately, the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) has some glaring inadequacies that cause unknown consequences with its use. The document states that the MBHCP maintains a map with all known San Joaquin kit fox dens in the program area.

The reality is that the map only contains dens that have been surveyed for previous projects and is not an actual, comprehensive map, rather it is only what has been reported to the MBHCP Group on a project by project basis. Many dens are left undocumented. Furthermore, healthy kit fox maintain a network of active dens, not limiting themselves to one specific den.

The MBHCP does not account for what happens once relocation (if that is the chosen method) of the kit fox and their pups occurs. Do the foxes return to the original habitat or do they acclimate to their relocation areas? Are established groups of foxes within the current MBHCP reserves co-joining with relocated kit fox? Are the relocated kit fox able to thrive in their new homes? 3

Please consider the following proposals for kit fox movement corridors/alternative den areas as supplemental to the current mitigation measures. In the area where the "bermed section" is proposed east of Calloway including, but not limited to, Coffee Road :

1. Access to sumps, both current and planned in the project area. Sumps are well documented as den areas for kit fox.
2. A small slope to any man made den areas.
3. Large culverts (minimally 1 meter high, 2 meters across) for under crossing movement corridors.

Ultimately, all reports should be included for public review at this time. Please include my contract information on all further notices so that public comment can be made on the outcome of the data from the studies (see page 4-31).

Sincerely,

Renee Donato Nels

Renee Donato Nelson
President, CWAM

Cc: Barbara Lomas, Chair, City of Bakersfield Planning Commission

RESPONSES TO CLEAN WATER & AIR MATTER COMMENTS

1. As discussed in Section 1.1 of the EA/EIR, the Westside Parkway was originally studied as a new alignment for State Route (SR) 58 between I-5 and SR99. That process, known as route adoption, initiated preliminary engineering and environmental review of alternative corridor alignments to replace existing SR58. In 1991, a Tier 1 EIS/EIR for the SR58 Route Adoption project was initiated. The objective of that document was to consider alternative corridors and identify a preferred corridor alignment that could be used for right of way acquisition and corridor protection. For purposes of providing a "worst-case" assessment of the kinds of impacts that could result from a transportation facility in a new corridor alignment, the Tier 1 EIS/EIR evaluated an ultimate eight-lane freeway connecting I-5 and SR99. That document was certified by FHWA and Caltrans in May 2001 and a Record of Decision was adopted in February 2002, recommending a preferred alternative.

   As specific transportation projects are identified in the Tier 1 corridor, Tier 2 environmental documents will be prepared to evaluate the specific impacts of those transportation projects. The Westside Parkway is the first transportation project proposed within the preferred corridor identified in the Tier 1 EIS/EIR. As transportation demand dictates, and funding becomes available, other projects may be identified within the corridor. These projects would be addressed in future environmental documents. Whether or not these other projects are built, the proposed Westside Parkway alone would reduce traffic congestion in the western Bakersfield metropolitan area and improve the continuity of the existing transportation network, as discussed in Section 4.4.4 of the EA/EIR. In terms of CEQA and NEPA, the project has independent utility and logical termini.

2. A 300-foot wide right of way was evaluated in the Tier 1 EIS/EIR to provide flexibility in the design of future transportation facilities. This width of right of way is not required to meet the projected transportation demand within the planning horizon for this project (i.e., 2030). The Westside Parkway does not preclude future uses for mass transit. Sufficient right of way has been acquired to provide multimodal opportunities for future mass transit uses including HOV lanes, dedicated bus ways, express bus or bus rapid transit.

3. As discussed in Section 4.3.1.2 of the EA/EIR, the City of Bakersfield may preserve habitat or participate in the MBHCP as compensatory mitigation for habitat loss associated with the proposed project. The EA/EIR provides the ratios that would be used for mitigation. Both project-specific preservation of habitat and participation in the MBHCP can be accomplished. This is not leaving mitigation for future consideration. It specifically identifies achievable means of accomplishing compensatory mitigation.

   The use of the MBHCP is only one of many biological mitigation measures outlined in Section 4.3.1.2 of the EA/EIR. Additional mitigation required by the

U.S. Fish and Wildlife Service (USFWS) Biological Opinion for the project include pre-construction surveys for sensitive species and avoidance or mitigation for any species found during those surveys, worker training in avoidance of biological damage, exclusion zones for sensitive habitat features and biological monitoring during construction. These terms and conditions are outlined in Section 4.3.1.2 and detailed in the Biological Opinion provided in Appendix D of the EA/EIR.

Among the terms and conditions of the Biological Opinion is a requirement to conduct a pre-construction survey for kit fox dens. If a kit fox den is present in a work area and cannot be avoided, the den would be monitored for three nights to ensure vacancy, and then must be excavated and backfilled according to USFWS guidelines (see Appendix D of the EA/EIR). In the Biological Opinion, the USFWS has found that the kit fox population in the project area would be protected with implementation of this and other required mitigation.

It is assumed that the reference to sumps in this comment means the storm water retention basins that would be constructed for the proposed project. Those basins would be accessible by kit fox. This comment also suggests that changes be made to existing retention basins in the project area. This suggestion has no nexus with the proposed project and the commenter has not provided substantial information indicating that this mitigation measure is proportionate to project-related impacts to kit fox.

The Biological Opinion for the Westside Parkway project acknowledges the importance of culvert sizing for kit fox passage. Based on that concern, the Biological Opinion requires studies of kit fox mortality from vehicle collisions in the project area, kit fox movement in the project area, and studies of the use of existing culverts by kit fox. The results of these studies would be used as input to the design of passages across the Westside Parkway right of way that can be used by kit fox. Caltrans has completed the kit fox mortality study and the study evaluating the use of existing culverts by kit fox is underway. The City of Bakersfield has received a proposal from a qualified biologist for the kit fox movement study along the Westside Parkway alignment. If the proposed project is approved, that study would be implemented by the City and the data used in conjunction with data from the other studies to design the Westside Parkway to allow for north-south movement of kit fox across the alignment, as appropriate.

4.0 INDIVIDUALS

28 March 2006

Mr. Marc Gauthier
City of Bakersfield
Development Planning Services
Planning Division
1715 Chester Ave.
Bakersfield, CA 93301

RECEIVED
MAR 3 0 2006
CITY OF BAKERSFIELD
PLANNING DEPARTMENT

COMMENTS ON THE TEIR 2 ENVIRONMENTAL ASSESSMENT/DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE WESTSIDE PARKWAY PROJECT

Dear Mr. Gauthier:

I would like to submit the following comments on the Teir 2 Environmental Assessment/Draft Environmental Impact Report (EIR) for the Westside Parkway Project.

My comments primarily concern potential impacts from the project to endangered San Joaquin kit foxes inhabiting Bakersfield. The assessment of impacts in the report seem incomplete for at least 2 important reasons as detailed below:

1. The EIR acknowledges that movements by kit foxes, both east-west and north-south, could be inhibited by the proposed Parkway (p. 4-30). There is mention of the use of culverts to permit movement by kit foxes across the Parkway. However, no details are provided regarding the dimensions of the culverts. Not all culverts are passable to kit foxes, particularly given the likely length of the culverts. Also, if the culverts are of insufficient size, they actually could be used as dens by predators of kit foxes, including coyotes, bobcats, and red foxes. It is very important that crossing structures of sufficient size be installed to maintain north-south movements by kit foxes. This is particularly critical in the stretch from Route 99 to Coffee Road.

2. The Biological Opinion issued for this project by the U.S. Fish and Wildlife Service requires that a study be conducted to examine movements of kit foxes through the project area, collect information on vehicle strikes, and examine use of crossing structures by kit foxes. The EIR openly acknowledges that this study has not been conducted to date (p. 4-31). In the absence of the results from such a study, it seems that it would not be possible to fully assess the effects of the project on kit foxes. Are there plans to conduct such a study?

1

The population of kit foxes in Bakersfield is substantial and is considered by the U.S. Fish and Wildlife Service and the California Department of Fish and Game to be important. This population may be able to contribute significantly to conservation and

2

recovery efforts for kit foxes. Also, a recent public opinion survey revealed that residents of Bakersfield favor and support the conservation of kit foxes in Bakersfield (Bjurlin, C. D. and B. L. Cypher. 2005. Encounter Frequency with the Urbanized San Joaquin Kit Fox Correlates with Public Beliefs and Attitudes Toward the Species. Endangered Species Update 22:107-115.).

I strongly encourage the city to implement mitigation measures that will contribute toward the conservation of kit foxes in Bakersfield. Such measures should include the installation of appropriate highway crossing structures for foxes (e.g., undercrossings of appropriate size and configuration), and also could include the installation of artificial within the project right-of-way to replace denning areas destroyed by the project. The kit fox study mentioned above would aid greatly in determining optimal locations for these structures and dens. 3

I sincerely appreciate the opportunity to provide comments and strongly urge the city to consider implementing the mitigation measures recommended above.

Sincerely,

Brian L. Cypher
3104 Corvallis Ct.
Bakersfield, CA 93309
661-398-2201
bcypher@bak.rr.com

RESPONSES TO BRIAN CYPHER COMMENTS

1. The U.S. Fish and Wildlife Service (USFWS) Biological Opinion on the Westside Parkway project acknowledges the importance of culvert sizing for kit fox passage. Based on that concern, the Biological Opinion requires studies of kit fox mortality from vehicle collisions in the project area, kit fox movement in the project area and studies of the use of existing culverts by kit fox. The results of these studies would be used as input to the design of passages across the Westside Parkway right of way that can be used by kit fox. Caltrans has completed the kit fox mortality study and the study evaluating the use of existing culverts by kit fox is underway. The City of Bakersfield has received a proposal from a qualified biologist for the kit fox movement study along the Westside Parkway alignment. If the proposed project is approved, that study would be implemented by the City in sufficient time for the results to be used in conjunction with data from the other studies to design the Westside Parkway to allow for north-south movement of kit fox across the alignment.

2. Refer to the response to comment 1 above.

3. Refer to the response to comment 1 above. Installation of artificial denning sites within the project right of way is not appropriate mitigation. This would increase the potential for kit foxes to be killed in traffic.

"Ted Wright" <Twright@bakersfieldcity.us>
05/05/2006 12:16 PM

To: "Jeff Chapman" <Jeff_Chapman@URSCorp.com>
cc: "Marc Gauthier" <Mgauthie@bakersfieldcity.us>
Subject: Re: Fwd: Westside Parkway

Jeff, this is the email I referred to in our telecon today. Thought I had already sent it to you. It doesn't mention the Tier 2 document, but since it was during the comment period I presumed a response would be done with the final ED?

>>> Wiladene Sawyer 04/20/06 1:53 PM >>>
ok - Ted do you want to respond to this Lucy?

This email came to the webmaster.

Willy Sawyer
Webmaster
Information Technology
City of Bakersfield California
1600 Truxtun Ave
Bakersfield California 93301
661-326-3068

>>> "Lucy Chhor" <lchhor@crown-energy.com> 4/20/2006 8:10 AM >>>

To Whom It May Concern:

I think it is unfair for you to put this Parkway in between houses. This Parkway will sit between Village of Brimhall, Brighton Estates, and Brighton Village. Everyone who has move to this area was not aware of a parkway being built. I am concern resident, who will have to hear the noise and feel that if the Parkway is built there would be more crime. Moving to this area gave my family a sense of security and since city is still deciding if the Parkway is being built, we have a very unease in our stomach. One question that I would like to bring up is that the Stockdale Highway leads straight to the 99. Why would you want to built another highway that leads to the same freeway and is not even a block from each other. Why waste all this money on building this Highway to have it duplicate to the Stockdale Highway. I believe that the Highway would not serve any purpose for us because there is already a highway that leads us straight to the 99 freeway. Looking at the diagram, the Parkway will not connect straight to the freeway anyways. You would have to drive on locate street to still get to the 99 freeway. As a concern resident, I would appreciate it if you would take this concern and evaluate it once more.

1
2
3

Thanks

Lucy Chhor

RESPONSES TO LUCY CHHOR COMMENTS

1. A major east-west transportation facility has been shown in the location of the Westside Parkway for many years in the City of Bakersfield General Plan. The City adopted a Specific Plan Line for the Westside Parkway in 1991. Many residents in west Bakersfield have been aware that the Westside Parkway would eventually be constructed on the alignment currently proposed. Noise impacts that exceed federal and state noise abatement criteria would be mitigated to an acceptable level. There is no evidence to indicate that construction of the Westside Parkway would in any way increase or decrease the frequency of crime in the area. One could consider the fact that an efficient transportation facility would provide an improved form of accessibility for use by emergency vehicles and would therefore; contribute to improved safety for the area.

2. Stockdale Highway is an at-grade arterial facility which means that it is at the same grade as the roads that intersect it, and traffic at those intersections is controlled by signs or traffic lights. In comparison, the proposed Westside Parkway would be a grade-separated facility which means that the facility is separated in elevation from roads that intersect it and traffic enters and exits the facility on interchanges. Access along Stockdale Highway is not controlled to the extent that it would be controlled for the Westside Parkway, in other words, minor roadways and private driveways may be allowed to connect with Stockdale Highway, but not along the Westside Parkway. This allows the Westside Parkway to operate more efficiently at higher speeds than Stockdale Highway. While it is true that the two transportation facilities would exist parallel to each other for a portion of their lengths, the two facilities would serve much different purposes and therefore would not duplicate each other. The Westside Parkway would provide a high-speed, high-volume transportation facility for people to travel relatively long distances across west Bakersfield, such as people commuting between west Bakersfield and the Central Business District. The Stockdale Highway provides people with access to properties in west Bakersfield.

3. You are correct that the Westside Parkway is not planned to connect directly to the State Route 99 freeway; however, this is precisely the intent of the Westside Parkway. The purpose and need for the Westside Parkway is to move east-west traffic from west Bakersfield to the downtown area. This commuter pattern would not need to connect with State Route 99 to meet the goals and objectives of the Westside Parkway project.

May 5, 2006

Marc Gauthier
Bakersfield City Planning Dept.
1715 Chester Ave.
Bakersfield, CA 93301

Re: Westside Expressway

Dear Mr. Gauthier,

I am a board member of the Kern River Parkway Foundation and have discussed with other members some aspects of the proposed Westside Express Expressway that we feel should be incorporated into the Expressway plans.

First we feel that Parkway should not be part of the name due to the confusion that would be created because Kern River Parkway is the name for the greenbelt along the river. 1

We advocate as wide a possible a greenbelt of native trees along the Expressway as is possible to provide adequate screening between the river and the Expressway. The same should be done between the Expressway and nearby buildings. 2

Alternatives to personal vehicle use are essential to help mitigate Bakersfield's congestion and air problems. Therefore bicycle use should be encouraged and class I bike paths should be on both sides of the Expressway. 3 Bus use also needs to be encouraged and express bus stops should be along the Expressway. 4

We also advocate pillars rather than solid walls to support Expressway bridges to create better openness. 5

Thank you for taking our suggestions into consideration

Andrew Honig
131 Pasatiempo Dr.
Bakersfield, CA 93305
andym5@cox.net

RESPONSES TO ANDREW HONIG COMMENTS

1. The name of any new street or road in the City of Bakersfield must be reviewed and approved by the City's emergency services departments, who in turn coordinate with the local ambulance service. The Police and Fire departments have reviewed the proposed name for the freeway and do not believe that it would result in any problems providing emergency services to locations on the freeway or within the Kern River Parkway.

2. The City of Bakersfield intends to provide appropriate landscaping to the extent feasible on side slopes, within interchanges and in certain locations within the median. Trees are expected to be utilized in planting designs where they can be implemented in a safe and maintainable way. The City is planning to include a substantial amount of tree plantings throughout the entire Westside Parkway project. Conceptual landscape designs for the freeway and its interchanges are provided in Figures 2.3-5 and 2.3-6 of the EA/EIR.

3. The Kern River Parkway already includes a Class I bike path along the south side of the Kern River. This bike path stretches from Enos Lane to near Manor Street, nearly twice the length of the Westside Parkway project. The Westside Parkway is planned to be a high-capacity, high speed facility that would not be conducive to bicycle use. The Kern River Parkway bike path provides a parallel and far superior bicycle facility than the Westside Parkway could provide. The Kern River Parkway bike path would be much safer than a bike path adjacent to or anywhere within the Westside Parkway right of way. The Metropolitan Bakersfield General Plan does not identify the Westside Parkway corridor to include a designated bicycle route.

   As indicated in Section 2.3.3.1 of the EA/EIR, sidewalks and paved areas for bicycle lanes (Class II and Class III Bikeways) would be provided on all streets that cross over and under the Westside Parkway. The paved area would be striped for bicycle lanes where bikeways currently exist. In addition, crosswalks would be provided at freeway on- and off-ramps to provide pedestrian pathways through interchange areas where pedestrian traffic is expected. All non-motorized facilities would be designed and built to comply with the Americans with Disabilities Act requirements.

4. Golden Empire Transit District (GET) may choose to establish a bus route along the Westside Parkway. If so planned, bus stops would be located at interchanges and local streets that cross the Westside Parkway. It would not be safe to have bus stops directly on the Westside Parkway mainline travel way. In addition, bus stops located at the interchanges would provide opportunities for bus transfers to north-south bus routes and would allow for pedestrians to enter and exit the bus stops in a safe and controlled manner.

5. The bridge supports planned for the two river crossings are intended to utilize pier arrangements that are consistent with other bridges across the Kern River. These bridges are supported on individual piers that allow for a more open visual condition rather than on solid pier walls.

May 7, 2006

Mr. Ted Wright
Traffic Engineer
City of Bakersfield
1501 Truxtun Ave.
Bakersfield, CA 93301

Dear Mr. Wright,

This letter is in regard to the Westside Parkway. I have a few suggestions before any more progress is made on this project that I believe need to be addressed. Of primary importance, is the name Westside Parkway. I think this title is misleading, since this project is actually a freeway. It could be confused with the Kern River Parkway. If someone were injured on the Kern River Parkway and they called for help, fire and ambulance services might be dispatched to the freeway in error as it would be known as a parkway, too. It makes more sense to call it the "Westside Way" or "Westside Boulevard". 1

Another point to make involves bicycle and pedestrian paths along the road. A Class I bicycle path on both sides of the road is necessary and most prudent to ensure this road is multi-modal and safe for all. This leads to my third point of contention regarding the freeway. Air quality is a major concern in Bakersfield. For this reason, extensive native trees and bushes should be planted the entire length of the road. Bridges may look pleasing to the eye, but a tree aids in air quality like nothing else ever could. Trees would also dampen vehicle noise. Other noise abatement measures on bridges and along the roadside will need to be included in the planning of this roadway, as well. Neighborhoods adjacent to the roadway should be protected from the vehicle noise. 2 3 4

Finally, express bus stops at intersections and bridges would be most beneficial for this cross-town freeway and guarantee that the general public could be moved from point A to point B across town in a most efficient manner. Isn't that the purpose of this freeway? With the high cost of gasoline, bus usage will only increase in the future. Planning for this change is forward thinking. Bus transportation is a quality of life issue. The elderly, disabled, and many others depend on the GET bus in Bakersfield. Incorporating express bus stops is one small measure that would make this freeway a pedestrian friendly project and an asset to our community. 5

If this freeway is altered from the original plan and moved along the Kern River Parkway, I would be most astonished and annoyed. Please notify me in the future so that I can attend the public comment meeting. I assume that a draft EIR is being prepared and will be available for perusal by the citizens of Bakersfield. Again, let me state my interest in this project leads me to insist that the original plan be followed and that the Westside Way not be relocated along the Kern River Parkway. 6

Thank you for your attention to this matter. I can be reached at the address and phone listed below.

Sincerely,

Elaine White

Ms. Elaine White
cc: Mr. Harvey Hall, Mayor

PO BOX 9364
BAKERSFIELD, CA 93389
(661) 833-3795

RESPONSES TO ELAINE WHITE COMMENTS

1. The name of any new street or road in the City of Bakersfield must be reviewed and approved by the City's emergency services departments, who coordinate with the local ambulance service. The Police and Fire departments have reviewed the proposed name for the freeway and do not believe that it would result in any problems providing emergency services to locations on the freeway or within the Kern River Parkway.

2. The Kern River Parkway already includes a Class I bike path along the south side of the Kern River. This bike path stretches from Enos Lane to near Manor Street, nearly twice the length of the Westside Parkway project. The Westside Parkway is planned to be a high-capacity, high speed facility that would not be conducive to bicycle use. The Kern River Parkway bike path provides a parallel and far superior bicycle facility than the Westside Parkway could provide. The Kern River Parkway bike path would be much safer than a bike path adjacent to or anywhere within the Westside Parkway right of way. The Metropolitan Bakersfield General Plan does not identify the Westside Parkway corridor to include a designated bicycle route.

   As indicated in Section 2.3.3.1 of the EA/EIR, sidewalks and paved areas for bicycle lanes (Class II and Class III Bikeways) would be provided on all streets that cross over and under the Westside Parkway. The paved area would be striped for bicycle lanes where bikeways currently exist. In addition, crosswalks would be provided at freeway on- and off-ramps to provide pedestrian pathways through interchange areas where pedestrian traffic is expected. All non-motorized facilities would be designed and built to comply with the Americans with Disabilities Act requirements.

3. The City of Bakersfield intends to provide appropriate landscaping to the extent feasible on side slopes, within interchanges and in certain locations within the median. Trees are expected to be utilized in planting designs where they can be implemented in a safe and maintainable way. The City is planning to include a substantial amount of tree plantings throughout the entire Westside Parkway project. Figures 2.3-5 and 2.3-6 provide conceptual landscape plans for the Westside Parkway.

4. Noise abatement is discussed in the EA/EIR in Section 4.4.5.2.2. The City of Bakersfield intends to provide noise abatement where impacts to sensitive noise receptors, as defined by Caltrans and FHWA guidance, exceed noise abatement criteria designed to protect specific land uses.

5. Golden Empire Transit District (GET) may choose to establish a bus route along the Westside Parkway. If so planned, bus stops would be located at interchanges and local streets that cross the Westside Parkway. It would not be safe to have bus stops directly on the Westside Parkway mainline travel way. In addition, bus

stops located at the interchanges would provide opportunities for bus transfers to north-south bus routes and would allow for pedestrians to enter and exit the bus stops in a safe and controlled manner.

6. The proposed alignment of the Westside Parkway, with the two east end tie-in options, as described in the EA/EIR, is the proposed project. The Tier 1 EIS/EIR considered many alignment alternatives, one of which was an alignment known as the Kern River Freeway, which extended to Interstate 5 to the west. The current proposal has been carefully planned to minimize impacts and encroachment upon the Kern River Parkway. The City of Bakersfield does not intend to move the Westside Parkway alignment, as currently proposed, to an alignment that is within the Kern River Parkway.

   The document distributed to the public on March 15, 2006, was a joint NEPA and CEQA document consisting of an Environmental Assessment under NEPA and a Draft EIR under CEQA. The public comment period on the EA/DEIR closed on May 5, 2006. Two public hearings were held on April 19 and 20, 2006, to gain additional public comment on the EA/DEIR. Information has been incorporated into the EA/Final EIR (EA/FEIR) in response to comments received on the document during the public review period and at the public hearings. The City of Bakersfield Planning Commission will review the EA/FEIR and following a public hearing on the document, make recommendations regarding its certification to the City of Bakersfield City Council. The Council will also hold a public hearing on the EA/FEIR in its deliberations regarding certification of the document and approval of the Westside Parkway project. In a parallel process, the Federal Highway Administration (FHWA) will use the EA/FEIR to prepare a Finding of No Significant Impact (FONSI) for the project.

7.0 TRANSCRIPTS FROM BOTH PUBLIC HEARINGS

CAL-TRANS DEPARTMENT PUBLIC HEARING

WESTSIDE PARKWAY

-ooo-

Bakersfield, California April 19, 2005

Reported by:

Victoria L. Richmond, CSR No. 12927

THE GAL-TRAN DEVELOPMENT PUBLIC HEARING concerning specific matters commenced at the hour of 4:00 p.m. and ended at 5:00 p.m. under the direction of Bruce Dabird at the Kern County Administrative Building, 1115 17th Street, Bakersfield, California.

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Official opening of hearing 4

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MR. HAKIMI: I'm Ahron Hakimi with Cal-Trans. I am here officially opening the public hearing at 4:00 o'clock.

MR. BAKER: Well, we have built two freeways to nowhere over the last 40 years. And 78 dumping down on 24th Street and 58 deadening at Stine Road. And one would think that we would learn after two horrendous errors not to build another freeway to nowhere. And to [illegible] building a tramway, spending 200 million dollars of Bill Thomas' hard-earned money, and not have a connect to 99 is stupid. Stupid. Good Anglo-Saxon word, means what it says.

This needs to be planned with a connection to 99 whether they pave it now -- build it now or build it in 100 years, but it needs -- there's no sense in laying concrete down and then having to tear it out later in order to create the right-of-way. The Centennial Parkway that they're planning also has no connection to 99 and that's going to be 325 million dollars. And if this is stupid, what is that?

Now, basically that's -- I looked at the

1 plans and they look wonderful, except for the fact that
2 there's no connection to 99. And to spend all that
3 money and not connect it is simply a waste of time and
4 money.
5
6 MR. BARTELL: My big objection, and I hope I
7 don't say it again on this new freeway that we're having
8 today, the Westside Parkway, that they definitely
9 underline, I'll underline it, that they need to have a
10 better choice of trees than what they picked on the
11 Truxtun Avenue Extension. It's called the Parkway, I
12 think the Truxtun Extension Parkway.
13 Those yellow trees that they planted look
14 horrible, and I've spoken to others about it here more
15 recently and emphatically doing it again today, because
16 I just came from along Truxtun Avenue and there's those
17 trees along the Truxtun Lake on the north side and the
18 south side of Truxtun Avenue, trees look dead. It's a
19 variety that doesn't belong here. While they have the
20 arborist try to tell me, Well, but it's native to the
21 area along the Kern River. And I says, Yes, it is
22 native, but that's 30 miles east of Bakersfield, not out
23 here on Truxtun Avenue or on the new cross-town freeway
24 of Westside Parkway.
25 There are trees, and I'll invite them to

1 look at my house that I grew up the same area along Kern
2 River. It's only a number mile from Kern River. These
3 trees have been planted in sand, same type of soil as
4 where the Westside Freeway would be, but it's a
5 beautiful tree. It has brilliancy in the fall. On the
6 autumn fantasia, is the -- almost looks like a liquid
7 amber, it's very beautiful. And a liquid amber is a
8 very beautiful tree and they supersede that one. And
9 then I have another tree, I can't tell you the exact
10 name, but it was the last tree to drop leaves this past
11 winter and it's the first tree that came out with a big,
12 full-size dark, dark thick green leaf.
13 It puts to shame what we did on Truxtun
14 Avenue. I mean, to me it's a disgrace to have people
15 come in on Truxtun Extension and look at these ugly,
16 ugly trees. And I'll be happy to entertain somebody to
17 come to my house, my ranch, and look at two trees that I
18 propose, granted they're over 10 years old. And if the
19 arborist thinks that these new trees that they want to
20 put along the Westside Parkway like they did on Truxtun
21 Avenue, I will raise cane like you don't even know what,
22 because it's a disgrace.
23 I'm a farmer and spent my whole life living
24 in the area, always owned property by the Kern River and
25 I know that there has to be a better looking tree. And

as their collection and their mobility has to be renewed to what we have done physically by planting some good looking trees. And I think people have, and I've had city council members, I have had others tell me how they feel, and I feel it, it looks like a field that you've been attacked by mites. And mites are the little insects, you know, that make seeds look dead. We don't need that on this new freeway.

MR. TRIMBLE: I'm all in favor of the project. It needs to -- it needs to get started just as soon as possible and completed as quickly as possible. Let's go. That's it.

MR. HAKIMI: Ahron Hakimi closing the Cal-Trans public hearing at 8:05 o'clock.

-oOo-

I, the undersigned, a Certified Shorthand Reporter of the State of California, do hereby certify:

That the foregoing proceedings were taken before me at the time and place herein set forth; that any witnesses in the foregoing proceedings, prior to testifying, were placed under oath; that a verbatim record of the proceedings was made by me using machine shorthand which was thereafter transcribed under my direction; further, that the foregoing is an accurate transcription thereof.

I further certify that I am neither financially interested in the action nor a relative or employee of any attorney or any of the parties.

IN WITNESS WHEREOF, I have subscribed my name.

KIMBERLY A. ZIMMERS CSR NO. 12029

RESPONSES TO NEPA HEARING COURT REPORTER COMMENTS – MR. BAKER

The proposed Westside Parkway would connect residential areas in west Bakersfield to the downtown central business district of Bakersfield. The Federal Highway Administration (FHWA) has stringent guidelines related to appropriate endpoints of a freeway facility that would be funded with federal funds. FHWA refers to these guidelines as "logical termini." The term logical termini means that the endpoints of a facility make sense from traffic operations and geographic considerations. The FHWA has determined that the Westside Parkway does indeed meet the federal requirements for a project to have logical termini and thus is not a "freeway to nowhere". The Westside Parkway would provide an efficient east-west transportation facility that serves local traffic patterns within Bakersfield.

It is not necessary for the Westside Parkway to connect to State Route 99 to meet the purpose and need that has been established for this project. This project would provide residents in west Bakersfield a high-speed, high-volume transportation facility to the Central Business District (CBD). The eastern terminus of the preferred alternative for the project ends at Truxtun Avenue and SR99, placing traffic on one of the major arterials feeding the CBD. Planning for future transportation facilities in Bakersfield, such as Centennial Corridor, is not anticipated to result in substantial changes to the Westside Parkway.

RESPONSES TO NEPA HEARING COURT REPORTER COMMENTS – MR. BARTELL

The City of Bakersfield intends to include extensive plantings along, and integrated with, the Westside Parkway. Decisions regarding specific plant types and tree species choices are not made during this level of project planning. During design a variety of tree species would be considered and evaluated considering different aspects such as local preferences, drought tolerance, climate requirements, maintenance requirements, safety, visual elements, etc. Your comments are noted and will be given due consideration as the design phase of the project is initiated and executed.

RESPONSES TO NEPA HEARING COURT REPORTER COMMENTS – MR. TRIMBLE

Comments noted.

URS CORPORATION – SANTA ANA

Transportation Planning Commission Meeting
4-20-06

[START TAPE 1 SIDE A]

CHAIRWOMAN LOMAS: Is there anyone in the audience wishes to comment on the adequacy of the draft EIR please come forward to the microphone and state your name.

DR. ARTHUR UNGER: Arthur Unger, Kern-Kaweah Chapter Sierra Club. Good evening. The EIR is not adequate because it doesn't tell you that we could use mass transit instead of this freeway. CEQA provides for alternatives and the Kern-Kaweah Chapter has been commenting on that alternative for 20 years.

This freeway is the wrong way and it is even wronger now than it was then. By the way we call it the Kern River Freeway because we don't want the word parkway to get mixed up with the real parkway that we have there now the Kern River Parkway.

Most of California relies on private motor vehicles and most of the United States does, but that is still no excuse for squeezing eight lanes through the center of town. If we continue to rely on private motorized vehicles, how long before these eight lanes are so

congested that we now have to build concentric freeways around town? I might mention that travel on these freeways isn't going to get any cheaper. It is up to $3.00 a gallon now gasoline is and in the long run we think it is going to go much higher so do all petroleum experts.

We are pleased that the Kern River freeway will someday accommodate potential future, multimodal transportation facilities. We urge that - well I count that. If light rail is put in, we would like it to be accompanied with parking near the freeway so that people can leave their cars and take the light rail into town.

In the unfortunate case that the freeway is built we suggest that its harm be reduced with several common sense measures. Trucks, prohibit trucks on these narrow lanes and we will have fewer fatalities and less spills into our drinking water. I didn't hear that the barriers were resistant to a truck of a certain size when it hits with a certain speed. The momentum of an 18-wheeler going at high speed is beyond my

ability to calculate. It would take a heck of a barrier to stop that.

Busses, there should be places at least every half mile where busses can pull off the parkway and be boarded. Parking near some of these busses should be provided, these bus stops should have roofed shelters. Vandals would probably prevent us from putting solar on those roofs, but I defer to the police department on that to build any roof in this valley without solar on it seems ridiculous to us.

On the light rail, grade level rail may be cheaper to build, but it takes more space and is more likely to be flooded. Please put the light rail in now before a portion of the road is widened to the planned eight lanes.

Bicycle paths are a good idea, but discourage riding on them until cars put out so little air pollution that the air near a freeway is fit to breathe. Lots of studies about how kids living near freeways get sicker than other kids and lose more lung function than other kids and this freeway sentences some Bakersfield kids children to that fate.

About the plantings, the last presenter covered that except we suggest valley oaks because they are spreading and they require less water than sycamores or cottonwoods and they are native and we like to show off what we have here.

When the oak trunks get tall they will need smaller bushes between them and I'm not botanist enough to know the little scrubby oaks that we have a little bit up the hill that you could probably put under these trees. I don't know if slopes on the side of any recessed freeway should be terraced to minimize erosion.

I understand that there is property that is going to be isolated by the freeway and I hope it will be planted with xerics and native plants. If traffic casualties and emergency personnel will not use these properties include lots of Bakersfield cactus, which by the way is beautifully in bloom around town today.

I understand from the agricultural community that they are very concerned with our use of water. I hope there is no grass around here, no sprinklers. My earliest memory of Bakersfield

is sprinklers operating in the rain. Thank you.

CHAIRWOMAN LOMAS: Thank you Dr. Unger. Anyone else wishing to comment on the adequacy of the EIR before us tonight? Seeing no one, the - Mr. Macintosh did you want to speak?

MR. MACINTOSH: Yes. I'm Roger Macintosh. I'm representing the Kern Transportation Foundation this evening. We have reviewed the environmental impact report and we have found it to be adequate. We feel that it is time to move this project forward. This thing has been in the planning process for decades now and it is time to move this thing forward to relieve some of the congestion so that the traffic that is on all those arterials that are backing up and polluting the air get relief as well. Thank you.

CHAIRWOMAN LOMAS: Thank you. Anyone else wishing to speak? Okay seeing no one in the public hearing and this item is now closed. And we prefer back to the commission. Commissioner Tkac.

COMMISSIONER TKAC: Thank you very much

Madam Chair. A few questions I had. I agree with - a few statements I want to make first. I completely agree with Mr. Macintosh, this is long overdue. It is an absolutely wonderful thing it will be a boon for this community and/or society since we never got our Freeway 58 through the way it was properly - the way it should have been planned and I really think that is a study that ought to be done by the good old Californian or somebody why that 58 never got put through. But I digress.

I guess again Dr. Unger made a point about light rail that spurred me on here and through the Chair if I may can I speak with my good friend Mr. Movius if possible? I have the high sign. Mr. Movius, and you may not be the perfect person or the only person to ask about this, but I want to shoot it at you.

Dr. Unger talks about light rail that would be wonderful if the funding were there. If Caltrans were in for it and especially if the automobile manufacturers were in for it. But my question is would there ever be enough room in this freeway to send light rail down the center

of this and/or do some subterranean light rail or under the ground just a little bit. would that ever be possible? And the reason I ask I have been to communities where they send light rail down the center of these things often times. Any provisions made for that? Any thoughts of these - along this mindset?

MR. MOVIUS: To the Chair, I would have to defer to the project manager, Ted Wright [phonetic] or our consultant to respond to that.

COMMISSIONER TKAC: Good.

MR. MOVIUS: I do want to indicate though that the purpose of this meeting is the adequacy of the document itself and I would prefer really not to get into long discussions. Thank you.

COMMISSIONER TKAC: Yeah. Okay. Well anyway those were my quick thoughts. As for the adequacy of this, I think it is tremendously adequate and far too late. I think it has been well planned it has been, I mean it has been a controversial thing for many, many moons and I can't see why there would be any of - controversy. I mean it just makes positive sense. So from that standpoint I don't have any

problems with it. I could have chosen maybe a little different route, but I think this is the best that we are going to get.

Another question again to MR. MOVIUS. What is - this is the million-dollar question. What is a reasonable timeframe for this thing to ever, ever happen? And that will help me dictate my thoughts of the adequacy or inadequacy.

MR. MOVIUS: Okay. Mr. Wright will give you a ballpark figure if I can't.

COMMISSIONER TKAC: Thank you.

MR. WRIGHT: Chairperson Lomas, Commissioner Tkac, Ted Wright, City of Bakersfield, Public Works Department. The timeline is dependent upon funding. We have had you might say a funding promise from the state, but they haven't been real good at upholding their promise. If they uphold their promise as they indicate I mean completion would be I would guess six years in that range. But if - so that is what is going to be, I think, the issue as we go forward.

Right away as I indicated it is primarily

purchase with the approval of the environmental document and there won't be anything holding back other than the funding this is funded through the state transportation improvement program. A combination of state and federal gas tax funds that are administered through the Kern Council of Governments.

So there is layers and we are like I say programmed for the funding on this, but that is not an entitlement I guess I would say. It is a - I guess I would say a promise or an intent to fund it, but we don't have the money in hand.

COMMISSIONER TKAC: It's okay. Which leads me to another question and again this helps me to determine my level of adequacy, what I think could be considered as adequate. Any of the Thomas funds coming to this at all? (5)

MR. WRIGHT: It wasn't initially planned that, but it could be - there could be some used on this to augment to my - this is to my understanding anyway.

COMMISSIONER TKAC: Okay and again off the subject as I was earlier. Is there any (6) provision or room for - could light rail ever be

stuck down the center?

MR. WRIGHT: I don't know the width of what light rail would take. There is a descent sized median in the center of the road that I would anticipate you know may be wide enough for that, but I don't know that that was [interposing].

COMMISSIONER TKAC: Good. I don't want to digress into that too much, but I want to go on the record as making that statement. So good. Thank you very much sir.

I again, I want to reiterate I think this is a wonderful, I think it should go forward as fast as we can possibly get it. I can find nothing wrong with it. I am again typically amazed at the Sierra Club finding something wrong with this. Dr. Unger made a statement about the children who live around freeways. Well I would much rather have them living around freeways than stopped up traffic where cars are sitting and idling.

But anyway those are the most of my comments. I think it has been wisely planned, wisely laid out. It is far too late, but now is the time to and so begin so Madam Chair thank

you.

CHAIRWOMAN LOMAS: Thank you. Commissioner Tragish.

COMMISSIONER TRAGISH: Thank you very much Chairwoman Lomas. I realize that this is a time to actually make a comment of things we would like to see in the environmental impact report and I would like to do that, but I need to ask a question to see if I need to formulate any comment. And the first one I would like to pursue the first question through the Chair if I may to staff is I don't understand - I don't - the EIR that we have been presented may have indicated why there is two different alternatives and the pros and cons of both of them and why there is even a decision on that, but I didn't gather that when I read it. Is, can I find out why there is that particular two alternatives and why it is still not decided and what are the advantages and disadvantages to both and how it would impact the EIR in that analysis?

CHAIRWOMAN LOMAS: I think that is a Mr. Wright question.

COMMISSIONER TRAGISH: Or is that, I'm sorry. Excuse me Chair. Or is that something that should just be a comment and something they could address later?

CHAIRWOMAN LOMAS: Well, let's filter it through MR. MOVIUS. MR. MOVIUS.

MR. MOVIUS: Staff would prefer to take that as a comment and redo the project description to make that more clear if that was not clear to you.

COMMISSIONER TRAGISH: All right excellent. My second question or comment have, as you will. I was a little bit confused on this having to do with the sections talking about cumulative impacts and references that were made to the increase or the impact of air quality as a result of the parkway.

In all due respect to Dr. Unger who I thought raised a good point to the extent that I didn't really see any types of alternative mitigations regarding the fact that there is going to be eventually eight lane parkway and then there will be accelerated vehicles and that I imagine would have an impact on air quality

and also in reading EIR it seemed to talk about the fact that it didn't really offer any mitigations and through the hot potato over to the San Joaquin Valley Air Pollution Control and to I guess to the federal regulation of air pollution as to emissions for vehicles. That is a mouthful.

But what I am trying to say is in reading this thing I could not see any alternatives or mitigations or how the air quality that would emanate the impact from this freeway would be mitigated. And in that regard that is one comment. (2)

Secondly, maybe to clarify in my mind it is my understanding that the San Joaquin Valley Air Pollution Control District doesn't have any regulatory effect over auto emissions. Is that correct MR. MOVIUS? Okay. (3)

MR. MOVIUS: I'm not sure I can give you a complete answer this evening. So I would prefer to respond to that in the final.

MR. TRAGISH: That would be fine. I think that would be my comment is that this particular section, which I think is 6.5 seems to indicate

that "hey, yes we're not in attainment regarding air quality in the South Valley. However, these regulatory agencies have stated as requirements and that will take care of it". But in reading this I'm not sure that the San Joaquin Valley Air Pollution Control District does have that kind of authority and if they don't - and if they do, to what extent and who - what other regulatory agency does. So I was a little bit foggy about that when I read that particular portion. 4

I had another question. And it maybe again to the nature of a comment and I will phrase it as an interrogatory so to speak. And that has to do with the impact on the recharge basins. And it is my understanding in reading this that they are moving - I don't know if that is the right way of saying they are moving the recharge basins, but if they are going to redirect the discharge into a different recharge basins is that correct? Is my understanding correct MR. MOVIUS or is that something that has to be answered later on? 5

CHAIRWOMAN LOMAS: I think he keeps telling

you don't ask questions.

COMMISSIONER TRAGISH: Is that what you are saying MR. MOVIUS?

CHAIRWOMAN LOMAS: Uh-huh.

MR. MOVIUS: Yes.

COMMISSIONER TRAGISH: All right. So my comment would be I would appreciate just a little bit more clarification on the issue regarding how they are going to redirect the discharge basins in its existence now. And it is mentioned in here, but I didn't get a lot of detail out of it and whether or not - and what the impacts of that would be whether it would be in the same position now with the move or whether it would be in a lesser position as far as storage and so forth. That is my comment. Thank you Chairwoman Lomas.

CHAIRWOMAN LOMAS: Thank you. It is awfully difficult to be a Commissioner and not do it like Jeopardy, form everything in the form of a question. Where to take all your questions and take off the question mark and I think that is what they are looking for. Commissioner Johnson.

6

COMMISSIONER JOHNSON: Thank you Madam Chair. My comments are no the draft EIR for the Westside Parkway are dealing with the adequacy of the document. I found the document to be fairly accurate and it is addressing the project in question and covering such areas, areas thoroughly as the mass transit alternative and the transportation management systems alternative and other alternatives as well. 1

I would say given the situation that with a population of 400,000 people in the year 2000, the City of Bakersfield is estimated to grow to the population of 800,000 residents by the year 2030. Given that, the goal of the Westside Parkway is to accommodate growth, to accommodate traffic from the west side of Bakersfield alleviating some of the traffic on the arterials. I feel that it accomplishes that goal and I further would like to say that with that happening if the Westside Parkway were not to go through at the year 2000 there was currently two intersections that were below the City of Bakersfield's standards for adequate traffic mobility. If we did nothing and we

didn't do the Westside Parkway there would be 14 intersections that would be above - that would be below the adequate standards for the City of Bakersfield. I feel that the Westside Parkway is a step in the right direction to ensuring that we have proper traffic mobility for the citizens of Bakersfield and I would - I just end my comments with that. (2)

CHAIRWOMAN LOMAS: Thank you Commissioner Johnson. Commissioner Blockley.

COMMISSIONER BLOCKLEY: Thank you Chairwoman Lomas. I have two comments regarding the adequacy of the draft EIR. The first has to do with the provision for bicycle and pedestrian access across the proposed freeway and it seems like the EIR has addressed both of those items very adequately. And the other comment has to do with something that I think the design shows very clearly, but I didn't find particular mention of and it may be worthwhile. (1)

And that is that it appears that the freeway does not divide existing neighborhoods, which is one of the factors that you often find with the new freeways is that they will take an existing (2)

neighborhood and divide it up and split it. And because of the design of this freeway and the development in the city there is very little evidence of that if any. And if a comment needs to be made about that to improve the EIR that would be terrific. Those are my two comments. Thank you.

CHAIRWOMAN LOMAS: Thank you. Okay on - this is the best EIR I have seen and the worst visually and as far as readability for us to get through it. One is there are so many graphics, which is wonderful. The roadway profile is there so we can look at is this road in certain sections going to be at grade, below grade, above grade. That was very helpful. It was very clear, very easy to understand. Tabs would be nice in sections, section tabs.

Some of the EIR's we get are tabbed and it is so much easier for us to deal with flipping from one section to the next so we wouldn't be having as many questions because we can answer them ourselves if we can readily find it.

A question to be answered later because we can't ask questions right now. The staff report

said that there will be an amendment to the specific plan line and I think that falls into I think Commissioner Tragish's comments on what is the timing of the two alignments when you get to the east end. And that is probably when we get to choosing the alignment when we will see a specific plan line. So I would like to know timing and the procedure that we go through for that. (2)

In reading some of this, a lot of this is history, and I followed this Parkway Freeway from the beginning and it takes a very long time to go through an environmental document to compile one and gather the data and Bakersfield has experienced great change in the past couple of years. And I am looking at just one area of the EIR and it talks about what would happen to Allen Road if there was nothing done. Well I would like - by the numbers that are quoted in here Jewetta and Allen aren't different. But Allen is going to have a bridge and Jewetta isn't so I wonder what do those numbers really mean. So I would like clarification on what is - is the bridge at Allen considered, I couldn't (3)

see it. There have been many, many zone changes as we have all seen. I looked at some of the maps and they said a lot of the - something was residential where I know. A lot of it is commercial now. I don't know what effect those have on the numbers. But there has been quite a bit of change and I would like to see that addressed what does that do to your document. (4)

Also too and I will admit we got this last week and I didn't read it word for word so if it is in here I apologize. If there were tabs I probably could have found it.

At the inception of this alignment this was an interstate freeway. It is no longer an interstate freeway. So I would like to know how that factors in. Because that would definitely change the numbers and are the - is that reflected in this document? (5)

And the zone, interstate, hold on. And just a side note and I tried to find some old documents that the off ramps don't look like what I remembered or what I saw. So I think Dr. Unger touched upon it where I thought at Allen

there was going to be a two - a half clover I think you call it. There is only one little leaf. So development has occurred there so what happens to the remnant parcel? I want to know how - and I think Dr. Unger asked that question that I can point to a specific spot that I think you are going to have extra ground and how will that be maintained and who is going to deal with that and I think that is it. Yes. That is it from me. Commissioner McGinnis.

COMMISSIONNER MCGINNIS: Thank you Madam Chair. I would like to start by complimenting those who have put so much work into this report. I think it has answered a lot of questions that I have had and probably of the general citizenry of Bakersfield with the look of horror in everyone's face that this parkway is going to split neighborhoods in half and this neighborhood was going and that one. I think they have done a very, very good job in doing just the opposite. It doesn't seem as though it splits any neighborhoods in half and it seems very, very efficient.

Also to the credit of the people who devised

this report and in response to Dr. Unger's comments, this report does address mass transit starting on Page 2-48. Maybe not to the degree and extent that would please some folks, but I think it does address that issue and I am personally looking forward to seeing the completed version and I think we are on the right track and I compliment you for it. Thank you very much.

CHAIRWOMAN LOMAS: Thank you. Commissioner Spencer.

COMMISSIONER SPENCER: Turn that thing on. I would like to compliment the staff also on this report and the environmental document that is being prepared. I started working on this specific plan line roughly in 1990. And I personally walked the line for the identification for this specific plan line, which was adopted before I left the county employment. And it just seems like we have been beating this thing to death and I think we should move on with it and I think that we have done enough studies to get it moving and if staff says that maybe we can get it started in

(2)

six years I think we ought to get started before then. But needless to say like I said, it was the specific plan line was adopted somewhere in the early 1990s, '91. And right now we are what 15 years in the making.

So I think we ought to move on with it. I think that we have enough studies to move on with this. Thank you.

CHAIRWOMAN LOMAS: Thank you. And I need a motion to refer comments to staff. Commissioner Tragish.

COMMISSIONER TRAGISH: Thank you Chairwoman Lomas. I would like to make a motion to refer the comments that the staff of preparation of a file EIR.

CHAIRWOMAN LOMAS: Thank you Commissioner McGinnis.

MALE VOICE: I second the motion.

CHAIRWOMAN LOMAS: Thank you. Madam Clerk this is a role call vote.

MADAM CLERK: Commissioner Blockley.

COMMISSIONNER BLOCKLEY: Yes.

MADAM CLERK: Commissioner Johnson.

COMMISSIONER JOHNSON: I

MADAM CLERK: Commissioner McGinnis.

COMMISSIONNER MCGINNIS: Yes.

MADAM CLERK: Commissioner Spencer.

COMMISSIONER SPENCER: Yes.

MADAM CLERK: COMMISSIONER TKAC.

COMMISSIONER TKAC: Yes.

MADAM CLERK: Commissioner Tragish.

COMMISSIONER TRAGISH: Yes.

MADAM CLERK: Commissioner Lomas.

COMMISSIONER LOMAS: Yes and that motion passes. On to communications MR. MOVIUS do you have anything for us?

MR. MOVIUS: No we have none. Thank you.

CHAIRWOMAN LOMAS: And any commissioners have any comments? Everybody wants to go home and see survivor. We are adjourned. Thank you for coming.

[END TAPE 1 SIDE A]

C E R T I F I C A T E

I, Gigi Lastra certify that the foregoing transcript of the Planning Commission Meeting was prepared using standard electronic transcription equipment and is a true and accurate record.

Signature Gigi Lastra

Date May 11, 2006

RESPONSES TO DR. ARTHUR UNGER, KERN-KAWEAH CHAPTER SIERRA CLUB COMMENTS

Dr. Unger read the Sierra Club's comments into the public record from a letter dated April 20, 2006, which is included in its entirety in a previous section of this appendix titled Organizations. Responses to the comment letter and Dr. Unger's comments are presented in Section 2, Organizations. The Sierra Club presented no additional substantive comments at the CEQA Public Hearing that were not already contained in the Sierra Club's written letter.

RESPONSES TO MR. MACINTOSH COMMENTS

Comments noted.

RESPONSES TO COMMISSIONER TKAC COMMENTS

1. Comments noted.

2. If a light rail transit system were to be added within the median area of the Westside Parkway as currently configured, at least one of each of the four lanes in either direction would need to be replaced by the light rail transit envelop. However, light rail transit was considered as an alternative for this transportation corridor and it was found not to adequately meet the purpose and need of the Westside Parkway project.

   As discussed in Section 2.4.4.2.2 of the EA/EIR, the western Bakersfield metropolitan area does not have a demographic profile in terms of population size and density to support light rail. Light rail is generally suitable where nonresidential concentrations of 35 to 50 million square feet are served and residential densities of nine or more dwelling units per acre exist in the line's service area. The Bakersfield metropolitan area falls short of these thresholds with only 26 million square feet of nonresidential uses in a 408 square mile area and average residential density of 0.5 dwelling unit per acre.

3. Comments noted.

4. The proposed Westside Parkway is scheduled to begin construction on the first phase of the project as early as 2007 or 2008. However, as noted at the Public Hearing, the timeline is dependent upon the availability of construction funding. At this time, there is an intended commitment on the part of the State to fund a portion of the project; however, funding challenges have delayed many projects the last few years and there is no guarantee that all of the Westside Parkway funding will be available as currently planned.

5. Thomas Roads Improvement Program funds were not initially planned to be used to fund the Westside Parkway; however, it may be possible to use some of the Thomas funds to augment the anticipated State funding for the project.

6. Please see the response to comment 2 above. Currently, there are no specific provisions for light rail in the median of the Westside Parkway.

7. Comments noted.

RESPONSES TO COMMISSIONER TRAGISH COMMENTS

1. Many environmental documents analyze a variety of differing alternatives. In the case of the Westside Parkway EA/EIR, two specific alignment alternatives were considered (along with many alternative routes and modes). The two alignment alternatives evaluated in the EA/EIR were both considered and studied to determine if they had differentiating environmental impacts between the two options at the east end. Since both alternatives were found to be technically feasible, they were both studied from an environmental standpoint to determine if one was environmentally superior to the other. As discussed in the EA/EIR, the two alternatives have nearly identical environmental impacts. Table 4.1-1 provides a summary of impacts for both build alternatives and the no build alternative. Impact areas where the two alternatives have slightly different impacts include 100-year flood elevations, conflicts with potential hazardous waste sites, very slight differences in biological impact areas, some differences in business impacts, visual impact differences and several traffic intersection differences. The EA/FEIR includes a new Section 2.5 which describes the selection of the Truxtun Option as the preferred alternative for the project. This discussion is also summarized in a new Section ES-4 of the Executive Summary to the EA/FEIR.

2. As discussed in Section 4.2.6.2 of the EA/EIR, the Clean Air Act Amendments of 1990 requires that transportation plans, programs, and projects funded by or approved under Title 23 and 49 of U.S. Code or the Federal Transit Act conform to State or Federal air quality plans. The proposed Westside Parkway falls into this category of projects.

   Transportation conformity ensures that transportation agencies and air quality planning are integrated at the metropolitan and State levels such that the State Implementation Plan (SIP) and transportation plans and programs are consistent in identifying and implementing strategies to reduce emissions from mobile sources and meet the National Ambient Air Quality Standards (NAAQS). As discussed in Section 4.2.6.2, the Westside Parkway conforms to air quality plans for the project region.

   The proposed project would not alter vehicle miles traveled in metropolitan Bakersfield but it would provide for more efficient movement of vehicles. It is estimated that average delay time for vehicles at many intersections in the vicinity of the Westside Parkway would be reduced between 8 and 20 percent by the project. Considering motor vehicle emissions are higher during low speeds and idling, it can be concluded that the improved level of service and reduction in average delay time would allow vehicles to travel at a higher speed with less idling time. The difference in vehicle speed and idling time would reduce regional vehicle emissions and improve air quality.

In addition to point sources of air emissions and traffic, the SJVAPCD has taken several measures to reduce air pollution from construction activities. As discussed in Section 4.2.6.3, substantial mitigation is proposed to minimize construction emissions from the proposed project. This includes the complete array of construction equipment emission controls and controls of fugitive dust from soil disturbance recommended by the SJVAPCD in their CEQA Guidelines. The City of Bakersfield would also comply with SJVAPCD Rule 9510 which requires the further development of construction emission controls in coordination with the SJVAPCD and monitoring of those controls or payment of an in lieu off-site mitigation fee.

3. The SJVAPCD does not have direct regulatory authority over vehicle emissions. However, they indirectly control vehicle emissions as indicated in the response to comment 2 above. All transportation plans, programs, and projects funded by or approved under Title 23 and 49 of U.S. Code or the Federal Transit Act must conform to the air quality plans developed initially by the SJVAPCD and ultimately included in state clean air plans.

4. As indicated in the response to comment 2 above, the Westside Parkway is expected to improve air quality in relation to the no project alternative. However, the purpose of the cumulative impact assessment is to evaluate impacts of the proposed project in combination with past and reasonably foreseeable future projects. As discussed in Section 6.5, on a regional basis, the implementation of any proposed development such as transportation, residential, commercial, and industrial projects identified in the Metropolitan Bakersfield General Plan would potentially result in an increase in air pollutant emissions. Although the City of Bakersfield has adopted zoning and circulation strategies to mitigate this impact, the region is in non-attainment for ozone and PM_{10}; therefore, any increase in emissions of ozone precursors and PM_{10}, no matter how small, must be considered a cumulative impact. Section 6.5 of the EA/EIR concludes that cumulative air quality impacts from potential growth identified in the Metropolitan Bakersfield General Plan would remain adverse and unavoidable; however, these impacts would not be a result of the Westside Parkway project. The project would result in a smaller contribution to air pollution than the no project alternative.

5. As discussed in Section 4.2.5.1 of the EA/EIR, 4.5 hectares (11.1 acres) of the existing Rosedale-Rio Bravo Water Storage District (RRBWSD) spreading basin area would be taken by the proposed project. Spreading basins impacted by the project are being replaced by 12 hectares (30 acres) of new basins on the east side of Allen Road (please see Figure 2.3-1c). This replacement was negotiated between the City of Bakersfield, RRBWSD and the homebuilder to the east of Allen Road. The additional recharge basins are designed to fit adjacent to the Westside Parkway and provide a buffer between the transportation facility and the new homes to the south. The existing recharge basins are not technically moving;

they are being expanded to include land east of Allen Road. The additional recharge basins would be connected to the existing basins by a large concrete box culvert that would run under the Allen Road interchange.

6. Recharge basin discharges would not be "redirected" by the proposed project. Rather, the additional recharge basins would replace the area that is physically covered by the Westside Parkway through the current RRBWSD property. The additional recharge basins would provide an area that is nearly three times the area impacted by the Westside Parkway. The additional recharge basin area soils have been tested to determine their suitability for recharge and they have been determined to be of equal or superior recharge capability. Therefore, the net effect of the additional recharge basins should be an enhancement to the RRBWSD's ability to recharge and store water in the local groundwater aquifers. This clarification has been included in Section 4.2.5.1 of the EA/FEIR.

RESPONSES TO COMMISSIONER JOHNSON COMMENTS

1. Comments noted.

2. Comments regarding traffic impacts and improvements noted.

RESPONSES TO COMMISSIONER BLOCKLEY COMMENTS

1. Comments regarding the EA/EIR's discussion of bicycle and pedestrian circulation are noted.

2. The project would not divide any existing or proposed neighborhoods along the alignment. This is due to the City of Bakersfield's long-range planning efforts such that development along the corridor has been able to progress while preserving land for the future Westside Parkway. This is discussed in Section 4.4.2.1.2 in the EA/EIR.

RESPONSES TO CHAIRPERSON LOMAS COMMENTS

1. The final EA/EIR will include section tabs.

2. A final amendment to the currently adopted Specific Plan Line would be adopted by the City of Bakersfield after determination of the preferred alternative at the east end of the project. Ultimately, the City of Bakersfield will consider all of the environmental impacts of the alternatives that were evaluated, along with other factors such as engineering features and cost, and then the City will choose a locally preferred alternative, which will be identified in the final EA/EIR. At this time the City wound adopt the amended Specific Plan Line for the project.

3. Table 1.5-5 of the EA/EIR presents average daily traffic data from the Kern Council of Governments (COG) travel demand model for the existing conditions and the future year conditions if no Westside Parkway were constructed. In the no build condition, there will be no Westside Parkway for Allen Road to connect with. Therefore, Allen Road would attract less traffic than if the Westside Parkway were constructed along with the interchange at Allen Road. Even though Allen Road is proposed to cross directly over the Kern River, Jewetta Avenue will indirectly cross the Kern River via Stockdale Highway. Liberty High School may be one destination along Jewetta Avenue that could be contributing to traffic volumes on Jewetta Avenue that would not be evident on Allen Road. The future year traffic models prepared by Kern COG do include the planned extension of Allen Road over the Kern River; therefore, this condition is factored into the EA/EIR.

4. Changes in land use can have a substantial impact on traffic volume projections throughout a transportation network. The traffic volume projections in the EA/EIR were based on the current Kern COG traffic model, which takes into account the latest available data on various land use conditions such as residential and commercial development, both existing and proposed, as defined in the Metropolitan Bakersfield General Plan and associated amendments. Therefore, the EA/EIR does take into account the changes in land use that have occurred over the years in west Bakersfield.

5. The change in classification from a previously proposed freeway (Kern River Freeway) that would extend all the way west to Interstate 5 (I-5) to the currently proposed local Westside Parkway that would extend to Heath Road is embodied in the traffic volume projections that are forecast by the Kern COG traffic model. In fact, the traffic model network was modified to delete the segment of the Kern River Freeway out to I-5 and to terminate the network linkages at Heath Road. The traffic volume projections do account for this change in project length.

   This comment refers to the proposed project as an interstate. The project is a freeway but it has never been proposed for inclusion in the interstate system.

6. Early planning studies for the Westside Parkway did consider an interchange configuration at Allen Road that included two loop ramps, one in the northeast quadrant and one in the southeast quadrant. The loop ramp in the southeast quadrant would have been for traffic exiting the Westside Parkway from the eastbound lanes to Allen Road. During preliminary engineering studies, it was determined that the loop exit ramp would have minimal traffic operational advantages over a standard diamond eastbound exit ramp. The diamond ramp, with its tighter geometry, requires less total right of way to construct and reduces the impacts on the surrounding developable land. In fact, in this particular area (southeast quadrant) land that is now not needed for the interchange loop ramp has been utilized for a portion of the additional recharge basins that have been proposed as mitigation for the loss of recharge basin area west of Allen Road. Therefore, there will be no "extra ground" to deal with after construction of the Westside Parkway.

RESPONSES TO COMMISSIONER MCGINNIS COMMENTS

1. Comments noted.

RESPONSES TO COMMISSIONER SPENCER COMMENTS

1. Comments noted.

2. Staff actually stated that the project was anticipated to begin construction as early as 2007 or 2008 and would be completed within six years if funding were available.

RESOLUTION NO. 321-06

RESOLUTION OF THE COUNCIL OF THE CITY OF BAKERSFIELD CERTIFYING IT HAS RECEIVED, REVIEWED, EVALUATED AND CONSIDERED THE INFORMATION CONTAINED IN THE FINAL ENVIRONMENTAL IMPACT REPORT FOR THE WESTSIDE PARKWAY PROJECT AND CONCURRENT SPECIFIC PLAN LINE AMENDMENT NO. 03-1163 AND CERTIFYING THAT THE FINAL ENVIRONMENTAL IMPACT REPORT HAS BEEN COMPLETED IN COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, THE STATE CEQA GUIDELINES, AND THE CITY OF BAKERSFIELD CEQA IMPLEMENTATION PROCEDURES, AND MAKING FINDINGS AND ADOPTING A MITIGATION MONITORING PLAN. (WARDS 2, 4 and 5).

WHEREAS, the Planning Commission of the City of Bakersfield in accordance with the provisions of Section 65353 of the Government Code, held a public hearing on Thursday, November 2, 2006, on the certification of the Final Environmental Impact Report (EIR) for the Westside Parkway project recommendation for and the proposed amendment to the specific plan line, notice of the time and place of hearing having been given at least ten (10) calendar days before said hearing by publication in *The Bakersfield Californian*, a local newspaper of general circulation; and

WHEREAS, preliminary engineering and environmental analysis has been conducted for a concurrent freeway improvement project and specific plan line amendment for the Westside Parkway project located between Heath Road and a point near State Route 99 (SR99) at Truxtun Avenue generally traversing an area north of the Kern River and the Cross Valley Canal, as shown in attached Exhibit "A". The Westside Parkway project is more specifically described as follows:

Westside Parkway Project:

The proposed project involves the construction a new east-west freeway referred to as the Westside Parkway. The alignment proposed for the Westside Parkway generally comprises follows the easterly portion of the Cross Valley Canal (CVC) Alignment as described in the Tier 1 Route 58 Route Adoption Environmental Impact Statement/Environmental Impact Report (EIS/EIR). The Westside Parkway is the first transportation facility project within the Route 58 corridor described in that Tier 1 EIS/EIR. The freeway would be approximately 13 kilometers (km) (8.1 miles) long and extend from approximately Heath Road to a point near SR99 at Truxtun Avenue in the City of Bakersfield and an unincorporated portion of Kern County. The project also includes the extension of Mohawk Street south from Rosedale Highway, across the Kern River, to Truxtun Avenue.

The Preferred Westside Parkway Truxtun Option alternative begins on Stockdale Highway at Heath Road (west terminus), running east and northeast generally paralleling the Cross Valley Canal and Kern River, then crosses the Kern River before connecting to Truxtun Avenue west of SR99 (east terminus). Mohawk Street would be improved and extended from Rosedale Highway south to Truxtun Avenue, interchanging with the Westside Parkway and crossing the Kern River. The Westside Parkway facility would be designed to accommodate an ultimate eight-lane freeway with potential multimodal transportation elements (i.e. mass transit). The project would cross a number of existing features such as other roadways, canals and the Kern River. In addition to connecting to Stockdale Highway and Truxtun Avenue; interchanges would be provided at Allen Road, Calloway Drive, Coffee

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Road and Mohawk Street. Grade-separations would be constructed at Jewetta Avenue and Renfro Road to carry local roadways over the Westside Parkway.

Concurrent Specific Plan Line Amendment No. 03-1163:

A concurrent specific plan line amendment requesting minor changes in a previously approved specific plan line for a portion of what was previously called the Kern River Freeway.

WHEREAS, for the above-described project, it was determined that the proposed project may have a significant effect on the environment and, therefore, an EIR was required for the project in accordance with the California Environmental Quality Act (CEQA); and

WHEREAS, the City of Bakersfield retained the professional consulting services of URS Corporation to prepare the Initial Study, EIR and related documents; and

WHEREAS, by Resolution No. 227-06 on November 2, 2006 the Planning Commission recommended certification of the Final EIR for the Westside Parkway project and Specific Plan Line Amendment No. 03-1163 and this Council has fully considered the findings made by the Planning Commission as set forth in that Resolution and as restated herein; and

WHEREAS, a Notice of Preparation was filed with the State Clearinghouse on November 27, 2002 for a 30-day review period in accordance with CEQA; and

WHEREAS, a public Scoping Hearing was held on December 17, 2002, to receive input from the public and agencies on the Initial Study and scope of the Draft EIR; and

WHEREAS, a Draft EIR was prepared and circulated to interested parties and agencies and a Notice of Availability was sent to property owners within 300 feet of the project site and all those who requested notification at the Planning Commission public hearing(s) or requested special notice to the Development Services Department on March 15, 2006, in accordance with CEQA for a 45-day review period to end on May 6, 2006, in accordance with Section 15087 of the State CEQA Guidelines; and

WHEREAS, the Public Hearing on the Draft EIR was held during the latter half of the public review period as is required by the City of Bakersfield CEQA Implementation Procedures; and

WHEREAS, the Notice of Completion was filed with the State Clearinghouse and the Draft EIR was submitted to the State Clearinghouse (SCH #2002121014) on March 14, 2006 to start the 45-day review period to end on May 6, 2006, in accordance with CEQA; and

WHEREAS, the Planning Commission of the City of Bakersfield in accordance with the provisions of the City of Bakersfield CEQA Implementation Procedures, held a Public Hearing on Thursday, April 20, 2006, on the adequacy of the Draft EIR; and

WHEREAS, on October 17, 2006, the Final EIR was completed and notice of its availability was made to interested parities and agencies; and

WHEREAS, on November 2, 2006, the Planning Commission considered the Final EIR; and

WHEREAS, based on comments received prior to and at the November 2, 2006, Planning Commission Hearing, the Planning Commission recommended certification of the Final EIR; and

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WHEREAS, the environmental record prepared in conjunction with the project includes the following:

1. The Notice of Preparation, Draft Environmental Impact Report, and Final Environmental Impact Report;

2. All staff reports, memoranda, maps, letters, minutes of meetings relating to the project;

3. All testimony, documents and evidence presented to the City by consultants working with the City relating to the project;

4. The proceedings before the Planning Commission relating to the project, the Draft EIR and the Final EIR, including testimony and documenting evidence introduced at the public hearings; and

5. Matters of common knowledge to the Planning Commission which it considered including but not limited to the following:

   a) The Metropolitan Bakersfield General Plan;
   b) The City of Bakersfield Zoning Ordinance;
   c) The City of Bakersfield Municipal Code;
   d) Other formally adopted policies and ordinances of the City of Bakersfield; and

WHEREAS, the Planning Commission adopted Resolution No. 227-06 on November 2, 2006, recommending certification of the Final EIR for the Westside Parkway project and Specific Plan Line Amendment No. 03-1163; and

WHEREAS, the Council has considered and concurs with the following findings made by the Planning Commission as set forth in Resolution No. 227-06, adopted on November 2, 2006:

1. The laws and regulations relating to the preparation and adoption of Environmental Impact Reports as set forth in CEQA, the State CEQA Guidelines, and the City of Bakersfield CEQA Implementation Procedures, have been duly followed by City staff and the Planning Commission; and

2. In accordance with State CEQA Guidelines Section 15151, the Planning Commission considered the following direction regarding "standards for adequacy" of an EIR:

   An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure; and

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3. In accordance with CEQA Guidelines Sections 15151 and 15090, the Final EIR was considered for adequacy, completeness and good faith effort at full disclosure and has been completed in compliance with CEQA; and

4. Attached Exhibit "B" containing the "Statement of Facts, Findings and Mitigation Measures" are appropriate and incorporated into the project; and

5. Attached Exhibit "C" containing the "Mitigation Monitoring and Reporting Program" is incorporated into the project; and

WHEREAS, in accordance with State CEQA Guidelines Section 15132, the Final EIR consists of the following:

1. The Draft EIR;

2. Comments and recommendations received on the Draft EIR either verbatim or in summary;

3. A list of persons, organizations and public agencies commenting on the Draft EIR;

4. The responses of the Lead Agency to significant environmental points raised in the review and consultation process; and

WHEREAS, the Final EIR for the Westside Parkway project and Specific Plan Line Amendment No. 03-1163 was prepared in accordance with State CEQA Guidelines Section 15132; and

WHEREAS, in accordance with State CEQA Guidelines Section 15090 the Lead Agency (City of Bakersfield) shall certify that:

(a) The Final EIR has been completed in compliance with CEQA; and

(b) The Final EIR was presented to the decision-making body of the Lead Agency and that the decision-making body reviewed and considered the information contained in the Final EIR prior to approving the project.

WHEREAS, in accordance with State CEQA Guidelines Sections 15151 and 15090, the Final EIR was considered for adequacy, completeness and good faith effort at full disclosure and has been completed in compliance with CEQA; and

NOW, THEREFORE, BE IT RESOLVED AND FOUND BY THE COUNCIL OF THE CITY OF BAKERSFIELD as follows:

1. The City Council hereby certifies that it has received, reviewed, evaluated and considered the information contained in the Final EIR for the Westside Parkway project and Specific Plan Line Amendment No. 03-1163.

2. The City Council hereby certifies the Final EIR for the Westside Parkway project and Specific Plan Line Amendment No. 03-1163.

3. The above recitals and findings incorporated herein by reference are true and correct and constitute the Findings of the City Council in this matter.

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4. That all required notices have been given.

5. The provisions of CEQA have been followed.

6. The City Council hereby finds the mitigation incorporated into the project avoids impacts or mitigates impacts to a less than significant level.

7. Certain environmental impacts regarding agricultural resources and transportation/traffic are considered unavoidable and cannot feasibly be mitigated to a less than significant level. Moreover, the project alternatives analyzed in the Final EIR would not feasibly mitigate the impacts.

8. Based on the absence of evidence in the record as required by Section 21082.2 of the State of California Public Resources Code (CEQA) for the purposes of documenting significant effects, it is the conclusion of the Lead Agency that this project will result in impacts that fall below the threshold of significance with regard to wildlife resources and, therefore must be granted a "de minimis" exemption in accordance with Section 711 of the State of California Fish and Game Code. Additionally the assumption of adverse effect is rebutted by the above–referenced absence of evidence in the record and the Lead Agency's decision to prepare an Environmental Impact Report for this project.

9. The Planning Division of the Development Services Department is hereby directed to file a Notice of Determination with the County Clerk of Kern County, pursuant to the provision of Section 21152 of the Public Resources Code and Section 15094 of the State CEQA Guidelines adopted pursuant thereto and a Certificate of Fee Exemption pursuant to Section 711.4 (c)(2)(B) of the State of California Department of Fish and Game Code.

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I HEREBY CERTIFY that the foregoing Resolution was passed and adopted by the Council of the City of Bakersfield at a regular meeting thereof held on December 13, 2006 by the following vote:

AYES: COUNCILMEMBER CARSON, BENHAM, WEIR, COUCH, HANSON, SULLIVAN, SCRIVNER
NOES: COUNCILMEMBER_____
ABSTAIN: COUNCILMEMBER_____
ABSENT: COUNCILMEMBER_____

Roberta Gafford for
PAMELA A. McCARTHY, CMC
CITY CLERK and Ex Officio Clerk of the
Council of the City of Bakersfield

APPROVED DEC 13 2006

HARVEY L. HALL
MAYOR of the City of Bakersfield

APPROVED as to form:
VIRGINIA GENNARO
City Attorney

By: Robert M. Sherry

EXHIBIT A Specific Plan Line Location Map
B Statement of Facts, Findings and Mitigation Measures
C Mitigation Monitoring and Reporting Program

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Exhibit A

Specific Plan Line Location Map

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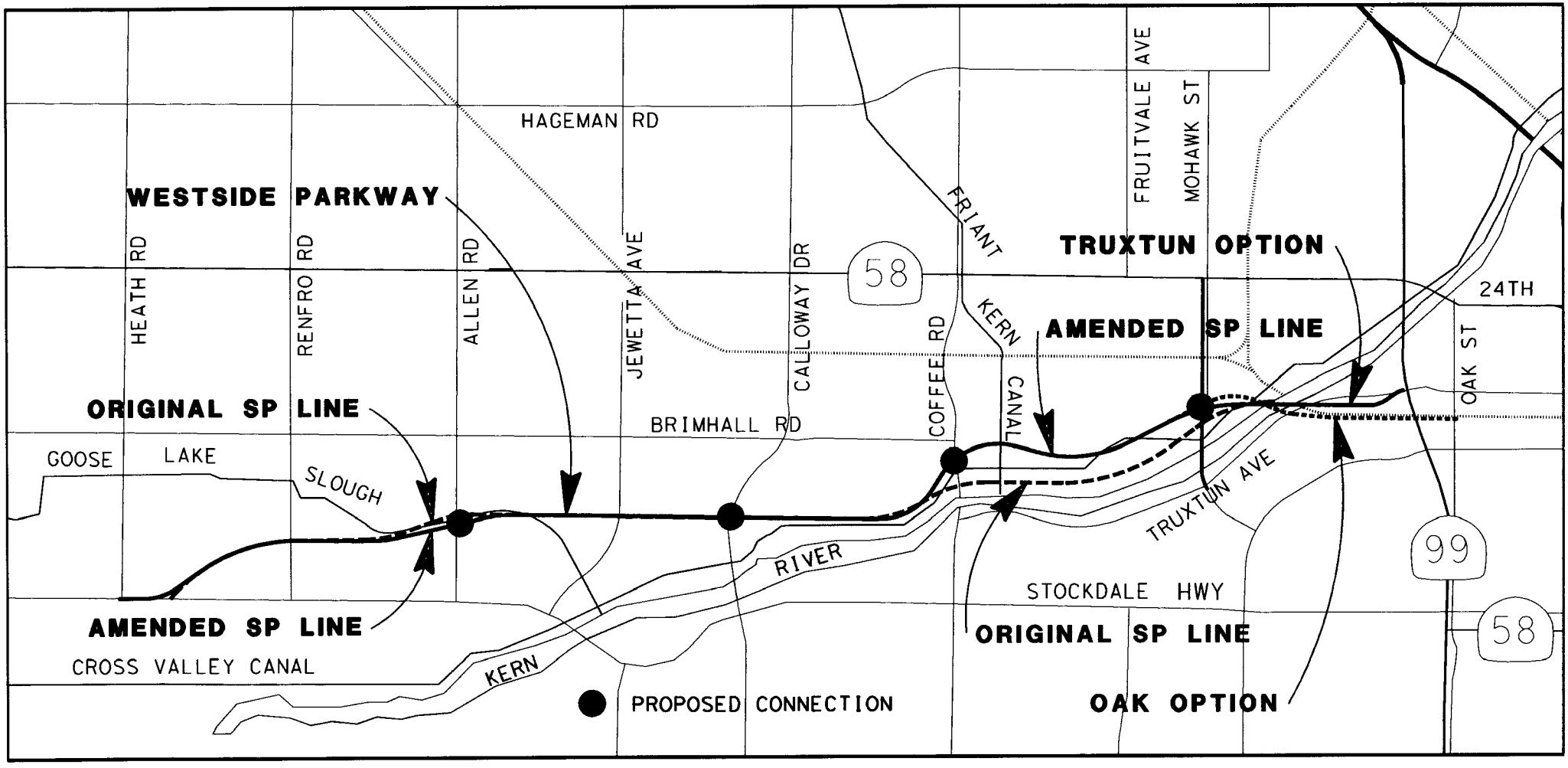

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Exhibit B

Statement of Facts, Findings and Mitigation Measures

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Findings of Fact

Introduction

To support a decision on a project for which an Environmental Impact Report (EIR) is prepared, a Lead or Responsible Agency must prepare written findings of fact for each significant environmental impact identified in the EIR. Pursuant to Section 21081 of the Public Resources Code and Section 15091 of the State CEQA Guidelines, the City of Bakersfield, as the Lead Agency, has prepared these Findings of Fact for the Westside Parkway project. These Findings of Fact must be adopted by the City Council after certification of the Environmental Assessment/Final Environmental Impact Report (EA/FEIR) and at the time of approval of the proposed project.

Section 15091 of the CEQA Guidelines provides that no public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:

- Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effects as identified in the Final EIR.
- Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- Specific economic, legal, social, technological, or other considerations, including provisions of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

After considering the Final EIR in conjunction with making findings, the Lead Agency must not approve the project if it will have a significant effect on the environment unless it finds that the benefits of the project outweigh the unavoidable adverse environmental effects. CEQA requires decision makers to balance the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve a project. Pursuant to Section 15093 of the CEQA Guidelines, a

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Statement of Overriding Considerations has been prepared for the proposed project.

Project Objectives

The objectives of the proposed project are:

- to reduce congestion in existing east-west arterials in west Bakersfield;
- to support Bakersfield's current and planned development west of SR99;
- to improve connectivity of the existing transportation network in west Bakersfield; and
- to accommodate potential future multimodal transportation facilities.

Proposed Project

The proposed project involves the construction of a new east-west freeway referred to as the Westside Parkway. The alignment proposed for the Westside Parkway generally comprises the easterly portion of the Cross Valley Canal (CVC) Alignment as described in the Tier 1 Route 58 Route Adoption Environmental Impact Statement/Environmental Impact Report (EIS/EIR). The Westside Parkway is the first transportation facility project within the Route 58 corridor described in that Tier 1 EIS/EIR. The freeway would be approximately 13 kilometers (km) (8.1 miles) long and extend from approximately Heath Road to a point near State Route (SR) 99 in the City of Bakersfield and an unincorporated portion of Kern County. The project also includes the extension of Mohawk Street south from Rosedale Highway, across the Kern River, to Truxtun Avenue.

The Preferred Westside Parkway Truxtun Option alternative begins on Stockdale Highway at Heath Road (west terminus), running east and northeast generally paralleling the Cross Valley Canal and Kern River, then crosses the Kern River before connecting to Truxtun Avenue west of SR99 (east terminus). Mohawk Street would be improved and extended from Rosedale Highway south to Truxtun Avenue, interchanging with the Westside Parkway and crossing the Kern River. The Westside Parkway facility would be designed to accommodate an ultimate eight-lane freeway with potential multimodal transportation elements. The project would cross a number of existing features such as other roadways, canals and the Kern River. In addition to connecting to Stockdale Highway and Truxtun Avenue; interchanges would be provided at Allen Road, Calloway Drive, Coffee Road, and Mohawk Street. Grade-separations would be constructed at Jewetta Avenue and Renfro Road to carry local roadways over the Westside Parkway.

Sufficient right of way is being acquired for the Westside Parkway to accommodate an ultimate eight-lane facility. The typical 64-meter (210-foot) wide right of way accommodates four 3.6-meter (12-foot) lanes in each direction; 3-meter (10-foot) left and right shoulders; plus space for landscaped side slopes,

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drainage facilities and maintenance access along both sides of the freeway. The right of way also allows for potential future conversion of inside lanes to mass transit usage such as high occupancy vehicle (HOV) lanes, bus lanes or possibly bus rapid transit systems.

While the right of way would accommodate the ultimate build-out of an eight-lane freeway, traffic projections for the year 2030 indicate that fewer lanes would be required initially. Therefore, it is planned to construct only the number of lanes necessary within each segment of the corridor to maintain acceptable levels of service on the freeway through 2030. This would be four lanes from Heath Road to Allen Road, six lanes from Allen Road to Coffee Road, eight lanes from Coffee Road to Mohawk Street and six lanes from Mohawk Street to the eastern terminus of the freeway.

The mainline right of way width of 64 meters (210 feet) acquired for the Westside Parkway is narrower than the corridor adopted in the Tier 1 Route 58 Route Adoption EIS/EIR, which was 91 meters (300 feet). The Tier 1 corridor width was selected to provide flexibility in the design of future transportation facilities. The Tier 1 corridor provided for an ultimate eight-lane freeway (depressed and elevated sections) and a median that could accommodate other transportation facilities. The Westside Parkway provides for an ultimate eight-lane freeway generally at grade, and a median that could accommodate other transportation facilities; i.e., mass transit.

Access to the freeway would be provided at Stockdale Highway, Allen Road, Calloway Drive, Coffee Road, Mohawk Street, and the eastern terminus at Truxtun Avenue. Stockdale Highway would connect with the Westside Parkway at an at-grade, three-way, signalized intersection east of Heath Road. Interchanges would be provided at Allen Road, Calloway Drive, Coffee Road, and the extended Mohawk Street. For the preferredTruxtun Option, Truxtun Avenue would be connected with the Westside Parkway at an at-grade, signalized intersection about 200 meters (650 feet) west of the Truxtun Avenue undercrossing of SR99.

The proposed project would be constructed in phases over a period of several years, as generally outlined in the following sequence:

- **Phase 1** – Mohawk Street improvements and bridge.
- **Phase 2** – Mainline between the east terminus and Coffee Road, including interchanges at Mohawk Street and Coffee Road.
- **Phase 3** – Mainline between Coffee Road and Allen Road, including interchanges at Calloway Drive and Allen Road.
- **Phase 4** – Mainline between Allen Road and the west terminus.

Construction sequencing would be similar within each particular phase of construction. Construction would generally begin with the establishment of any necessary temporary facilities or detours for local roadways. In the case of overcrossing structures proposed to carry local roads over the mainline, they would be built after any necessary temporary routes are completed.

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The proposed project would take a step toward implementing the Metropolitan Bakersfield General Plan by constructing an east-west transportation corridor consistent with that plan. Since the proposed project is included in the General Plan, it is accommodating planned growth; therefore, it would not be growth inducing. The Westside Parkway project would be consistent with the growth set forth in the Metropolitan Bakersfield General Plan.

The City of Bakersfield, Caltrans, and FHWA have prepared this joint Tier 2 EA/EIR for the proposed Westside Parkway transportation project. Construction-level impacts of the Westside Parkway project are addressed by this Tier 2 EA/EIR based upon the preferred alternative selected in the previously prepared Tier 1 studies. The specific objective under this environmental document is to support the proposed project by addressing social, economic, and environmental effects relating to construction and meet the environmental review requirements of both NEPA and CEQA. Funding that has been identified for construction of the Westside Parkway project requires completion of a Tier 2 (construction-level) environmental analysis. As a result, the City of Bakersfield, Caltrans, and FHWA have prepared this EA/EIR to satisfy those requirements.

Findings of Fact

Findings of Fact are based on information contained within the Draft and Final EA/EIR for the proposed Westside Parkway project. The EA/Draft EIR addresses the potential effects on the environment that are associated with the proposed project, and was made available for public review from March 16, 2006 through May 6, 2006. Two public hearings were held on the adequacy of the EA/DEIR on April 19 and 20, 2006. The EA/FEIR contains copies of the comments received during the public review period of the draft environmental document, and the EA/FEIR contains responses to all comments received during the public review period. This section provides a summary of the significant environmental effects of the project that are discussed in the EA/FEIR, and provides written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each Finding.

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Environmental Impacts

Summary of Impacts

The EA/FEIR indicated that potentially significant impacts to the following environmental resources would occur if the proposed project is implemented:

- Geology and Soils
- Mineral Resources
- Agricultural Resources
- Hydrology
- Hazardous Waste
- Biological Resources
- Socioeconomics
- Visual Resources
- Traffic and Transportation
- Noise
- Cultural Resources

Other environmental impacts were identified and disclosed within the EA/DEIR. Impacts that were determined to be less than significant and that would not require the implementation of mitigation include Water Quality, Air Quality, Land Use, Socioeconomics and Environmental Justice, Public Services and Utilities, and Energy.

These findings are presented and organized by environmental resource and are presented separately for environmental impacts that are potentially significant but mitigated to less than significant levels, and significant unavoidable environmental impacts. Where mitigation measures are proposed, these mitigation measures are included in a Mitigation Monitoring Plan, which has been prepared separately from these findings. In addition to the mitigation measures that have been incorporated into the proposed project, several alternatives were identified in order to attempt to reduce significant environmental impacts associated with the proposed project.

Environmental Impacts That Are Mitigated to Less Than Significant Levels

The following environmental impacts were found to be potentially significant, but could be reduced to less than significant levels through the implementation of appropriate mitigation measures.

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Geology and Soils

Impact

GEO-1. The proposed project area consists primarily of sands that exhibit low expansion potential. However, differential settlement could occur between embankments and bridge or ramp structures. Standard engineering practices, such as replacement of expansive soils with appropriate fill can be used to prevent this impact. Site-specific geotechnical investigations would be conducted during final engineering design to identify the presence of expansive soils and determine appropriate engineering treatment of those soils to prevent impacts to the facility. No known geologic hazards are present in the project area that would be expected to substantially damage the proposed Westside Parkway. Additional geotechnical studies would be performed to develop final seismic design recommendations. The project components would be designed and constructed to the seismic design requirements for ground shaking specified in the project design documents. Proper design and construction of the project components would reduce impacts from ground shaking.

Mitigation

MM GEO-1.1. Geotechnical investigations would be conducted in support of the design of a new transportation facility. The use of standard Caltrans design and construction procedures, as contained in the Highway Design Manual and Standard Specifications, would obviate any additional mitigation measures.

Finding

Changes or alterations have been incorporated into the project that avoid or substantially lessen the significant environmental effects. These changes are identified in the form of a mitigation measure as presented above. The City hereby finds that implementation of the mitigation measure above is feasible, and is therefore adopted.

Mineral Resources

Impact

MIN-1. The proposed project would require the consumption of sand and gravel to construct the facility; however, no impacts on mineral resources are anticipated due to the availability of sand and aggregate in the region. Approximately four active oil wells could potentially be displaced and access to approximately three active oil wells could potentially be affected. Oil production would continue at surrounding oil wells in the nearby vicinity. Reserves in the drainage radius of a particular well that conflicts with the transportation improvements could be irredeemably lost.

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Mitigation

MM MIN-1.1. To the extent possible, sand and gravel required for project construction would be obtained from resources other than from within the Kern River channel.

Finding

Changes or alterations have been incorporated into the project that avoid or substantially lessen the significant environmental effects. These changes are identified in the form of a mitigation measure as presented above. The City hereby finds that implementation of the mitigation measure above is feasible, and is therefore adopted.

Impact

MIN-2. There are previously plugged and abandoned wells in the vicinity of the Westside Parkway Truxtun Option. Damage to these wells during project construction could result in the release of hazardous materials.

Mitigation

MM MIN-2.1. In accordance with the Bakersfield Municipal Code, all reasonable efforts would be made to keep the Westside Parkway at least 25 meters (75 feet) from existing oil and gas wells. The City of Bakersfield would contact the active oil and gas operators listed by the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, as appropriate, and review the design plans for the Westside Parkway with these operators to ensure that buried flowlines or pipelines associated with oil field production are not damaged by project construction. The City of Bakersfield would identify the locations of previously plugged and abandoned wells prior to construction. If conflicts with these wells cannot be avoided, the Department of Conservation, Division of Oil, Gas, and Geothermal Resources in Bakersfield would be contacted to determine appropriate measures to ensure that the abandoned wells are not damaged, which may include re-abandonment. If any abandoned or unrecorded wells are uncovered or damaged during project construction, the Department of Conservation, Division of Oil, Gas and Geothermal Resources in Bakersfield would be contacted to obtain information on the requirements for and approval to perform remedial operations on these wells.

Finding

Changes or alterations have been incorporated into the project that avoid or substantially lessen the significant environmental effects. These changes are identified in the form of a mitigation measure as presented above. The City hereby finds that implementation of the mitigation measure above is feasible, and is therefore adopted.

Hydrology

Impact

HYDRO-1. The project would require bridge piers to be located within the river floodway and would have the potential to change existing storm water runoff patterns.

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Mitigation

MM HYDRO-1.1. Storm water runoff from the proposed project would be collected and stored in retention basins.

MM HYDRO-1.2. Culvert drainage facilities would be installed underneath Westside Parkway embankments, where required, in order to maintain existing storm water runoff patterns in the study area.

Finding

Changes or alterations have been incorporated into the project that avoid or substantially lessen the significant environmental effects. These changes are identified in the form of a mitigation measure as presented above. The City hereby finds that implementation of the mitigation measure above is feasible, and is therefore adopted.

Air Quality

Impact

AQ-1. Construction equipment from the proposed project would emit gaseous air pollutants such as NO_x and CO. Fugitive dust emissions would also be generated during construction as a result of land clearing, ground excavation, cut and fill operations, and the construction of the roadway and structures themselves. Construction emission control measures recommended by the San Joaquin Valley Air Pollution Control District (SJVAPCD) would be implemented, as discussed below under mitigation. In December 2005, the SJVAPCD passed Rule 9510 requiring further mitigation for construction emissions so that the District can achieve the goals set forth in its PM_{10} and Ozone Attainment Plans. The City of Bakersfield would comply with the requirements of Rule 9510.

Mitigation

MM AQ-1.1. The project must comply with regional rules, which would assist in reducing short-term air pollutant emissions. SJVAPCD Regulation VIII requires that fugitive dust be controlled with best available control measures so that the amount of such dust from man-made sources is reduced. These dust suppression techniques are summarized below. Implementation of these techniques, as required by the SJVAPCD, would reduce the fugitive dust generation (and thus the PM_{10} component). Compliance with the BACMs listed below would reduce air quality impacts:

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.
- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.

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- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emission, and at least 15 centimeters (six inches) of freeboard space from the top of the container shall be maintained.
- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. *(The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions.) (Use of blower devices is expressly forbidden).*
- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.
- Within urban areas, trackout shall be immediately removed when it extends 15 or more meters (50 or more feet) from the site and at the end of each workday.
- Any site with 150 or more vehicle trips per day shall prevent carryout and trackout.

MM AQ-1.2. The SJVAPCD further recommends the following control measures for a greater degree of PM_{10} reduction for construction projects of significant size:

- Limit traffic speeds on unpaved roads to 25 kph (15 mph).
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site;
- Install wind breaks at windward side(s) of construction areas.
- Suspend excavation and grading activity when winds exceed 30 kph (20 mph). *(Regardless of windspeed, an owner/operator must comply with Regulation VIII's 20 percent opacity limitation).*
- Limit area subject to excavation, grading, and other construction activity at any one time.

MM AQ-1.3. In an effort to further reduce emissions from construction equipment exhaust, the SJVAPCD has established the following control measures for emission sources such as heavy-duty equipment (scrapers, graders, excavators, backhoes, etc.). These measures will be implemented to the extent feasible.

- Use of alternative fueled or catalyst equipped diesel construction equipment.

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- Minimize idling time (e.g., 10-minute maximum).
- Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use.
- Replace fossil-fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set).
- Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak-hour of vehicular traffic on adjacent roadways.
- Implement activity management (e.g., rescheduling activities to reduce short-term impacts).

MM AQ-1.4. The City of Bakersfield shall submit an Air Impact Assessment to the SJVAPCD in accordance with District Rule 9510. The assessment would be used by the District in coordination with the City to identify all reasonable measures for reducing on-site emissions of NO_x and PM_{10} and to establish a monitoring and reporting schedule for that emissions reduction plan. The City may propose an off-site deferral schedule in-lieu of on-site emissions reductions.

Finding

Changes or alterations have been incorporated into the project that avoid or substantially lessen the significant environmental effects. These changes are identified in the form of a mitigation measure as presented above. The City hereby finds that implementation of the mitigation measure above is feasible, and is therefore adopted.

Hazardous Waste

Impact

HAZ-1. Initial Site Assessments (ISAs) were conducted for the project area to assess the potential for the presence of hazardous waste contamination. The ISAs estimated that approximately 50 parcels have the potential for hazardous waste within the project area. Nine parcels were identified as Rank 1 parcels, six were identified as Rank 2 parcels, and 19 were identified as Rank 3 parcels.

Mitigation

MM HAZ-1.1. The City of Bakersfield would not acquire any project right of way involving potentially contaminated properties until Preliminary Site Investigations were completed, remediation plans developed, as necessary, and plans implemented in accordance with State and Federal guidelines. Remediation plans would be implemented in cooperation with the landowner.

MM HAZ-1.2. Information would be placed in the project file to alert construction crews to the possibility of undetected soil contamination, particularly in the vicinity of the Shell Bakersfield Refinery. Hazardous materials discovered in the construction area would require special handling as hazardous waste. Contaminated soils exceeding regulatory limits would require on-site treatment or transportation to off-site processing facilities. Contaminated soil

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removed from the project area must be transported in accordance with State and Federal regulations. If odor or fumes were encountered during construction, work would be stopped for further investigation and remedial action, as appropriate. Appropriate subsurface testing and/or contingency planning should be in place to manage the unanticipated discovery of petroleum hydrocarbon contamination.

MM HAZ-1.3. Sampling to determine the presence of pesticides would be conducted where evidence of potential pesticide usage exists prior to excavation. Contaminated soils would be removed and transported offsite accompanied by a hazardous waste manifest and disposed of at a permitted Class I disposal facility.

MM HAZ-1.4. The following mitigation could be anticipation for the Rank 1, 2 or 3 parcels:

- Rank 1. Parcels with Rank 1, where remediation and assessments are being conducted under the direction and oversight of a lead regulatory agency, are not likely to incur additional remediation costs. The Responsible Party identified should be responsible for completion of site remediation prior to property transfer. The schedule for remediation and formal notice of site closure should be obtained from the property owner, if property acquisition is contemplated.
- Rank 2. Parcels with Rank 2, where observations and regulatory records may indicate the potential for contaminated conditions, but where active remediation is not apparently occurring, should be assessed with a defined scope that most likely would include a Phase I Environmental Assessment (as defined by the American Society for Testing and Materials Standard E 1527-00) and appropriate subsurface investigations (Phase II), if conditions warrant.
- Rank 3. Parcels with Rank 3 may or may not have hazardous wastes or, if present, could be relatively easily remediated. Cleanup for these parcels, if "routine and predictable", may be straightforward, with cleanup of more impacted parcels more complex, commensurate with the severity and extent of contamination.

Finding

Changes or alterations have been incorporated into the project that avoid or substantially lessen the significant environmental effects. These changes are identified in the form of a mitigation measure as presented above. The City hereby finds that implementation of the mitigation measure above is feasible, and is therefore adopted.

Terrestrial Vegetation Types and Special-status Plant and Animal Species

Impact

BIO-1. The proposed project would result in the removal of non-native and riparian habitat. The project would also have the potential to impact the San Joaquin kit fox, especially disruption of travel corridors near the Kern River in the City of Bakersfield. Potential impacts from project construction would also

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occur to special-status species including the loss of individuals and burrows of blunt-nosed leopard lizards, burrowing owls, San Joaquin antelope squirrels and Tipton kangaroo rats. Because the blunt-nosed leopard lizard is a "fully protected species" in California (CDFG Code), no take authorization can be granted by the CDFG. Take-minimization measures for the blunt-nosed leopard lizard specific to the Westside Parkway project would be developed with input from that agency. The conversion of agricultural land and disturbance in the Kern River would affect Swainson's hawk foraging habitat.

Mitigation

MM BIO-1.1. Mitigation measures for the Westside Parkway project include actions to minimize biological impacts and compensation for habitat loss. Mitigation to minimize biological impacts is described in the Terms and Conditions for the SR58 Route Adoption Biological Opinion and as amended in February 18, 2005 by USFWS an0d include:

- A worker education program to be developed and given by an approved biologist.
- Pre-activity surveys to be conducted for listed species, including blunt-nosed leopard lizard, San Joaquin kit fox, and Tipton kangaroo rat.
- Pre-activity surveys for particular sensitive species that are not Federally-listed, including burrowing owl and Swainson's hawk.
- Avoidance and disturbance-minimization measures for the burrowing owl and Swainson's hawk.
- Exclusion zones around sensitive habitat features, including kit fox dens and burrows occupied by blunt-nosed leopard lizard and Tipton kangaroo rat.
- Biological monitoring of construction work conducted in environmentally sensitive areas.
- Work in blunt-nosed leopard lizard habitat to be conducted between May 1 and September 30, to the extent possible.
- Minimization of habitat disturbance.
- Measures related to restrictions on use of pesticides, vehicle speed limits, control of trash and hazardous materials, and placement of culverts specifically for kit fox.
- A specific study of the effects of highways on kit fox was a term and condition of the Biological Opinion. A study plan was to be submitted to USFWS for review and approval. The plan was to include: (a) examination of the movement of kit fox throughout the length of the project area; (b) a method for collecting data on kit fox strikes by vehicles, as well as how such data will be used to minimize strikes in the project area; and (c) research techniques for evaluating use of culverts by kit fox. This study has not yet been undertaken.
- Construction and maintenance of appropriate barriers and devices to guide kit fox to culverts, as determined by research.

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MM BIO-1.2. Compensatory mitigation would be provided for habitat losses associated with the Westside Parkway project. Compensatory mitigation could be provided in one of two ways. The City of Bakersfield could preserve lands in perpetuity near the project at the following replacement ratios: 3:1 for riparian habitat; 3:1 for non-native grassland; and 1:1 for agricultural land. Compensatory mitigation could also be accomplished through the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP).

MM BIO-1.3. Mitigation through the MBHCP is on a fee-per-acre basis. The fee covers the cost of offsite acquisition, as well as necessary improvements to, and management of, the acquired land. No additional fees are required. Therefore, the terms and conditions in the Biological Opinion that address acquisition, improvement, enhancement, and management for compensation lands would be satisfied if compensation were completed through the MBHCP. If the MBHCP is not utilized for compensation, then the terms and conditions regarding replacement ratios would apply such that compensation requirements are met preserving lands near the project area as described in the Biological Opinion. Based on the area of disturbance for the Westside Parkway and the replacement ratios defined above, the total compensation amount for the project would be 163.1 ha (402.9 acres), including 33.5 ha (82.8 acres) of agricultural land, 128.1 ha (316.4 acres) of non-native grassland, and 1.5 ha (3.7 acres) of riparian.

MM BIO-1.4. In addition, projects using the MBHCP, must conduct a field survey for known kit fox dens. The MBHCP program maintains a list and map of all known kit fox dens within the MBHCP boundaries. Each den that could potentially be disturbed by construction activities must be examined to determine occupancy status. If the den is unoccupied, then construction can proceed. If the den is active at the time of construction, take-avoidance measures must be implemented. If it is an active non-natal den, the kit fox must be excluded from it, using agency-approved protocol. If it is an active natal den, construction activities must avoid the den by at least 150 meters (500 feet) until the pups have left the den.

MM BIO-1.5. No construction activities that may cause nest abandonment or forced fledging will be initiated within 0.4 kilometer (0.25 mile) of an active Swainson's hawk nest between March 1 and August 15. As indicated above, a pre-construction survey will be conducted for Swainson's hawk. The survey will be conducted in accordance with the methodology developed by the Swainson's Hawk Technical Advisory Committee (SHTAC 2000) within one week from the start of ground-disturbing activities that occur during the nesting season (March 1 – August 15). If an active nest is found prior to construction, the City of Bakersfield will consult with CDFG about appropriate mitigation.

MM BIO-1.6. If construction or other project-related activities that may cause nest abandonment or forced fledging of Swainson's hawk were necessary within the buffer zone of 0.4 kilometer (0.25 mile), a qualified wildlife biologist would evaluate existing conditions around the nest site to determine the minimum distance necessary to ensure that "take" of a Swainson's hawk is avoided. The minimum buffer would depend on the level of noise or construction disturbance,

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line of site between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. These factors would be analyzed in coordination with CDFG to make an appropriate decision on minimum buffer distances. In addition, the biologist would monitor the nest site weekly to ensure that the minimum buffer is maintained until the young are fledged.

MM BIO-1.7. As indicated above, pre-construction surveys for burrowing owls will be conducted in suitable habitat within 75 meters (250 feet) of the project footprint. The surveys will be conducted in accordance with the protocol provided in the Staff Report on Burrowing Owl Mitigation (CDFG 1995). Occupied burrows will not be disturbed during the nesting season (February 1 – August 31). When destruction of occupied burrows is unavoidable during the non-nesting season (September 1 – January 31), suitable burrows will be enhanced (enlarged or cleared of debris) or new burrows created (installing artificial burrows) at a ratio of 2:1 on protected lands approved by CDFG. Newly created burrows will follow guidelines established by CDFG. If owls must be moved away from the project area, passive relocation techniques (such as installing one-way doors at burrow entrances) will be used instead of trapping. At least one week will be necessary to accomplish passive relocation and allow owls to acclimate to alternative burrows. If owls must be moved away from the project area, the City of Bakersfield will work with CDFG to find an appropriate permanent relocation site.

Finding

Changes or alterations have been incorporated into the project that avoid or substantially lessen the significant environmental effects. These changes are identified in the form of a mitigation measure as presented above. The City hereby finds that implementation of the mitigation measure above is feasible, and is therefore adopted.

Waters of the U.S.

Impact

WOUS-1. The project would impact non-wetland jurisdictional waters of the U.S. and would require a Section 404 permit from the USACOE, which would be accomplished through the use of Nationwide Permits 14 (linear transportation corridors) and 33 (temporary construction access and dewatering).

Mitigation

MM WOUS-1.1. The MBHCP provides one vehicle for non-wetland waters compensatory mitigation for the project. The alignment occurs completely within the boundaries of the MBHCP (except for the Kern River crossings which occur within the primary floodplain of the Kern River) and the project is eligible to be included in the MBHCP mitigation strategy. The MBHCP Implementing Trust Group approved the inclusion of the Westside Parkway project into the MBHCP for purposes of compensating effects to habitats, including non-native grassland and agricultural land. As such, a per-acre fee could be paid to the MBHCP Implementing Trust Group. The City of Bakersfield, as project proponent, would not be responsible for acquisition and restoration of replacement habitat. The

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MBHCP Implementing Trust Group would use the funds provided to acquire habitat in perpetuity and the management entity (likely CDFG) would be responsible for restoring or enhancing the habitat as part of ongoing management.

MM WOUS-1.2. Mitigation through the MBHCP is on a fee-per-acre basis. The fee collected by the MBHCP program would be used to acquire and preserve in perpetuity nearby natural lands. Although there is no fee specific to wetlands and waters of the U.S., preserved land is likely to be a combination of habitats, which may include small amounts of wetlands (in the form of valley saltbush scrub) or waters of the U.S. (in the form of sandy wash habitat similar to the reach of the Kern River traversed by the Westside Parkway project). The amount of waters of the U.S. habitat to be impacted by the project is 0.25 hectare (0.61 acre).

Finding

Changes or alterations have been incorporated into the project that avoid or substantially lessen the significant environmental effects. These changes are identified in the form of a mitigation measure as presented above. The City hereby finds that implementation of the mitigation measure above is feasible, and is therefore adopted.

Visual Resources

Impact

VIS-1. The Westside Parkway project would be constructed in phases that would occur over an estimated four to six years. During each phase of construction, viewers would see materials, equipment, workers, and the operations of construction including trenches, excavations, and structures in the process of being built. The visual impacts of construction are unavoidable and are temporary. Motorists and pedestrians would be exposed to construction activities while passing through the construction zone. Residents of adjacent homes would be exposed to construction activities on a more continuous basis. However, the impact to residents would be reduced by existing screen walls and by the installation of proposed screening elements such as soundwalls or dense plantings during early stages of construction. These project elements could reduce exposure of adjacent residents to noise and views of construction activities. Areas disturbed by construction are recommended for landscaping.

Mitigation

MM VIS-1.1. The project would include installation of new plants. The locations and types of plantings would be in conformance with City of Bakersfield standards for types of species, set back clearance, and maintenance criteria. Vegetation would not be restored to the original character. The introduced planting would include plants that grow tall and wide to screen the ramps and abutments, a mixture of shrubs and groundcover within the loop ramps, and plants at the edges of right of way and medians where there are adequate setbacks for planting. The existing landscape is naturalistic in character and consists of naturally-occurring grasses, some riparian vegetation and a few isolated mature Fremont cottonwoods. The landscaping design would be finalized during final design. It would not have the same character as the existing

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landscape but rather would be composed of introduced plant species planted in a refined and urban landscape design.

MM VIS-1.2 The proposed project would result in the removal of 0.5 hectare (1.3 acres) of Great Valley cottonwood riparian forest where the project crosses the Kern River in two locations. The loss of this habitat would be compensated through the MBHCP or by preserving lands (replacement habitat) near the project area. Mature trees removed by the project would be replaced at the required City of Bakersfield replacement ratios of five trees for every one removed within the Kern River Parkway and at a ratio of one tree for every one removed within the rest of the project right of way.

Finding

Changes or alterations have been incorporated into the project that avoid or substantially lessen the significant environmental effects. These changes are identified in the form of a mitigation measure as presented above. The City hereby finds that implementation of the mitigation measure above is feasible, and is therefore adopted.

Traffic and Transportation

Impact

TR-1. Traffic modeling was performed for 27 existing intersections located along five key east-west arterials in west Bakersfield using year 2030 with project conditions. Of the intersections modeled, 24 are projected to operate at a LOS C or better in the a.m. peak hour, and 17 are projected to operate at a LOS C or better during the p.m. peak hour. The project would reduce the p.m. peak hour level of service at the Mohawk Street/California Avenue intersection from LOS E to LOS F.

Mitigation

MM TR-1.1. To mitigate the level of service decrease (LOS E to LOS F) at the Mohawk Street/California Avenue intersection, a grade-separated interchange would be necessary. The right of way footprint and access restrictions necessary to implement an interchange at the location of this existing intersection would require the acquisition and relocation of at least four, and as many as eight, major commercial buildings near the intersection. This is not feasible mitigation. This impact, however, is considered offset by the overall lowering of intersection delays and improved levels of service at a majority of the study intersections, as compared to the year 2030 No Action Alternative.

Finding

Changes or alterations have been incorporated into the project, which reduce significant environmental effects. However, this mitigation would not reduce impacts to less than significant levels. Specific economic, legal, social, technological, or other considerations, including provisions of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the EA/FEIR.

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Noise

Impact

NOI-1. Noise produced by construction equipment required to build this project would occur with varying intensity and duration during the various phases of construction. These construction phases are expected to occur over an estimated four to six year period. Because of the different phases of construction, no single location would experience a long-term period of construction noise. Rather, construction activities and associated noise would move along the right of way as construction proceeds. Typically, construction activities would be expected to occur on weekdays, probably between the hours of 6:00 a.m. and 9:00 p.m.

Mitigation

MM NOI-1.1. Construction noise is to some extent unavoidable and could adversely affect some nearby residents during daytime hours. However, the impact would be temporary and limited to the time of the construction in any one location. The following mitigation measures would be incorporated into the project contract specifications to minimize construction noise impacts:

- Comply with City of Bakersfield Municipal Code Chapter 9, Section 9.22.050. Construction activities taking place within 300 meters (1,000 feet) of residential dwellings shall be limited to between the hours of 6 a.m. to 9 p.m. on weekdays, and 8 a.m. to 9 p.m. on weekends.
- Place maintenance yards, batch plants, haul roads, and other construction-oriented operations in locations that would be the least disruptive to the community.
- Prior to the start of construction activities, one community meeting should be held to explain the following to area residents: the purpose and nature of the construction work; the duration of the construction activities; and the control measures that would be taken to reduce the impact of the construction work.
- Avoid pile driving at night and on weekends.
- Use portable noise screens to provide shielding for jack hammering or other similar type activities when work is close to noise-sensitive areas.
- Comply with the Caltrans Standard Specifications 7-1.011 (July 1999) "Sound Control Requirements - The contractor shall comply with all local sound control and noise level rules, regulations and ordinances which apply to any work performed pursuant to the contract. Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without said muffler".

Finding

Changes or alterations have been incorporated into the project that avoid or substantially lessen the significant environmental effects. These changes are identified in the form of a mitigation measure as presented above. The City

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hereby finds that implementation of the mitigation measure above is feasible, and is therefore adopted.

Impact

NOI-2. Traffic noise impacts, evaluated against Caltrans/FHWA noise impact criteria, were estimated for 36 representative noise-sensitive receivers. Based upon Caltrans/FHWA criteria, substantial noise increases (i.e., an increase of 12 dBA or more above existing noise levels) would occur at 20 of the 36 representative noise-sensitive receivers unless noise abatement measures are implemented. Additionally, Caltrans/FHWA Noise Abatement Criteria levels would be approached or exceeded at 29 of the 36 representative noise-sensitive receivers without noise abatement. Estimated unabated future peak-noise-hour noise levels with the proposed project (including ambient levels) range from 61 dBA L_{eq} (at locations ST-4 and ST-7) to 74 dBA L_{eq} (at location M-27).

Mitigation

MM NOI-2.1. Final decisions with regard to noise barriers and pavement type would be made upon completion of the project design and the public involvement process. With the incorporation of feasible mitigation measures described, noise impacts would be reduced to a level below the Federal Noise Abatement Criteria.

Finding

Changes or alterations have been incorporated into the project that avoid or substantially lessen the significant environmental effects. These changes are identified in the form of a mitigation measure as presented above. The City hereby finds that implementation of the mitigation measure above is feasible, and is therefore adopted.

Cultural Resources

Impact

CR-1. The proposed project would have the potential to impact archaeological resources. However, these resources are planned to be avoided during project construction, or mitigated prior to completion of the proposed project.

MM CR-1.1. Once the project area has been staked, and prior to any excavation, the project contractor should request a qualified archaeologist to determine whether any archaeological resources would be directly impacted by construction. Should the retained archaeologist find that any site would be directly impacted by construction, Caltrans policy should be followed with the purpose of determining significance of the site. Should testing take place and should the site be found to be significant, the site shall either be avoided or excavated.

MM CR-2.1. The evidence suggests that cultural resources would not be uncovered during construction, and it is not recommended that archaeological monitoring take place during construction. However, should cultural resources be encountered during construction, the project contractor should contract with a qualified archaeologist to determine if the find is potentially significant. Under

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this condition, monitoring should then take place until the project archaeologist determines that monitoring can be discontinued.

MM CR-3.1. If human remains are encountered during excavations associated with this project, all work shall halt and the county coroner shall be notified (Section 5097.98 of the Public Resources Code). The county coroner would determine whether the remains are of forensic interest. If the county coroner, with the aid of the City-approved archaeologist, determines that the remains are prehistoric, he/she would contact the NAHC. The NAHC would be responsible for designating the most likely descendant (MLD), who would be responsible for the ultimate disposition of the remains as required by Section 7050.5 of the California Health and Safety Code. The MLD would make his/her recommendations within 24 hours of their notification by the NAHC. This recommendation may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials (Section 7050.5 of the Health and Safety Code).

Finding

Changes or alterations have been incorporated into the project, which avoid or substantially lessen the significant environmental effects. These changes are identified in the form of a mitigation measure as presented above. The City hereby finds that implementation of the mitigation measure above is feasible, and is therefore adopted.

Significant Unavoidable Environmental Impacts

Agricultural Resources

Impact

AGR-1. Portions of the project alignment traverse properties that are designated as Prime Farmland by the California Department of Conservation, Farmland Mapping and Monitoring Program. The proposed project would result in the conversion of 32 hectares (79 acres) of Prime Farmland to transportation use. This conversion is consistent with the Metropolitan Bakersfield General Plan and zoning land use designations and ongoing urbanization and residential development in the project vicinity. The loss of Prime Farmland is not considered adverse.

Mitigation

MM AGR-1.1. The loss of Prime Farmland cannot be mitigated, but is consistent with the Metropolitan Bakersfield General Plan and zoning land use designations and ongoing urbanization and residential development in the project vicinity. Farmland purchased would be leased back to the property owner until construction occurs. Compensation would be provided to property owners and farm operators needed to pay for costs of on-farm investments of reorganization of their operations needed to make divided parcels into viable farm units. Should non-farmable remnant parcels be created, these parcels would be offered to the adjoining property owners and would be offered for public sale only if all reasonable efforts at sale to the adjoining property owners are unsuccessful.

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Finding

There is no feasible mitigation or alternative that could substantially lessen the significant environmental effect. Relative to the conversion of farmland to non-farmland (development uses); however, this impact is not a new impact.

Portions of the project alignment traverse properties that are designated as Prime Farmland by the California Department of Conservation, Farmland Mapping and Monitoring Program. No additional significant farmland categories (i.e., "Farmland of Statewide Importance", "Unique Farmland" or "Farmland of Local Importance") would be affected by the project. With future construction of proposed urban developments, the area planned for the Westside Parkway (i.e., a linear area) would no longer be feasible to be used as farmland.

Changes or alterations have been incorporated into the project, which reduce significant environmental effects. However, this mitigation would not reduce impacts to less than significant levels. Specific economic, legal, social, technological, or other considerations, including provisions of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the EA/FEIR.

Alternatives to the Proposed Project

Alternative 1. No Project/No Build Alternative

Under the No Action Alternative, no new high-capacity, east-west transportation facility would be constructed in the western Bakersfield metropolitan area and the highway system would primarily exist as it does today, augmented by those additional projects which are reasonably expected to be in place without completion of the project. These would include projects planned by the City of Bakersfield and County of Kern in the current RTP and short-term minor rehabilitation and reconstruction projects, for example safety and maintenance improvements.

Finding

The No Action Alternative would not satisfy the purpose and need for the project. It would not reduce congestion on existing east-west arterials or improve connectivity of the existing transportation network in west Bakersfield, it would not support Bakersfield's current and planned development west of SR99, and it would not facilitate connection of the planned transit system for the Bakersfield metropolitan area with the existing roadway network in west Bakersfield. Thus, the City has determined that this alternative is not feasible and eliminated it from consideration.

Alternative 2. Westside Parkway Oak Option Alternative

The Westside Parkway Oak Option is the same as the Westside Parkway Truxtun Option, except at the east terminus of the project. This alternative would displace approximately 18 percent of the BNSF rail yard and relocate two more commercial businesses than the Truxtun option.

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Finding

This alternative would satisfy the purpose and need for the project, and provides nearly identical transportation improvements as the preferred alternative, but at an increased cost. These increased costs are associated with the required relocation of the BNSF Bakersfield yard. Due to these higher costs, the City has determined that this alternative is not feasible, and has therefore been eliminated from consideration.

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Exhibit C

Mitigation Monitoring and Reporting Program

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WESTSIDE PARKWAY PROJECT
ENVIRONMENTAL ASSESSMENT / FINAL ENVIRONMENTAL IMPACT REPORT

MITIGATION MONITORING AND REPORTING CHECKLIST

The City of Bakersfield Program Manager for the Westside Parkway has the primary responsibility for ensuring that the mitigation program specified is implemented. However, other City staff may also be involved and may have responsibility for specific mitigation areas.

Mitigation Measure	Verification of Compliance
PRIOR TO FINAL DESIGN	
MM GEO-1.1. Site-specific geotechnical investigations would be conducted during final design to identify the presence of expansive soils and determine appropriate engineering treatment of those soils to prevent impacts to the facility.	Approved by: _____ Signature _____ Department/Title On: _____ Date
MM MIN-2.1. In accordance with the Bakersfield Municipal Code, all reasonable efforts would be made to keep the Westside Parkway at least 25 meters (75 feet) from existing oil and gas wells. The City of Bakersfield would contact the active oil and gas operators listed by the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, as appropriate, and review the design plans for the Westside Parkway with these operators to ensure that buried flowlines or pipelines associated with oil field production are not damaged by project construction. The City of Bakersfield would identify the locations of previously plugged and abandoned wells prior to construction. If conflicts with these wells cannot be avoided, the Department of Conservation, Division of Oil, Gas, and Geothermal Resources in Bakersfield would be contacted to determine appropriate measures to ensure that the abandoned wells are not damaged, which may include re-abandonment. If any abandoned or unrecorded wells are uncovered or damaged during project construction, the Department of Conservation, Division of Oil, Gas and Geothermal Resources in Bakersfield would be contacted to obtain information on the requirements for and approval to perform remedial operations on these wells.	Approved by: _____ Signature _____ Department/Title On: _____ Date

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Mitigation Measure	Verification of Compliance
MM HYDRO-1.1. Storm water runoff from the proposed project would be collected and stored in retention basins.	Approved by: _____ Signature _____ Department/Title On: _____ Date
MM HYDRO-1.2. Culvert drainage facilities would be installed underneath Westside Parkway embankments, where required, in order to maintain existing storm water runoff patterns in the study area.	Approved by: _____ Signature _____ Department/Title On: _____ Date
MM HAZ-1.1. The City of Bakersfield would not acquire any project right of way involving potentially contaminated properties until Preliminary Site Investigations were completed, remediation plans developed, as necessary, and plans implemented in accordance with State and Federal guidelines. Remediation plans would be implemented in cooperation with the landowner.	Approved by: _____ Signature _____ Department/Title On: _____ Date

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Mitigation Measure	Verification of Compliance
MM VIS-1.1. The project would include installation of new plants. The locations and types of plantings would be in conformance with City of Bakersfield standards for types of species, set back clearance, and maintenance criteria. Vegetation would not be restored to the original character. The introduced planting would include plants that grow tall and wide to screen the ramps and abutments, a mixture of shrubs and groundcover within the loop ramps, and plants at the edges of right of way and medians where there are adequate setbacks for planting. The existing landscape is naturalistic in character and consists of naturally-occurring grasses, some riparian vegetation and a few isolated mature Fremont cottonwoods. The landscaping design would be finalized during final design. It would not have the same character as the existing landscape but rather would be composed of introduced plant species planted in a refined and urban landscape design.	Approved by: _____ Signature _____ Department/Title On: _____ Date
MM NOI-2.1. Final decisions with regard to noise barriers and pavement type would be made upon completion of the project design and the public involvement process. With the incorporation of feasible mitigation measures described, noise impacts would be reduced to a level below the Federal Noise Abatement Criteria.	Approved by: _____ Signature _____ Department/Title On: _____ Date
MM CR-1.1. A qualified Archaeologist shall determine whether any archaeological resources will be directly impacted by construction. Should retained archaeologist find that any site would be directly impacted by construction, Caltrans policy should be followed with the purpose of determining the significance of the site. Should testing take place and should the site be found to be significant, the site shall either be avoided or excavated.	Approved by: _____ Signature _____ Department/Title On: _____ Date

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Mitigation Measure	Verification of Compliance
MM HAZ-1.2. Information would be placed in the project file to alert construction crews to the possibility of undetected soil contamination, particularly in the vicinity of the Shell Bakersfield Refinery. Hazardous materials discovered in the construction area would require special handling as hazardous waste. Contaminated soils exceeding regulatory limits would require on-site treatment or transportation to off-site processing facilities. Contaminated soil removed from the project area must be transported in accordance with State and Federal regulations. If odor or fumes were encountered during construction, work would be stopped for further investigation and remedial action, as appropriate. Appropriate subsurface testing and/or contingency planning should be in place to manage the unanticipated discovery of petroleum hydrocarbon contamination.	Approved by: _____ Signature _____ Department/Title On: _____ Date
MM HAZ-1.3. Sampling to determine the presence of pesticides would be conducted where evidence of potential pesticide usage exists prior to excavation. Contaminated soils would be removed and transported offsite accompanied by a hazardous waste manifest and disposed of at a permitted Class I disposal facility.	Approved by: _____ Signature _____ Department/Title On: _____ Date
MM HAZ-1.4. The following mitigation could be anticipation for the Rank 1, 2 or 3 parcels: ▪ **Rank 1.** Parcels with Rank 1, where remediation and assessments are being conducted under the direction and oversight of a lead regulatory agency, are not likely to incur additional remediation costs. The Responsible Party identified should be responsible for completion of site remediation prior to property transfer. The schedule for remediation and formal notice of site closure should be obtained from the property owner, if property acquisition is contemplated. ▪ **Rank 2.** Parcels with Rank 2, where observations and regulatory records may indicate the potential for contaminated conditions, but where active remediation is not apparently occurring, should be assessed with a defined scope that most likely would include a Phase I Environmental Assessment (as defined by the American Society for Testing and Materials Standard E 1527-00) and appropriate subsurface investigations (Phase II), if	Approved by: _____ Signature _____ Department/Title On: _____ Date

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Mitigation Measure	Verification of Compliance
conditions warrant. ▪ **Rank 3.** Parcels with Rank 3 may or may not have hazardous wastes or, if present, could be relatively easily remediated. Cleanup for these parcels, if "routine and predictable", may be straightforward, with cleanup of more impacted parcels more complex, commensurate with the severity and extent of contamination.	
MM BIO-1.1. Mitigation measures for the Westside Parkway project include actions to minimize biological impacts and compensation for habitat loss. Mitigation to minimize biological impacts is described in the Terms and Conditions for the SR58 Route Adoption Biological Opinion and include: ▪ A worker education program to be developed and given by an approved biologist; ▪ Pre-activity surveys to be conducted for listed species, including blunt-nosed leopard lizard, San Joaquin kit fox, and Tipton kangaroo rat. ▪ Pre-activity surveys for particular sensitive species that are not Federally-listed, including burrowing owl and Swainson's hawk. ▪ Avoidance and disturbance-minimization measures for the burrowing owl and Swainson's hawk. ▪ Exclusion zones around sensitive habitat features, including kit fox dens and burrows occupied by blunt-nosed leopard lizard and Tipton kangaroo rat. ▪ Biological monitoring of construction work conducted in environmentally sensitive areas. ▪ Work in blunt-nosed leopard lizard habitat to be conducted between May 1 and September	Approved by: _____ Signature _____ Department/Title On: _____ Date

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30, to the extent possible. ■ Minimization of habitat disturbance. ■ Measures related to restrictions on use of pesticides, vehicle speed limits, control of trash and hazardous materials, and placement of culverts specifically for kit fox. ■ A programmatic consultation with USFWS regarding all highway construction and maintenance projects in the San Joaquin Valley. Caltrans submitted input to USFWS on October 16, 2000; the programmatic Biological Opinion may not have been issued by USFWS. Included as a subpart of this term and condition was the requirement that a study be conducted on kit fox mortality due to roads and traffic. ■ A specific study of the effects of highways on kit fox was a term and condition of the Biological Opinion. A study plan was to be submitted to USFWS for review and approval. The plan was to include: (a) examination of the movement of kit fox throughout the length of the project area; (b) a method for collecting data on kit fox strikes by vehicles, as well as how such data will be used to minimize strikes in the project area; and (c) research techniques for evaluating use of culverts by kit fox. This study has not yet been undertaken. ■ Construction and maintenance of appropriate barriers and devices to guide kit fox to culverts, as determined by research.	
MM BIO-1.2. Compensatory mitigation would be provided for habitat losses associated with the Westside Parkway project. Compensatory mitigation could be provided in one of two ways. The City of Bakersfield could preserve lands in perpetuity near the project at the following replacement ratios: 3:1 for riparian habitat; 3:1 for non-native grassland; and 1:1 for agricultural land. Compensatory mitigation could also be accomplished through the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP).	Approved by: _____ Signature _____ Department/Title On: _____ Date

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MM BIO-1.3. Mitigation through the MBHCP is on a fee-per-acre basis. The fee covers the cost of offsite acquisition, as well as necessary improvements to, and management of, the acquired land. No additional fees are required. Therefore, the terms and conditions in the Biological Opinion that address acquisition, improvement, enhancement, and management for compensation lands would be satisfied if compensation were completed through the MBHCP. If the MBHCP is not utilized for compensation, then the terms and conditions regarding replacement ratios would apply such that compensation requirements are met preserving lands near the project area as described in the Biological Opinion. Based on the area of disturbance for the Westside Parkway and the replacement ratios defined, the total compensation amount for the project would be 163.1 ha (402.9 acres), including 33.5 ha (82.8 acres) of agricultural land, 128.1 ha (316.4 acres) of non-native grassland, and 1.5 ha (3.7 acres) of riparian.	Approved by: _____ Signature _____ Department/Title On: _____ Date
MM BIO-1.4. In addition, projects using the MBHCP, must conduct a field survey for known kit fox dens. The MBHCP program maintains a list and map of all known kit fox dens within the MBHCP boundaries. Each den that could potentially be disturbed by construction activities must be examined to determine occupancy status. If the den is unoccupied, then construction can proceed. If the den is active at the time of construction, take-avoidance measures must be implemented. If it is an active non-natal den, the kit fox must be excluded from it, using agency-approved protocol. If it is an active natal den, construction activities must avoid the den by at least 150 meters (500 feet) until the pups have left the den.	Approved by: _____ Signature _____ Department/Title On: _____ Date
MM BIO-1.5. No construction activities that may cause nest abandonment or forced fledging will be initiated within 0.4 kilometer (0.25 mile) of an active Swainson's hawk nest between March 1 and August 15. As indicated above, a pre-construction survey will be conducted for Swainson's hawk. The survey will be conducted in accordance with the methodology developed by the Swainson's Hawk Technical Advisory Committee (SHTAC 2000) within one week from the start of ground-disturbing activities that occur during the nesting season (March 1 – August 15). If an active nest is found prior to construction, the City of Bakersfield will consult with CDFG about appropriate mitigation.	Approved by: _____ Signature _____ Department/Title On: _____ Date

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MM BIO-1.6. If construction or other project-related activities that may cause nest abandonment or forced fledging of Swainson's hawk were necessary within the buffer zone of 0.4 kilometer (0.25 mile), a qualified wildlife biologist would evaluate existing conditions around the nest site to determine the minimum distance necessary to ensure that "take" of a Swainson's hawk is avoided. The minimum buffer would depend on the level of noise or construction disturbance, line of site between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. These factors would be analyzed in coordination with CDFG to make an appropriate decision on minimum buffer distances. In addition, the biologist would monitor the nest site weekly to ensure that the minimum buffer is maintained until the young are fledged.	Approved by: _____ Signature _____ Department/Title On: _____ Date
MM BIO-1.7. As indicated above, pre-construction surveys for burrowing owls will be conducted in suitable habitat within 75 meters (250 feet) of the project footprint. The surveys will be conducted in accordance with the protocol provided in the Staff Report on Burrowing Owl Mitigation (CDFG 1995). Occupied burrows will not be disturbed during the nesting season (February 1 – August 31). When destruction of occupied burrows is unavoidable during the non-nesting season (September 1 – January 31), suitable burrows will be enhanced (enlarged or cleared of debris) or new burrows created (installing artificial burrows) at a ratio of 2:1 on protected lands approved by CDFG. Newly created burrows will follow guidelines established by CDFG. If owls must be moved away from the project area, passive relocation techniques (such as installing one-way doors at burrow entrances) will be used instead of trapping. At least one week will be necessary to accomplish passive relocation and allow owls to acclimate to alternative burrows. If owls must be moved away from the project area, the City of Bakersfield will work with CDFG to find an appropriate permanent relocation site.	Approved by: _____ Signature _____ Department/Title On: _____ Date
MM AGR-1.1. The loss of Prime Farmland cannot be mitigated, but is consistent with the Metropolitan Bakersfield General Plan and zoning land use designations and ongoing urbanization and residential development in the project vicinity. Farmland purchased would be leased back to the property owner until construction occurs. Compensation would be provided to property owners and farm operators needed to pay for costs of on-farm investments of reorganization of their operations needed to make divided parcels into viable farm units. Should non-farmable remnant parcels be created, these parcels would be offered to the adjoining property owners and would be offered for public sale only if all reasonable efforts at sale to the adjoining property owners are unsuccessful.	Approved by: _____ Signature _____ Department/Title On: _____ Date

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MM NOI-1.1. Prior to the start of construction activities, one community meeting should be held to explain the following to area residents: the purpose and nature of the construction work; the duration of the construction activities; and the control measures that would be taken to reduce the impact of the construction work.	Approved by: _____ Signature _____ Department/Title On: _____ Date
MM WOUS-1.1. The MBHCP provides one vehicle for non-wetland waters compensatory mitigation for the project. The alignment occurs completely within the boundaries of the MBHCP (except for the Kern River crossings which occur within the primary floodplain of the Kern River) and the project is eligible to be included in the MBHCP mitigation strategy (S. Strait, personal communication, 2003). The MBHCP Implementing Trust Group approved the inclusion of the Westside Parkway project into the MBHCP for purposes of compensating effects to habitats, including non-native grassland and agricultural land. As such, a per-acre fee could be paid to the MBHCP Implementing Trust Group. The City of Bakersfield, as project proponent, would not be responsible for acquisition and restoration of replacement habitat. The MBHCP Implementing Trust Group would use the funds provided to acquire habitat in perpetuity and the management entity (likely CDFG) would be responsible for restoring or enhancing the habitat as part of ongoing management.	Approved by: _____ Signature _____ Department/Title On: _____ Date
MM WOUS-1.2. Mitigation through the MBHCP is on a fee-per-acre basis. The fee collected by the MBHCP program would be used to acquire and preserve in perpetuity nearby natural lands. Although there is no fee specific to wetlands and waters of the U.S., preserved land is likely to be a combination of habitats, which may include small amounts of wetlands (in the form of valley saltbush scrub) or waters of the U.S. (in the form of sandy wash habitat similar to the reach of the Kern River traversed by the Westside Parkway project). The amount of waters of the U.S. habitat to be impacted by the project is small [0.25 hectare (0.61 acre)].	Approved by: _____ Signature _____ Department/Title On: _____ Date

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MM VIS-1.2. The proposed project would result in the removal of 0.5 hectare (1.3 acres) of Great Valley cottonwood riparian forest where the project crosses the Kern River in two locations. The loss of this habitat would be compensated through the MBHCP or by preserving lands (replacement habitat) near the project area. Mature trees removed by the project would be replaced at the required City of Bakersfield replacement ratios of five trees for every one removed within the Kern River Parkway and at a ratio of one tree for every one removed within the rest of the project right of way.	Approved by: _____ Signature _____ Department/Title On: _____ Date
MM SOCIO-1.1. Any relocation or property impact mitigation would adhere to Caltrans' Relocation Assistance Program. That program is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and Title 49 Code of Federal Regulations, Part 24. The purpose of the Relocation Assistance Program is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. All relocation services and benefits are administered without regard to race, color, national origin, or sex in compliance with Title VI of the Civil Rights Act (42 U.S. Code 2000d, et seq.).	Approved by: _____ Signature _____ Department/Title On: _____ Date
MM MIN-1.1. To the extent possible, sand and gravel for project construction would be obtained from resources other than from within the Kern River channel.	Approved by: _____ Signature _____ Department/Title On: _____ Date

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MM WQ-1.1. Construction and operation of the Westside Parkway project would comply with National Pollutant Discharge Elimination System (NPDES) permit requirements	Approved by: _____ Signature _____ Department/Title On: _____ Date
MM AQ-1.1. The project must comply with regional rules, which would assist in reducing short-term air pollutant emissions. SJVAPCD Regulation VIII requires that fugitive dust be controlled with best available control measures so that the amount of such dust from man-made sources is reduced. These dust suppression techniques are summarized below. Implementation of these techniques, as required by the SJVAPCD, would reduce the fugitive dust generation (and thus the PM_{10} component). Compliance with the BACMs listed below would reduce air quality impacts: ■ All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover. ■ All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant. ■ All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking. ■ When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emission, and at least 15 centimeters (six inches) of freeboard space from the top of the container shall be maintained. ■ All operations shall limit or expeditiously remove the accumulation of mud or dirt from	Approved by: _____ Signature _____ Department/Title On: _____ Date

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adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions.) (Use of blower devices is expressly forbidden). ▪ Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant. ▪ Within urban areas, trackout shall be immediately removed when it extends 15 or more meters (50 or more feet) from the site and at the end of each workday. ▪ Any site with 150 or more vehicle trips per day shall prevent carryout and trackout.	
MM AQ-1.2. The SJVAPCD further recommends the following control measures for a greater degree of PM_{10} reduction for construction projects of significant size: ▪ Limit traffic speeds on unpaved roads to 25 kph (15 mph). ▪ Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent. ▪ Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site; ▪ Install wind breaks at windward side(s) of construction areas. ▪ Suspend excavation and grading activity when winds exceed 30 kph (20 mph). (Regardless of windspeed, an owner/operator must comply with Regulation VIII's 20 percent opacity	Approved by: _____ Signature _____ Department/Title On: _____ Date

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limitation). ■ Limit area subject to excavation, grading, and other construction activity at any one time.	
MM AQ-1.3. In an effort to further reduce emissions from construction equipment exhaust, the SJVAPCD has established the following control measures for emission sources such as heavy-duty equipment (scrapers, graders, excavators, backhoes, etc.). These measures will be implemented to the extent feasible. ■ Use of alternative fueled or catalyst equipped diesel construction equipment. ■ Minimize idling time (e.g., 10-minute maximum). ■ Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use. ■ Replace fossil-fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set). ■ Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak-hour of vehicular traffic on adjacent roadways. ■ Implement activity management (e.g., rescheduling activities to reduce short-term impacts). ■ Mitigation measures as stated in SJVAPCD Regulation VIII are required to be implemented during construction of the proposed project in order to minimize impacts.	Approved by: _____ Signature _____ Department/Title On: _____ Date

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MM AQ-1.4. The City of Bakersfield would submit an Air Impact Assessment to the SJVAPCD in accordance with District Rule 9510. The assessment would be used by the District in coordination with the City to identify all reasonable measures for reducing on-site emissions of NOx and PM10 and to establish a monitoring and reporting schedule for that emissions reduction plan. The City may propose an off-site deferral schedule in-lieu of on-site emissions reductions.	Approved by: _____ Signature _____ Department/Title On: _____ Date
MM NOI-1.1. Construction noise is to some extent unavoidable and could adversely affect some nearby residents during daytime hours. However, the impact would be temporary and limited to the time of construction in any one location. The following mitigation measures would be incorporated into the project contract specifications to minimize construction noise impacts: ■ Comply with City of Bakersfield Municipal Code Chapter 9, Section 9.22.050. Construction activities taking place within 300 meters (1,000 feet) of residential dwellings shall be limited to between the hours of 6 a.m. to 9 p.m. on weekdays, and 8 a.m. to 9 p.m. on weekends. ■ Place maintenance yards, batch plants, haul roads, and other construction-oriented operations in locations that would be the least disruptive to the community. ■ Avoid pile driving at night and on weekends. ■ Use portable noise screens to provide shielding for jack hammering or other similar type activities when work is close to noise-sensitive areas. ■ Comply with the Caltrans Standard Specifications 7-1.011 (July 1999) "Sound Control Requirements - The contractor shall comply with all local sound control and noise level rules, regulations and ordinances which apply to any work performed pursuant to the contract. Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without said muffler".	Approved by: _____ Signature _____ Department/Title On: _____ Date

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MM CR-2.1. The evidence suggests that cultural resources would not be uncovered during construction, and it is not recommended that archaeological monitoring take place during construction. However, should cultural resources be encountered during construction, the project contractor should contract with a qualified archaeologist to determine if the find is potentially significant. Under this condition, monitoring should then take place until the project archaeologist determines that monitoring can be discontinued.	Approved by: _____ Signature _____ Department/Title On: _____ Date
MM CR-3.1. If human remains are encountered during excavations associated with this project, all work shall halt and the county coroner shall be notified (Section 5097.98 of the Public Resources Code). The county coroner would determine whether the remains are of forensic interest. If the county coroner, with the aid of the City-approved archaeologist, determines that the remains are prehistoric, he/she would contact the NAHC. The NAHC would be responsible for designating the most likely descendant (MLD), who would be responsible for the ultimate disposition of the remains as required by Section 7050.5 of the California Health and Safety Code. The MLD would make his/her recommendations within 24 hours of their notification by the NAHC. This recommendation may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials (Section 7050.5 of the Health and Safety Code).	Approved by: _____ Signature _____ Department/Title On: _____ Date
MM VIS-3.1. Where safety lighting is needed on the Westside Parkway, directional lighting and deflector shields would be used where the freeway passes through residential areas. This would mitigate the potential for excessive light and glare in these areas.	Approved by: _____ Signature _____ Department/Title On: _____ Date

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EXHIBIT D

Statement of Overriding Considerations

Westside Parkway Project

Pursuant to Section 15093 of the CEQA Guidelines, the City must balance the benefits of the proposed project against unavoidable environmental risks in determining whether to approve the project.

The proposed project would result in significant unavoidable impacts to agricultural resources and transportation/traffic. Findings of Fact have been developed, which provide that mitigation measures and/or alternatives to the proposed project that would substantially reduce or avoid these significant unavoidable impacts are infeasible.

The proposed project offers several benefits that outweigh the unavoidable adverse environmental effects of the project. These benefits are described in detail in the EA/FEIR, and include the following:

- The proposed project would reduce congestion on existing east-west arterials in west Bakersfield;
- The proposed project supports Bakersfield's current and planned development west of SR99;
- The proposed project will improve connectivity of the existing transportation network in west Bakersfield;
- The proposed project will accommodate potential future multimodal transportation facilities;
- The proposed project will provide an alignment for future multimodal transportation facilities that reduces congestion on the transportation network in the western Bakersfield metropolitan area;
- The proposed project contributes to overall protection for sensitive species through the payment of MBHCP mitigation fees;
- The proposed project would generate substantial construction employment benefits in the Bakersfield metropolitan area;
- The project would provide substantial monetary savings for the region from improvements in operating efficiency, mobility, and safety of vehicular travel. Improvements in operating efficiency include such user benefits as savings in fuel, oil, tires, repairs, and maintenance; mobility improvements that result in time savings; and safety savings that include reduction in property damage and fatal and injury accidents. These savings would benefit commuters, emergency service providers, and businesses;

- The project would provide improved access to downtown Bakersfield by shifting traffic from existing east-west arterials, such as Rosedale Highway, onto the Westside Parkway; and

- The proposed project is consistent with the Land Use and Circulation Elements of the Metropolitan Bakersfield General Plan.

The City hereby finds that the benefits of the proposed project are considered to outweigh the unavoidable adverse environmental effects to agricultural resources and traffic/transportation, which are therefore considered acceptable.