

Addendum to the Air Quality Study Report (October 2015)

Centennial Corridor Project

Project ID: 060000484

SCH ID: 2008091102

PURPOSE OF THE TECHNICAL MEMORANDUM

This Addendum to the Air Quality Study Report was prepared after circulation of the Draft Environmental Impact Report/Environmental Impact Statement (DEIR/EIS) for the Centennial Corridor Project (May 2014) to address changes in, or pertaining to, any of the following: comments received; design refinements; regulatory setting; affected environment; environmental consequences; or avoidance, minimization, and mitigation measures.

CHANGE IN PROJECT DESIGN

Many public comments on the DEIR/EIS requested that design modifications be incorporated into the proposed project. The following refinements provide benefits or otherwise improve the project, and they do not result in additional or new impacts not previously described and analyzed in the DEIR/EIS.

Kaiser Realignment

During the public circulation period of the draft environmental document, Caltrans and the city of Bakersfield received a letter on behalf of Kaiser Foundation Health Plan, Inc. (Kaiser), dated July 7, 2014, describing various concerns in regard to the proposed Centennial Corridor Project. Due to these concerns, preliminary design plans for Alternative B were modified to avoid direct impacts to the Kaiser Health Care Center. The preliminary design revisions that would avoid impacts on the Kaiser medical offices are depicted in Attachment 1 of this Addendum. These revisions would significantly increase the distances between the Kaiser facility and the project improvements, creating an 80-foot buffer between the medical facility's parking lot and the proposed alignment. No obstructions associated with the Centennial Corridor Project will block Kaiser Health Care Center driveways, and no modifications would be made to change the configuration of the existing driveways. In addition, the modified design will not require property or temporary construction easements on Kaiser's property.

Additionally, as a response to Kaiser's comments on the draft environmental document, additional noise mitigation measures may be incorporated by Caltrans and the construction contractor if they are deemed practicable and reasonable. These additional construction abatement measures include the use of temporary noise barriers, outdoor sound curtains or sound

curtain noise barriers. These measures typically reduce equipment noise levels from 15 to 22 dBA.

Carrier Canal Crossing

To address concerns regarding bicycle and pedestrian connectivity, preliminary design plans for Alternative B were revised to include a multi-use pathway that will run parallel to the project alignment connecting bicyclists and pedestrians from California Avenue to Commerce Drive. The decision to incorporate a multi-use pathway to accommodate a bicycle and pedestrian connection was made in response to public comments requesting a bicycle connection spanning over the Carrier Canal. As part of this change, an approximately 100-foot-long-bridge over the Carrier Canal would be constructed to accommodate bicycles and pedestrians. The bridge would be of sufficient width to accommodate two-way pedestrian and bicycle traffic. The preliminary design layout for the Carrier Canal Crossing is included in Attachment 2 of this Addendum. The proposed modification is located within the study area analyzed in the draft environmental document and supporting technical studies. This multi-use pathway and bridge structure will provide direct connectivity to the Kern River Parkway Bike Trail for its users.

Pacific Gas and Electric Towers

The Preferred Alternative B alignment originally proposed to relocate six Pacific Gas and Electric transmission towers within the general area of Truxtun Avenue/Westside Parkway; however, after the circulation of the draft environmental document the relocation of these towers was identified as a project activity in the previously approved *Final Westside Parkway Environmental Assessment/Environmental Impact Report* (2007) to accommodate the construction of the Westside Parkway Project. The relocation of the Pacific Gas and Electric transmission towers were not relocated to their ultimate location as stated in the city of Bakersfield's General Plan. Because of this change to the project, impacts to utilities would be reduced. These tower relocations would be coordinated with Pacific Gas and Electric in compliance with applicable Public Utilities Commission regulations.

CHANGE IN REGULATORY SETTING

Ambient Air Quality Standards

Table 2-1, Ambient Air Quality Standards (published by the California Air Resources Board, June 7, 2012), has been replaced with a newer version dated June 4, 2013, as shown in Attachment 3 of this Addendum.

CHANGE IN AFFECTED ENVIRONMENT

Attainment Status

The attainment status of ozone (O₃) (1-hour federal standard) has been updated. The San Joaquin Air Basin was classified as a serious nonattainment area for the Federal 8-hour O₃ standard. On May 5, 2010 the U.S. Environmental Protection Agency approved the Basin's reclassification to extreme nonattainment. The San Joaquin Valley Air Pollution Control District has implemented an Ozone Attainment Demonstration Plan since 2004. The 2004 Ozone Plan, which addressed the 1-hour O₃ standard, was withdrawn by California in late 2012. In 2013, the State adopted a revised 1-hour O₃ plan that demonstrates that the area will attain the 1-hour O₃ standard by 2017. The San Joaquin Valley Air Pollution Control District implemented the current 2007 Ozone Plan for 8-hour O₃ on April 30, 2007.

Existing Local Ambient Air Quality

Table 3-1, Criteria Air Pollutants Data Summary (California Avenue Monitoring Station), has been updated to include additional air quality monitoring data for 2012 and 2013, as presented in Attachment 4 of this Addendum. The discussion in Section 3.2.1, Criteria Pollutants, was revised to include the following data:

Table 3-1 presents ambient air quality data, which was recorded at this station, for the past 7 years. Table 3-1 shows the following trend in local ambient criteria pollutant concentrations:

- Ozone – The maximum 1-hour ozone concentration recorded during the 2007 to 2014 period was 0.127 ppm [parts per million]. During this period, the California standard of 0.09 ppm was exceeded between 3 to 16 times annually, with the highest number of exceedances recorded in 2009. The 8-hour O₃ standards, for both national and state standards were exceeded every year and the highest number of exceedances occurred in 2012, with the national standard exceeded 56 times and the state standard exceeded 83 times.
- Respirable Particulate Matter (PM₁₀) – During the recorded period of 2007 to 2014, the maximum 24-hour monitored data were below the National Ambient Air Quality Standards, with the exception of 2008 and 2014. In 2008 and 2014, the highest 24-hour concentration recorded was 196 µg/m³ [micrograms per cubic meter] and 430 µg/m³, respectively. In 2008, the exceedance was recorded only once; the second highest measured concentration in 2008 was 128 µg/m³, which is below the standard level. In 2014, the exceedance was recorded two times. The second-highest measured concentration in 2014 was 180 µg/m³, which still exceeded the standard level. The

third highest measured concentration in 2014 was 122 $\mu\text{g}/\text{m}^3$, which is below the standard level.

- Fine Particulate Matter ($\text{PM}_{2.5}$) – During the recorded period of 2007 to 2014, the 3-year average of 98th percentile of 24-hour concentrations exceeded the 2006 National Ambient Air Quality Standards every year. The annual mean $\text{PM}_{2.5}$ concentration exceeded the national ambient air quality standard every year except in 2010 and 2011. Although the recorded data do not show a consistent trend, they do indicate an overall declining trend for ambient $\text{PM}_{2.5}$ concentrations in the project area.

CHANGE IN ENVIRONMENTAL CONSEQUENCES

Project-Level Conformity

Particulate Matter ($\text{PM}_{2.5}$ and PM_{10}) Emissions

Table 4-5, Future Particulate Matter (PM_{10} and $\text{PM}_{2.5}$) Emission Reductions by Project Alternatives, has been revised to include the total vehicle miles traveled (VMT) data per the request of the U.S. Environmental Protection Agency. In addition, Table 4-6, PM_{10} Re-entrained Road Dust by Project Alternatives (Year 2038), has been updated to include the VMT data and to use the emission factors published in the U.S. Environmental Project Agency's AP-42 document dated January 2011. These tables are included in this Addendum as Attachment 5.

Conformity Determination

The following text has been added to the Conformity Subsection.

In May 2012, the San Joaquin Valley Interagency Consultation Group met to discuss the Centennial Corridor project, a project of air quality concern. Through the interagency consultation process it was determined that a qualitative hot spot analysis was the appropriate level of analysis.

Based on the qualitative analysis, the proposed Centennial Corridor Project meets the $\text{PM}_{2.5}$ and PM_{10} project-level conformity requirements and will not cause or contribute to any new violations of PM standards in any area; increase the frequency or severity of any existing violation, delay timely attainment of PM reductions or milestones.

The project as a whole will improve particulate matter emissions within the project limits as shown in the particulate matter qualitative analysis. However, residents located along the new alignment portion of SR 58 will experience an increase in traffic within the vicinity of their neighborhood. Total particulate matter emissions for horizon year 2038 for the Preferred Alternative B have been calculated to be approximately 8 tons. Construction of the

Preferred Alternative B alignment would shift traffic towards the new alignment and would result in a decrease in particulate matter at local arterials within this same segment area, including major arterials such as: Rosedale Highway (decrease of 2.2 tons), Stockdale Highway (decrease of 2.7 tons), and Truxtun Avenue (decrease of 1.5 tons). There are also local minor roads that will experience a decrease in particulate matter emissions due to traffic shifting to the new freeway alignment.

Additionally, Caltrans has entered into a Voluntary Emission Reduction Agreement with the San Joaquin Valley Air Pollution Control District to provide betterments to local air quality within the project area. This agreement will offset any localized particulate matter impacts due to project emissions. See Section “Avoidance, Minimization, and/or Mitigation Measures,” for more details on the Voluntary Emission Reduction Agreement.

Construction Conformity

Construction activities will not last more than 5 years at one general location, so construction-related emissions do not need to be included in regional and project-level conformity analysis (40 *Code of Federal Regulations* 93.123(c)(5)).

CHANGE TO AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

Since publication of the DEIR/EIS in May 2014, Caltrans has entered into a Voluntary Emission Reduction Agreement with the San Joaquin Valley Air Pollution Control District to provide betterments to local air quality within the project area, as shown in Attachment 6 of this Addendum.

The San Joaquin Valley Air Pollution Control District’s Voluntary Emissions Reduction Program is a grant/incentive program. The \$1.5 million dollars provided by Caltrans to the San Joaquin Valley Air Pollution Control District to fund this Voluntary Emission Reduction Agreement will be used to award funds to businesses, residents, and municipalities to generate real and quantifiable reductions in emissions for the Bakersfield area and the Central Valley. Participation by Bakersfield residents is voluntary and is available to residents living within a certain distance of the project alignment. The following are some examples of how these funds will be utilized to reduce air pollution:

- Grants to residents to purchase cleaner vehicles through the San Joaquin Valley Air Pollution Control District’s Drive Clean Rebate Program.
- Grants to residents through the San Joaquin Valley Air Pollution Control District’s Tune-In Tune-Up program to repair older high-polluting vehicles.

- Grants to residents to replace fireplaces and noncertified wood-burning stoves with clean-burning U.S. Environmental Protection Agency-certified units through the San Joaquin Valley Air Pollution Control District’s Burn Cleaner Incentive Program.
- Grants to electrify or replace existing diesel-powered off-road equipment through the San Joaquin Valley Air Pollution Control District’s Heavy-Duty Engine Program.
- Grants to replace old trucks with new low-emissions trucks through the District’s Truck Voucher Program.
- Grants to replace older and high-polluting school buses through the San Joaquin Valley Air Pollution Control District’s School Bus Replacement Program. This would be provided for buses that operate within the Preferred Alternative B alignment.
- Grants to upgrade heating, ventilation, air conditioning (HVAC) systems to qualifying daycare centers, preschools, and schools, to provide improvements to reduce indoor air particles related to negative health effects such as exacerbating the symptoms of asthma.

The emissions reductions secured through the voluntary emission reduction agreements are “surplus” to existing regulations, achieving reductions earlier or beyond those required by the regulations. Over the years, the San Joaquin Valley Air Pollution Control District has built a reputation for excellence in the implementation of these programs, as highlighted in multiple audits by state agencies that lauded the San Joaquin Valley Air Pollution Control District’s incentive programs for their efficiency and effectiveness. Historically, the San Joaquin Valley Air Pollution Control District’s incentive programs have invested more than \$1 billion in public and private funding for clean air projects, reducing more than 100,000 tons of emissions. With the programs listed above offered to residents near the project alignment, reduction in construction emissions within the project area would be reduced by the following in three years:

- Year 1 – 1.9 tons of reactive organic gases/33.6 tons of nitrous oxides/7.6 of tons of particulate matter (PM₁₀)
- Year 2 – 1.45 tons of reactive organic gases/16.5 tons of nitrous oxides/7.3 tons of particulate matter (PM₁₀)
- Year 3 – 0.4 ton of reactive organic gases/2.55 tons of nitrous oxides/0.7 ton of particulate matter (PM₁₀)

It should be noted that the reductions mentioned above will be implemented mainly within the Year 1 timeframe, and the reductions will carry over to future years well beyond the construction years.

With implementation of the Voluntary Emission Reduction Agreement programs listed above, the project area will see operational emission reductions of:

- 5 tons of nitrous oxides
- 73 tons of nitrogen oxides
- 5 tons of particulate matter (PM₁₀)

These emission reductions will be achieved throughout the 20-year design life of the project.

In addition to the Voluntary Emission Reduction Agreement, the Centennial Corridor Project would provide a one-time \$200,000 grant to a non-profit organization to plant trees along the Preferred Alternative B alignment. This organization may plant trees at the resident's property. Initially, trees will be offered to environmental justice communities living within 1,000 feet of either side of the new freeway (first priority), and secondly, properties within 500 feet of each side of the Alternative B alignment. If trees are available after the primary and secondary targeted areas, trees would be offered to property owners within 1,500 feet of each side of the alignment. If trees are still available, they may be planted at other locations in consultation with and approved by the city of Bakersfield. Planting and maintenance of the trees would be the responsibility of those accepting the trees.

The Voluntary Emission Reduction Agreement is provided in Appendix L of the final environmental document.

Joseph Drive Pedestrian Sidewalk

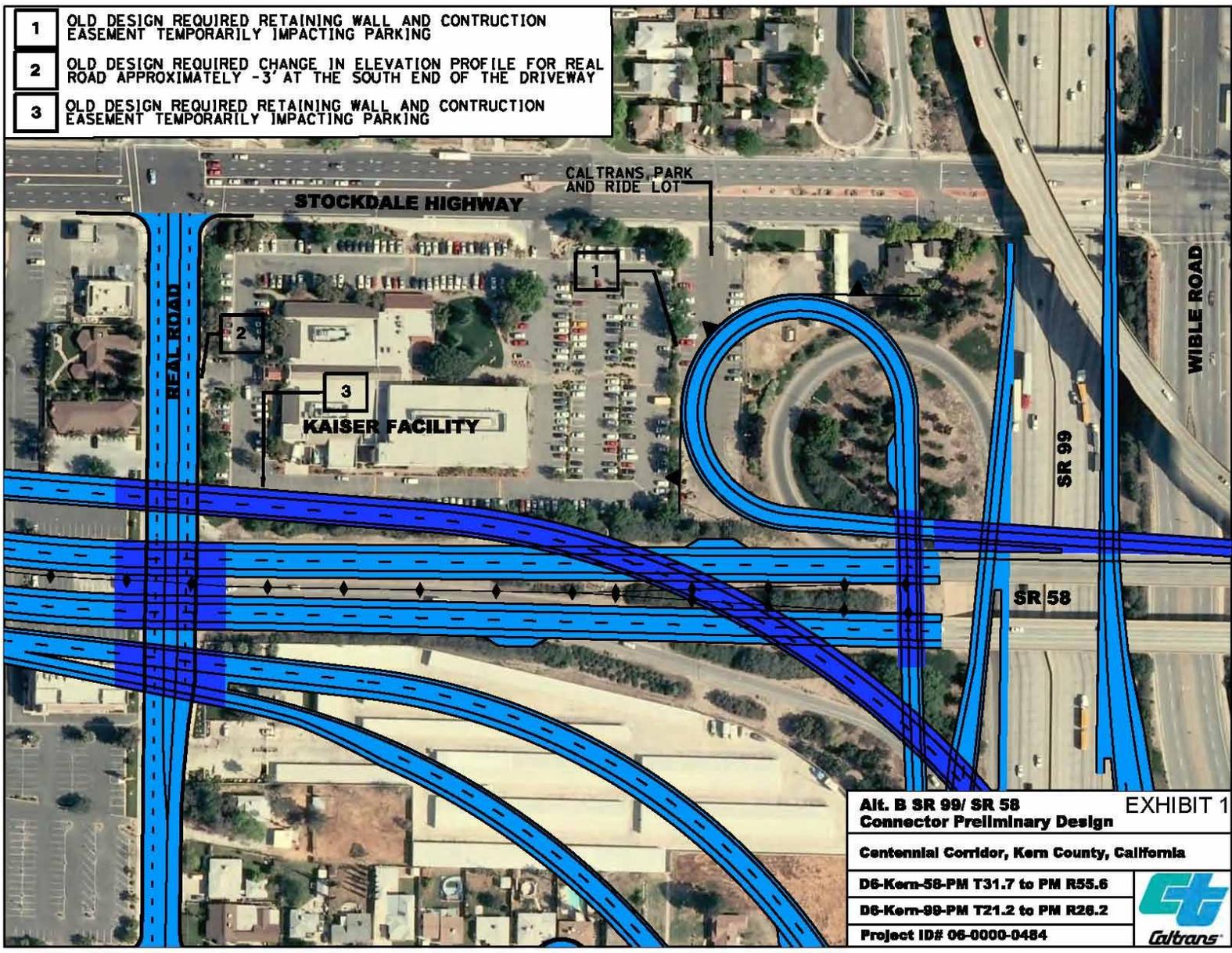
Implementation of the Centennial Corridor Project will result in the permanent closure of 11 local streets, which in some cases greatly lengthens the routes for current pedestrian routes in the Westpark neighborhood. The city will coordinate with Caltrans to install a dedicated new pedestrian sidewalk for the benefit of residents living in homes south of La Mirada Drive and Joseph Drive. The pedestrian sidewalk would enhance connectivity to newly divided areas in the Westpark neighborhood and shorten the route for pedestrians to access popular community facilities located on either side of the freeway, including Centennial Park, Harris Elementary school, and other neighborhood destinations. This proposed feature would upgrade bicyclist and pedestrian access via La Mirada Drive. The preliminary design layout for the Joseph Drive pedestrian crosswalk is included in Attachment 7 of this Addendum.

PREPARER/REVIEWER

Anne Kochoon, Environmental Senior Project Manager, MS Environmental Engineering, 30 years of experience. Addendum Preparer/Reviewer.

Attachment 1

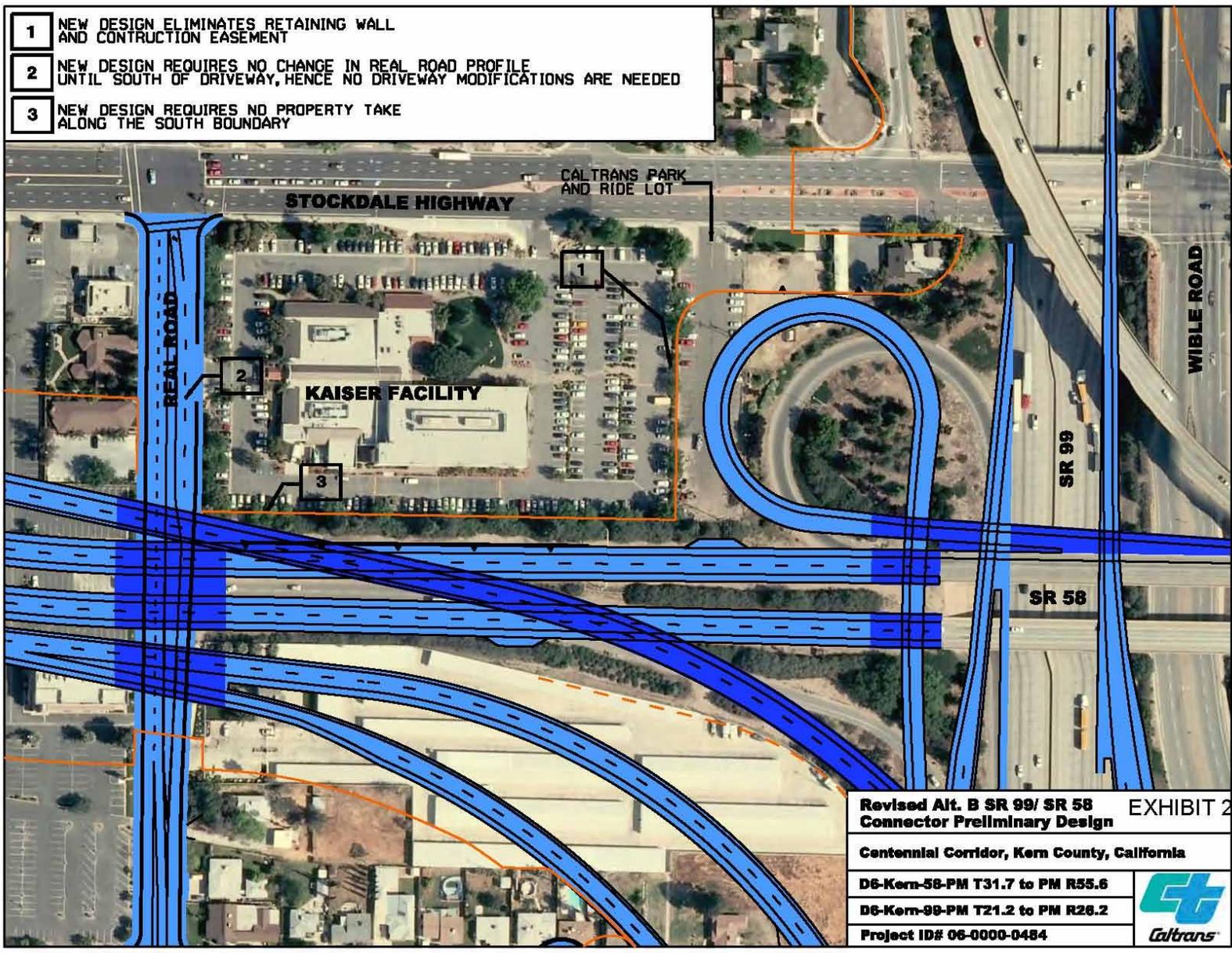
Kaiser Realignment



- 1** OLD DESIGN REQUIRED RETAINING WALL AND CONSTRUCTION EASEMENT TEMPORARILY IMPACTING PARKING
- 2** OLD DESIGN REQUIRED CHANGE IN ELEVATION PROFILE FOR REAL ROAD APPROXIMATELY -3' AT THE SOUTH END OF THE DRIVEWAY
- 3** OLD DESIGN REQUIRED RETAINING WALL AND CONSTRUCTION EASEMENT TEMPORARILY IMPACTING PARKING

Alt. B SR 99/ SR 58 EXHIBIT 1
Connector Preliminary Design
 Centennial Corridor, Kern County, California
 D6-Kern-58-PM T31.7 to PM R55.6
 D6-Kern-99-PM T21.2 to PM R26.2
 Project ID# 06-0000-0484





Attachment 2

Carrier Canal Crossing Design Modification

LEGEND

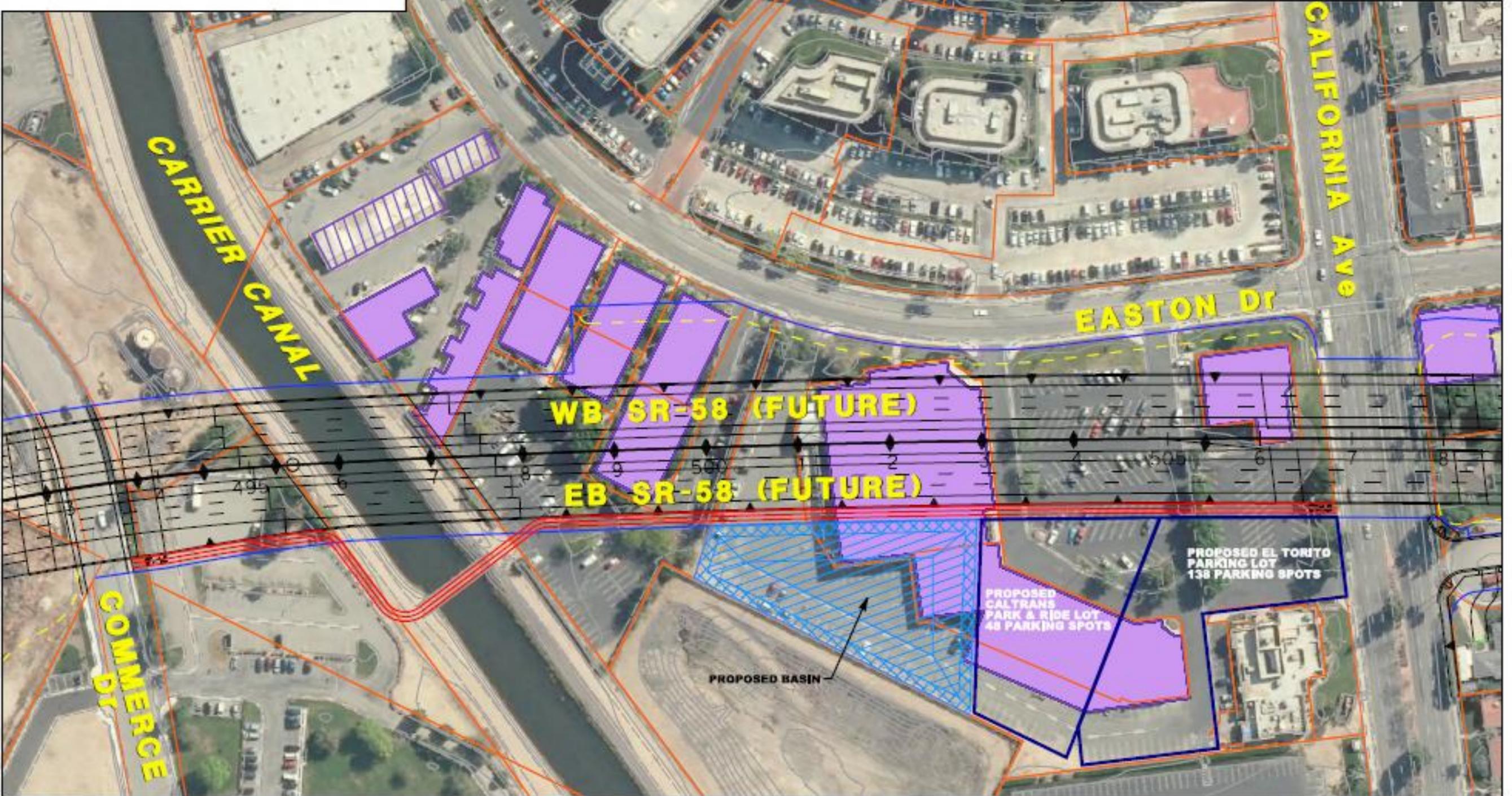
-  EXISTING RIGHT OF WAY
-  CENTENNIAL RIGHT OF WAY
-  PROPOSED ROADWAY
-  PROPOSED BIKE PATH
-  RETAINING WALL
-  PROPOSED BUILDING IMPACTS
-  PROPOSED PARTIAL BUILDING IMPACTS

PARSONS

CENTENNIAL CORRIDOR

EASTON DR

APRIL 10, 2015
SCALE 1" = 100'



Attachment 3
State and Federal Criteria Air Pollutant
Standards

Table 2-1 Ambient Air Quality Standards

Ambient Air Quality Standards						
Pollutant	Averaging Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
Ozone (O₃)	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m ³)		0.075 ppm (147 µg/m ³)		
Respirable Particulate Matter (PM₁₀)⁸	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		—		
Fine Particulate Matter (PM_{2.5})⁸	24 Hour	—	—	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ³		
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		—	—	
Nitrogen Dioxide (NO₂)⁹	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m ³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)		0.053 ppm (100 µg/m ³)	Same as Primary Standard	
Sulfur Dioxide (SO₂)¹⁰	1 Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m ³)	
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas) ¹⁰	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) ¹⁰	—	
Lead^{11,12}	30 Day Average	1.5 µg/m ³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m ³ (for certain areas) ¹²	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m ³		
Visibility Reducing Particles¹³	8 Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride¹¹	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

See footnotes on next page ...

Source: California Air Resources Board (June 4, 2013).

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above $150 \mu\text{g}/\text{m}^3$ is equal to or less than one. For PM2.5, 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 U.S. EPA for further clarification and current national 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 measurement method which can be shown to the satisfaction of the ARB 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 U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On December 14, 2012, the national annual PM2.5 primary standard was lowered from $15 \mu\text{g}/\text{m}^3$ to $12.0 \mu\text{g}/\text{m}^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at $35 \mu\text{g}/\text{m}^3$, as was the annual secondary standard of $15 \mu\text{g}/\text{m}^3$. The existing 24-hour PM10 standards (primary and secondary) of $150 \mu\text{g}/\text{m}^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
9. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
10. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
11. The ARB 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.
12. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard ($1.5 \mu\text{g}/\text{m}^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
13. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Source: *California Air Resources Board (6/4/13)*.

Attachment 4
Criteria Air Pollutants Data Summary
(California Avenue Monitoring Station)

**Table 3-1 Criteria Air Pollutants Data Summary
(California Avenue Monitoring Station)**

Pollutant	Averaging Time	Standard	2007	2008	2009	2010	2011	2012	2013
Ozone (O ₃)	1-Hour	Maximum Concentration (ppm)	0.117	0.127	0.120	0.109	0.107	0.102	0.107
		Days > CAAQS (0.09 ppm)	4	15	16	8	5	9	3
	8-Hour	4 th Maximum Concentration (ppm) ^a	0.085	0.101	0.086	0.093	0.087	0.087	0.084
		Days > NAAQS (0.075 ppm)	25	40	34	28	25	56	22
		Days > CAAQS (0.07 ppm)	49	60	58	48	51	83	47
Particulate Matter (PM ₁₀)	24-Hour	Maximum Concentration (µg/m ³)	115	262	95	86	97	100	121
		Days > CAAQS (50 µg/m ³)	130	170	84	47	116	89	n/a
		Days > NAAQS (150 µg/m ³)	n/a	3	0	0	0	0	n/a
	Annual	State Annual Average (20 µg/m ³)	49	55	41	33	44	41	n/a
Particulate Matter (PM _{2.5})	24-Hour	Maximum Concentration (µg/m ³)	86	99	196	92	80	87	112
		Days > NAAQS (35 µg/m ³)	n/a	67	46	29	n/a	24	50
		National Std. 98 th Percentile ^b	73	65	67	53	66	56	72
	Annual	National Annual (15.0 µg/m ³)	21.9	21.9	19.0	14.1	16.2	13.0	19.9
Carbon Monoxide ^c (CO)	1-Hour	Maximum Concentration (ppm)	2.8	3.5	2.2	2.1	n/a	n/a	n/a
		Days > CAAQS (20 ppm)	0	0	0	0	0	0	0
		Days > NAAQS (35 ppm)	0	0	0	0	0	0	0
	8-Hour	Maximum Concentration (ppm)	1.97	2.17	1.51	1.34	n/a	n/a	n/a
		Days > CAAQS (9.0 ppm)	0	0	0	0	0	0	0
Nitrogen Dioxide (NO ₂)	1-hour	Maximum Concentration (ppm)	0.072	0.083	0.069	0.079	0.064	0.064	0.055
		Days > CAAQS (0.18 ppm)	0	0	0	0	0	0	0
	Annual	Arithmetic Average (0.053 ppm)	0.017	0.016	0.016	0.014	0.015	0.015	n/a

AAM – Annual Arithmetic Mean; CAAQS – California ambient air quality standards; µg/m³ – micrograms per cubic meter; NAAQS – National ambient air quality standards; ppm – parts per million; n/a – sufficient data not available to determine the value

The estimated number of measured concentrations above national standards are shown in **bold**.

Note: Ambient data for SO₂ and airborne lead are not included in this table since the Basin is currently in compliance with state and federal standards for these pollutants.

^a The 8-hour ozone standard is attained when the fourth highest concentration in a year, averaged over 3 years, is equal to or less than the new national standard of 0.075 ppm (effective May 27, 2008).

Values listed in the table represent midnight-to-midnight 24-hour averaged and may be related to an exceptional event.

^b Attainment condition for PM_{2.5} is that the 3-year average of the 98th percentile of 24-hour concentrations at each monitor within an area must not exceed the standard (65 µg/m³ at the time of monitoring).

^c Carbon monoxide concentrations have not been measured at the California station since 2005; the listed data are from the Golden State Monitoring Station located at 1128 Golden State Highway, about 2.7 miles northeast of Alternative A, 2.2 miles northeast of Alternative B, and 2 miles northeast of Alternative C alignment.

Source: California Air Resources Board, accessed January 2015.

Attachment 5

Future Particulate Matter (PM₁₀ and PM_{2.5}) Emission Reductions by Project Alternatives

PM₁₀ Re-entrained Road Dust by Project Alternatives (Year 2038)

Table 4-5 Future Particulate Matter (PM₁₀ and PM_{2.5}) Emission Reductions by Project Alternatives

Alternative	Total VMT (2038)	Existing (Lb/day)	Year 2018 (Lb/day)	Year 2018 % Emission Reduction when compared to No Build	Year 2038 (Lb/day)	Year 2038 % Emission Reduction when compared to No Build
Particulate Matter (PM ₁₀)						
No-Build	3,986,596	782.4	409.1		534.5	
Alternative A	3,557,527	--	Not calculated		467.1	-12.6%
Alternative B (Preferred Alternative)	4,154,021	--	407.6	-0.37%	534.3	-0.04%
Alternative C	3,866,240	--	Not calculated		503.0	-5.9%
Fine Particulate Matter (PM _{2.5})						
No-Build		480.3	196.3		250.4	
Alternative A		--	Not calculated		217.4	-13.2%
Alternative B (Preferred Alternative)		--	195.5	-0.41%	246.1	-1.7%
Alternative C		--	Not calculated		233.7	-6.7%
Source: Centennial Corridor Project Qualitative PM ₁₀ and PM _{2.5} Hot-Spot Analysis, 2013.						

Table 4-6 PM₁₀ Re-entrained Road Dust by Project Alternatives (Year 2038)

Alternative	Total VMT	Re-entrained Dust (lb/day)
No-Build	3,986,596	0.57
Alternative A	3,557,527	0.51
Alternative B (Preferred Alternative)	4,154,021	0.59
Alternative C	3,866,240	0.55
Source: Centennial Corridor Project Qualitative PM ₁₀ and PM _{2.5} Hot-Spot Analysis, 2013.		

Attachment 6
Voluntary Emission Reduction
Agreement

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VOLUNTARY EMISSION REDUCTION AGREEMENT 20140259

This Voluntary Emission Reduction Agreement ("Agreement") is entered into as of November 13, 2014 by and between CALTRANS and the SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, an air pollution control district formed pursuant to California Health and Safety Code section 40150, et seq. ("District").

RECITALS

WHEREAS, CALTRANS is proposing to build the CENTENNIAL CORRIDOR (Project) located in the city of Bakersfield in Kern County, California, as more particularly described on Exhibit A attached hereto in 2017; and

WHEREAS, the Project incorporates the design features specified on Exhibit B attached hereto and incorporated herein ("Emission Reduction Design Features"), in order to reduce the air quality impacts associated with the Project; and

WHEREAS, CALTRANS has volunteered additional emission reductions as a means of further reducing impacts on air quality; and

WHEREAS, CALTRANS desires to fully comply with all requirements of the California Environmental Quality Act codified at California Public Resources Code section 21000, et seq. ("CEQA") and the National Environmental Policy Act ("NEPA"), including all requirements relating to the mitigation of air quality impacts arising from or in connection with the Project; and

WHEREAS, District is an air pollution control district formed by the counties of Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus and Tulare, pursuant to California Health and Safety Code section 40150, et seq.; and

WHEREAS, District is responsible for developing and implementing air quality control measures within the District Boundaries, including air quality control measures for stationary sources, transportation sources, and indirect sources; and

1 **WHEREAS**, the District's incentive programs have been developed around
2 several core principles, including cost-effectiveness, integrity, effective program
3 administration, excellent customer service, the efficient use of District resources, fiscal
4 transparency and public accountability; and

5 **WHEREAS**, the District's incentive programs are regularly audited by
6 independent outside agencies including professional accountancy corporations on
7 behalf of the federal government, the California Air Resources Board (ARB), the
8 California Department of Finance and the California Bureau of State Audits; and

9 **WHEREAS**, District has determined that with appropriate funding, District can
10 provide reductions of emissions through its incentive programs from certain projects in
11 types and in sufficient quantities to fully mitigate criteria pollutant construction
12 emissions from the Project as presented in Paragraph 1 below ("Full Mitigation of
13 Criteria Pollutant Construction Emissions") and provide a betterment of air quality in the
14 project area and greater Bakersfield area as presented in Paragraph 2 below
15 ("Additional Emissions Reductions for Betterment of Air Quality"); and

16 **WHEREAS**, CALTRANS and District desire to enter into this Agreement in
17 which CALTRANS will provide the District \$1.5 million in Air Quality Funds in order to
18 develop and implement Emission Reduction Projects through Funding Agreements with
19 owners or operators of pollution source equipment. This Agreement will do both of the
20 following:

21 a) Fully mitigate criteria pollutant construction emissions from the Project, as
22 presented in Paragraph 1 below ("Full Mitigation of Criteria Pollutant Construction
23 Emissions") with an estimated \$695,000 investment in Emission Reduction Projects.
24 As a result of the implementation of this Agreement, the development of the Project will
25 result in no net increase in criteria pollutant emissions over the criteria pollutant
26 emissions which would otherwise exist without the development of the Project.

27 b) Achieve betterment of air quality with further emissions reductions beyond
28 those necessary to fully mitigate criteria pollutant construction emissions from the

1 Project, as presented in Paragraph a) above, with an estimated additional \$805,000
2 investment in Emission Reduction Projects. As a result of the implementation of this
3 Agreement, the development of the Project will result in a betterment of air quality in
4 the project area and greater Bakersfield area, as presented in Paragraph 2 below
5 ("Additional Emissions Reductions for Betterment of Air Quality").

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AGREEMENT

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NOW THEREFORE, in exchange of the mutual covenants herein contained,
CALTRANS and District hereby agree as follows:

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1. Full Mitigation of Criteria Pollutant Construction Emissions

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CALTRANS shall fully mitigate the project's criteria pollutant construction emissions by achieving surplus, quantifiable and enforceable emission reductions in the amount of 52.68 tons of NOx, 3.71 tons of VOC/ROG, and 15.65 tons of PM10 in accordance with paragraphs 2 through 4. "Surplus" emission reductions are reductions that are not otherwise required by existing laws or regulations.

For the purpose of this agreement, full mitigation means the emission reductions achieved by the mitigation measures equals, or is greater than, the sum of all NOx, VOC/ROG, and PM10 emissions specified in the environmental review document certified by the Lead Agency when approving the Project.

CALTRANS shall provide sufficient Air Quality Funds to the District to execute Emission Reduction Projects through the District's Incentive Programs to fully mitigate the Project emissions as described above. The District estimates that \$695,000 will be sufficient Air Quality Funds to fully mitigate the Project emissions as described above.

2. Additional Emissions Reductions for Betterment of Air Quality

To achieve a betterment of air quality in the project area and greater Bakersfield area, CALTRANS shall provide emissions reductions beyond those necessary to fully mitigate the project's criteria pollutant construction emissions, as presented in Paragraph 1 above ("Full Mitigation of Criteria Pollutant Construction Emissions").

1 The District shall use the remainder of the \$1.5 million total Air Quality Funds,
2 after satisfying Paragraph 1 ("Full Mitigation of Criteria Pollutant Construction
3 Emissions"), to execute further Emission Reduction Projects through the District's
4 Incentive Programs to achieve a betterment of air quality in the vicinity of the project.
5 All emission reduction projects funded under this paragraph will provide betterment of
6 air quality in the area, by offsetting construction and operation emissions occurring in
7 the vicinity of the new highway segment and existing highway segments that will be
8 adding capacity. The District estimates that \$805,000 will be available for this
9 betterment of local air quality.

10 **3. Timing of Air Quality Funds**

11 CALTRANS shall provide \$1.5 million in Air Quality Funds to the District to
12 execute Emission Reduction Projects through the District's Incentive Programs before
13 occurrence of the first project related emissions generating activity for Project.

14 **4. Mitigation and Air Quality Betterment**

15 District shall credit CALTRANS for all air quality mitigation and air quality
16 betterment brought about by this Agreement, including any emission reductions District
17 achieves prior to the date CALTRANS grants final approval of the Project.

18 Emissions reduction cost estimates under this VERA are based on the District's
19 cost per ton set forth below in Table 1 (Emission Reduction Cost Schedule).

20 **Table 1 Emission Reduction Cost Schedule**

Criteria Pollutants	Construction Rate \$/ton
NOx or VOC/ROG	\$9,350
PM10	\$9,011

24 These per-ton costs are not a guarantee and only an estimate, but the District
25 shall use every reasonable effort to accomplish average per-ton costs no higher than
26 these Table 1 costs. The Table 1 per-ton costs are derived from District Rule 9510
27 (Indirect Source Review) and are subject to change through the District's formal public
28 procedures for amending these rules. Consistent with District Rule 3180

1 (Administrative Fees for Indirect Source Review), the Air Quality Fund estimates
2 include an additional administrative cost equal to four percent (4%) of the emission
3 reduction estimate.

4 **5. Excess Emission Reductions**

5 All emission reductions achieved by District through this Agreement that exceed
6 the amount of required emission reductions to fully mitigate the Project's construction
7 emissions of criteria pollutants ("Excess Emission Reduction") shall be applied towards
8 the betterment of air quality in the Project area.

9 **6. Refunds**

10 Upon verification by District that the Project's construction emissions of criteria
11 pollutants have been fully mitigated, District shall apply all remaining funds towards the
12 betterment of air quality for Project. No refunds shall be made to CALTRANS.

13 **7. District Rule 9510 (Indirect Source Review)**

14 CALTRANS acknowledges that except as provided for in this Agreement,
15 CALTRANS is subject to all applicable provisions of District Rule 9510 (Indirect Source
16 Review), that are in effect at the time of submitting an Air Impact Assessment
17 Application in accordance with Paragraph 6.1 ("Rule 9510 Equivalency"). District
18 acknowledges that to the extent that mitigation provided under this Agreement equals
19 or exceeds mitigation that would otherwise be achieved through compliance with
20 Sections 6.0 and 7.0 of District Rule 9510, CALTRANS shall be considered to be in
21 compliance with Sections 6.0 and 7.0 of District's Rule 9510.

22 **7.1 Rule 9510 Equivalency**

23 CALTRANS shall submit to District an Indirect Source Review (ISR) Air Impact
24 Assessment Application. District shall calculate the amount of emission reductions
25 required pursuant to District Rule 9510 (Indirect Source Review) and verify equivalency
26 of emission reductions achieved under this Agreement.

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1 **8. District's Obligation**

2 **8.1 Funding Agreements**

3 District shall use diligent efforts to enter into Funding Agreements for Emission
4 Reduction Projects with owners and/or operators of pollution source equipment within
5 one hundred eighty (180) days of the District's receipt of Air Quality Funds.

6 **8.2 Oversight of Funding Agreements**

7 District shall ensure that the owners/operators of equipment subject to Funding
8 Agreements perform all obligations to be performed on the part of such parties under
9 said Funding Agreements.

10 **8.3 Documentation, Record Keeping and Monitoring**

11 District shall document, keep adequate records on and monitor the emission
12 reductions brought about as a result of this Agreement, and shall, upon written request
13 by CALTRANS or by the lead agency for the Project, provide CALTRANS written
14 reports verifying achieved emission reductions and/or emission reductions being
15 brought about to fully mitigate Project related impacts on air quality.

16 **8.4 Achievement of Emission Reductions**

17 For and in exchange of CALTRANS's payment of funds, District shall ensure, by
18 way of entering into, funding and enforcing the Funding Agreements in accordance with
19 the provisions of Paragraph 7.2 (Oversight of Funding Agreements), that the Project
20 achieves the required emission reductions and air quality betterment to the extent
21 specified in this Agreement.

22 **8.5 Acknowledgement of Full Mitigation and Betterment of Air Quality**

23 Within 90 days of completion and funding of all Funding Agreements associated
24 with the Project, District shall verify in writing to CALTRANS of the quantity of the
25 emissions reductions achieved.

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1 **9. Subsequent Litigation, Legislation and/or Administrative Action /**
2 **Credit to CALTRANS**

3 In the event that despite this Agreement, CALTRANS is required as a result of a
4 final judgment or District Approved Settlement (as defined below) in any third party
5 litigation, to pay monies in addition to the monies to be paid by CALTRANS pursuant to
6 this Agreement, then District shall acknowledge and credit CALTRANS with the
7 emission reductions achieved pursuant to this Agreement and any additional emission
8 reductions that will result from payment of such additional monies. For purposes of this
9 Paragraph, a "District Approved Settlement" shall mean a settlement of a lawsuit filed
10 pursuant to CEQA, the National Environmental Protection Act or other applicable
11 environmental law which (i) provides for CALTRANS's payment of monies in exchange
12 for a dismissal of such lawsuit, (ii) provides for the use of such monies by the petitioner
13 in such lawsuit in such a manner as to mitigate adverse air quality impacts of the
14 Project, and (iii) is approved in writing by District. The District shall have no authority to
15 commit CALTRANSs money in any settlement of a third party lawsuit without
16 CALTRANSs consent.

17 **10. Term of Agreement**

18 This Agreement shall be effective upon the date first written above, and shall
19 terminate upon District's meeting its obligation to implement Funding Agreements that
20 provide necessary emissions reductions to fully mitigate the Project's construction
21 criteria pollutant emissions and provide for betterment of air quality for the project area
22 and greater Bakersfield area. CALTRANS may, at any time by written notice to District,
23 terminate this Agreement, whereupon, (i) District shall acknowledge such termination in
24 writing to the Lead Agency and certify whether or not that CALTRANS has achieved
25 betterment of air quality and mitigated air quality impacts of the Project to the extent
26 and in the types and quantities brought about by Funding Agreements, (ii) District shall
27 refund to CALTRANS any unused portion of CALTRANS's Air Quality Funds less any
28 unpaid administrative costs incurred; and (iii) neither CALTRANS nor District shall have

1 any further rights or obligations under this Agreement except as expressly provided.

2 District's obligations to oversee implementation of Funding Agreements
3 pursuant to Paragraph 7.2 ("Oversight of Funding Agreements") and to ensure that
4 required emission reductions are achieved, pursuant to Paragraph 7.4 ("Achievement
5 of Emission Reductions"), and in relation to the Air Quality Funds which have been
6 provided shall remain effective for as long as necessary to ensure that the anticipated
7 emission reductions continue to be achieved to the extent specified in this Agreement.

8 **11. Representations, Covenants and Warranties**

9 **11.1. CALTRANS's Representations, Covenants and Warranties.**

10 CALTRANS represents, covenants and warrants to District, as of the date of this
11 Agreement, as follows:

12 11.1.1. The undersigned representatives of CALTRANS are duly
13 authorized to execute, deliver and perform this Agreement, and upon CALTRANS's
14 execution and delivery of this Agreement, this Agreement will have been duly
15 authorized by CALTRANS.

16 11.1.2. Upon execution and delivery of this Agreement by
17 CALTRANS, CALTRANS's obligations under this Agreement shall be legal, valid and
18 binding obligations of CALTRANS, duly enforceable at law and in equity in accordance
19 with the terms and conditions of this Agreement.

20 11.1.3. There is no lawsuit, legal action, arbitration, legal or
21 administrative proceeding, legislative quasi-legislative or administrative action or claim
22 existing, pending, threatened or anticipated which would render all or any portion of this
23 Agreement invalid, void or unenforceable in accordance with the terms and conditions
24 thereof.

25 11.1.4. Other than the execution and delivery of this Agreement by
26 the undersigned representatives of CALTRANS, there are no approvals, consents,
27 confirmations, proceedings, or other actions required by CALTRANS or any third party,
28 entity or agency in order to enter into and carry out the terms, conditions and intent of

1 the parties with respect to this Agreement, except as required to enter Funding
2 Agreements.

3 **11.2. District's Representations, Covenants and Warranties**

4 District represents, covenants and warrants to CALTRANS, as of the date of this
5 Agreement, as follows:

6 11.2.1. The undersigned representatives of District are duly
7 authorized to execute, deliver and perform this Agreement, and upon District's
8 execution and delivery of this Agreement, this Agreement will have been duly
9 authorized by District.

10 11.2.2. Upon execution and delivery of this Agreement by District,
11 District's obligations under this Agreement shall be legal, valid and binding obligations
12 of District, duly enforceable at law and in equity in accordance with the terms and
13 conditions of this Agreement.

14 11.2.3. There is no lawsuit, legal action, arbitration, legal or
15 administrative proceeding, legislative, quasi-legislative or administrative action or claim
16 existing, pending, threatened or anticipated which would render all or any portion of this
17 Agreement invalid, void or unenforceable in accordance with the terms and conditions
18 thereof.

19 11.2.4. Other than the execution and delivery of this Agreement by
20 the undersigned representatives of District, there are no approvals, consents,
21 confirmations, proceedings, or other actions required by District or any third party,
22 entity or agency in order to enter into and carry out the terms, conditions and intent of
23 the parties with respect to this Agreement, except as required to enter Funding
24 Agreements.

25 11.2.5. The monies paid by CALTRANS under this Agreement shall
26 be sufficient to ensure that the emission reductions contemplated by this Agreement
27 shall occur, and District shall utilize such monies in such a manner as to ensure that
28 such emission reduction shall occur.

1 11.2.6. Upon the approval of this Agreement by the governing
2 board of District, the Air Pollution Control Officer of District, or equivalent
3 representative, or a delegee of such officer, shall have the authority to approve, deliver,
4 verify, enter into, acknowledge and/or accept any communication, notice, notification,
5 verification, agreement and/or other document to be issued or entered into by District
6 under the terms and conditions of this Agreement, without further approval of the
7 governing board of District.

8 **12. Indemnification**

9 CALTRANS agrees to indemnify, defend and hold harmless District for, from
10 and in connection with any third party claims, losses and/or liabilities arising from or in
11 connection with District's performance of this Agreement, excluding only such claims,
12 losses and/or liabilities which result from or are in connection with District's sole
13 negligence, act or omission.

14 **13. Inurement**

15 CALTRANS's rights and obligations under this Agreement, or applicable portions
16 thereof, shall run with the land encompassed by the Project, and shall inure to the
17 benefit of and be binding upon the heirs, successors and assigns of CALTRANS who
18 take title to such lands or applicable portions thereof. Upon CALTRANS's conveyance
19 of all or any portion of the lands encompassed by the Project, the rights and obligations
20 of CALTRANS under this Agreement shall, to the extent applicable to the lands so
21 conveyed, be transferred to the transferee thereof, and CALTRANS shall thereupon be
22 released by District from, all obligations and liabilities so assigned, except for such
23 obligations and liabilities arising prior to such transfer.

24 **14. Assignment**

25 CALTRANS shall have no right to assign all or any part of its rights and/or
26 obligations under this Agreement without the District's written consent. In the event the
27 District does give consent to any such assignment, the District, the third party assignee
28 and CALTRANS shall enter into an amendment and novation of this Agreement which

1 acknowledges the assignment and conforms the various provisions of this Agreement
2 as may be required to be conformed in order to provide to the assignee the rights and
3 benefits of this Agreement as if such assignee and its project were the original party
4 and project contemplated in this Agreement.

5 **15. Recitals Incorporated**

6 The recitals set forth hereinabove are hereby incorporated into this Agreement
7 and acknowledged, agreed to and adopted by the parties to this Agreement.

8 **16. Further Assurances**

9 CALTRANS and District agree to execute and deliver any documents and/or
10 perform any acts which are reasonably necessary in order to carry out the intent of the
11 parties with respect to this Agreement.

12 **17. No Joint Venture or Partnership**

13 District and CALTRANS agree that nothing contained in this Agreement or in any
14 document executed in connection with this Agreement shall be construed as making
15 District and CALTRANS joint venturers or partners.

16 **18. Notices**

17 Any notices or communications relating to this Agreement shall be given in
18 writing and shall be deemed sufficiently given and served for all purposes when
19 delivered, if (a) in person, (b) by facsimile (with the original delivered by other means
20 set forth in this paragraph, (c) by generally recognized overnight courier or (d) by
21 United States Mail, certified or registered mail, return receipt requested, postage
22 prepaid, to the respective addresses set forth below, or to such other addresses as the
23 parties may designate from time to time by providing written notice of the change to the
24 other party.

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CALTRANS

Christine Cox-Kovacevich
Chief, Central Region
Environmental Division
1352 W. Olive Ave.
Fresno CA 93728
Phone: (559)488-4150
Fax: (559)488-4195

DISTRICT

Seyed Sadredin
Executive Director/APCO
1990 E. Gettysburg Ave.
Fresno, CA 93726
Phone: (559) 230-6000
Fax: (559) 230-6061

19. Entire Agreement

The terms of this Agreement, together with all attached exhibits, are intended by the parties as the complete and final expression of their agreement with respect to such terms and exhibits and may not be contradicted by evidence of any prior or contemporaneous agreement. This Agreement specifically supersedes any prior written or oral agreements between the parties with respect to the subject matter of this Agreement.

20. Amendments and Waivers

No addition to or modification of this Agreement shall be effective unless set forth in writing and signed by the party against whom the addition or modification is sought to be enforced. The party benefited by any condition or obligation may waive the same, but such waiver shall not be enforceable by another party unless made in writing and signed by the waiving party.

21. Invalidity of Provisions

If any provision of this Agreement as applied to either party or to any circumstance shall be adjudged by a court of competent jurisdiction to be void or unenforceable for any reason, the same shall in no way affect (to the maximum extent permissible by law) any other provision of this Agreement, the application of any such provision under circumstances different from those adjudicated by the court, or the validity or enforceability of this Agreement as a whole. The parties further agree to replace any such invalid, illegal or unenforceable portion with a valid and enforceable provision, which will achieve, to the maximum extent legally possible, the economic,

1 business or other purposes of the invalid, illegal or unenforceable portion.

2 **22. Construction**

3 Unless otherwise indicated, all paragraph references are to the paragraph of this
4 Agreement and all references to days are to calendar days. Whenever, under the
5 terms of this Agreement the time for performance of a covenant or condition falls upon
6 a Saturday, Sunday or California state holiday, the time for performance shall be
7 extended to the next business day. The headings used in this Agreement are provided
8 for convenience only and this Agreement shall be interpreted without reference to any
9 headings. Wherever required by the context, the singular shall include the plural and
10 vice versa, and the masculine gender shall include the feminine or neuter genders, or
11 vice versa. This Agreement may be executed in one or more counterparts, each of
12 which shall be deemed an original, but all of which together shall constitute one and the
13 same instrument. The language in all parts of this Agreement shall be construed as a
14 whole in accordance with its fair meaning, and shall not be construed against any party
15 solely by virtue of the fact that such party or its counsel was primarily responsible for its
16 preparation.

17 **23. Governing Law**

18 23.1 The rights and obligations of the parties and the interpretation and
19 performance of this Agreement shall be governed in all respects by the laws of the
20 State of California.

21 23.2 Venue for any action arising out of or relating to this Agreement shall be in
22 Fresno County, California.

23 **24. No Third-party Beneficiaries**

24 Nothing in this Agreement, express or implied, is intended to confer any rights or
25 remedies under or by reason of this Agreement on any person other than the parties to
26 it and their respective permitted successors and assigns, nor is anything in this
27 Agreement intended to relieve or discharge any obligation of any third person to any
28 party hereto or give any third person any right of subrogation or action over or against

1 any party to this Agreement.

2 **25. Exhibits**

3 The exhibits attached to this Agreement shall be deemed to be a part of this
4 Agreement and are fully incorporated herein by reference.

5 **26. Force Majeure**

6 The time within which any party shall be required to perform under this
7 Agreement shall be extended on a day-per-day basis for each day during which such
8 performance is prevented or delayed by reason of events reasonably outside of the
9 control of the performing party, including, without limitation, acts of God, events of
10 destruction, acts of war, civil insurrection, strikes, shortages, governmental delays,
11 moratoria, civil litigation and the like, and/or delays caused by the non-performing
12 party's act or omission.

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1 IN WITNESS WHEREOF, CALTRANS and District have executed this
2 Agreement and agree that it shall be effective as of the date first written above.

3
4 **CALTRANS**
5 **California Department of**
6 **Transportation**

7 
8 _____
9 Christine Cox-Kovacevich
10 Chief, Central Region
11 Environmental Division

DISTRICT
San Joaquin Valley Unified Air
Pollution Control District



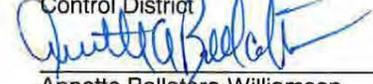
Hub Walsh
Governing Board Chair

Recommended for approval:
San Joaquin Valley Unified Air Pollution
Control District



Seyed Sadredin
Executive Director/APCO

Approved as to legal form:
San Joaquin Valley Unified Air Pollution
Control District



Annette Ballatore-Williamson
District Counsel

Approved as to accounting form:



Mehri Barati
Director of Administrative Services

For accounting use only:
San Joaquin Valley Unified Air Pollution
Control District

Program: _____
Account No: _____

SJVUAPCD
1990 E. Gettysburg
Fresno, CA 93726
(559) 230-6000

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EXHIBIT A

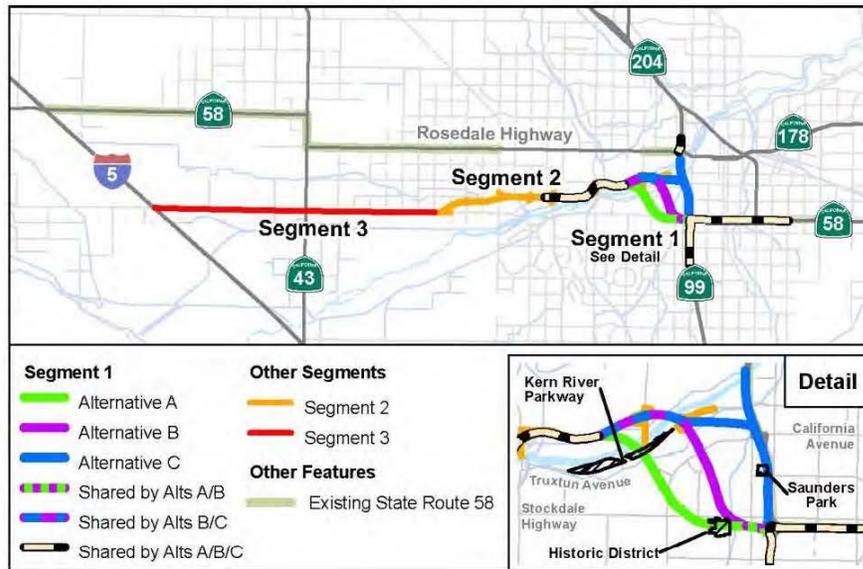
DESCRIPTION OF THE PROJECT

The proposed capital Centennial capital corridor has been divided into three segments.

The actions for the proposed project would be:

- Route adoption/transfer for a continuous route from the existing freeway portion of Route 58 east of State Route 99 to Interstate 5 with the western portion on existing Stockdale highway from Heath road to Interstate 5; and
- approval for construction of segment one, improvements within segment two, and intersection improvements at the Stockdale highway and State Route 43 (known locally as Enos Lane) intersection.

Project Alternatives (Alternative B has been selected as the Preferred Alternative).



1 Segment 1 is the easternmost segment that would connect a local roadway known as
2 the Westside Parkway to the existing State Route 58 (East) freeway. This segment
3 would construct a new section of freeway (which would be part of State Route 58) to
4 provide the direct connection to segment two (the Westside Parkway). In addition, the
5 project would involve modifications to the existing State Route 58 (East) and State
6 Route 99 to accommodate the new connection ramps.

7 Alternative B, which emerged as the Preferred Alternative, runs westerly from the
8 existing State Route 58 (East)/State Route 99 interchange for about 1200 feet south of
9 Stockdale Highway. Then it turns northwesterly and span Stockdale Highway/Stine
10 Road, California Avenue, Commerce Drive, Truxtun Avenue, and the Kern River before
11 joining the East end of the Westside Parkway near the Mohawk Street interchange.

12 This alignment depresses the Centennial corridor (the roadway would be lower than
13 the existing ground level) between California Avenue and Ford Ave., Overcrossings are
14 proposed at morale a way and La Mirada Drive to help traffic circulation. The option of
15 removing the La Mirada Drive overcrossing and adding a Ford Avenue under crossing
16 with alternative B is also under consideration. Alternative B is about 8.6 miles long.

17 Segment 2 of the Centennial Corridor is composed of the Westside Parkway, which will
18 ultimately extend from about Truxtun Avenue to Stockdale Highway near Heath Road.

19 The final segment of the Parkway from Allen Road to Stockdale Highway is currently
20 under construction. The Westside Parkway would be incorporated into the State
21 Highway System with each of the alternatives. Additionally the current portion of State
22 Route 58 (West) (Rosedale Highway) from Allen Road to Interstate 5 would be
23 relinquished (made a local road, no longer a state highway) to the local jurisdictions
24 (city of Bakersfield and County of Kern).

25 Alternative B in Segment 1 would require improvements to the Westside Parkway. The
26 changes would be to several ramps and the medians to allow for auxiliary lanes. This
27 would mostly be done within the existing right-of-way. Though technically these
28 improvements are within Segment 2, they are required to accommodate Segment 1 to

1 facilitate traffic operations between the Westside Parkway and the Centennial Corridor.
2 The impacts associated with these improvements in Segment 2 are very minor since
3 the area has already been disturbed for the construction of the Westside Parkway.
4 Rather than split the impact analysis and have a separate impact discussion for
5 Segment 2, any impacts associated with Segment 2 have been included in the impact
6 discussion or Segment 1. However, because the connection with Segment 1 of the
7 Centennial Corridor Project would substantially increase traffic on the Westside
8 Parkway (Segment 2), the traffic study prepared for the project analyzed the impacts
9 across the proposed Centennial Corridor from Interstate 5 to Cottonwood Road.
10 Similarly the noise and air quality analysis were performed using the projected traffic
11 volume for the Centennial Corridor and the analysis extended to cover the Westside
12 Parkway (Segment 2).
13 Segment 3 traffic would use Stockdale Highway, a two-lane conventional roadway, to
14 link Interstate 5. To accommodate the additional traffic, improvements to the Stockdale
15 Highway/State Route 43 intersection, such as a new signal and turn lanes, would be
16 made (State Route 43 is known locally as Enos Lane). These improvements would be
17 constructed at the same time as the Segment 1 improvements.

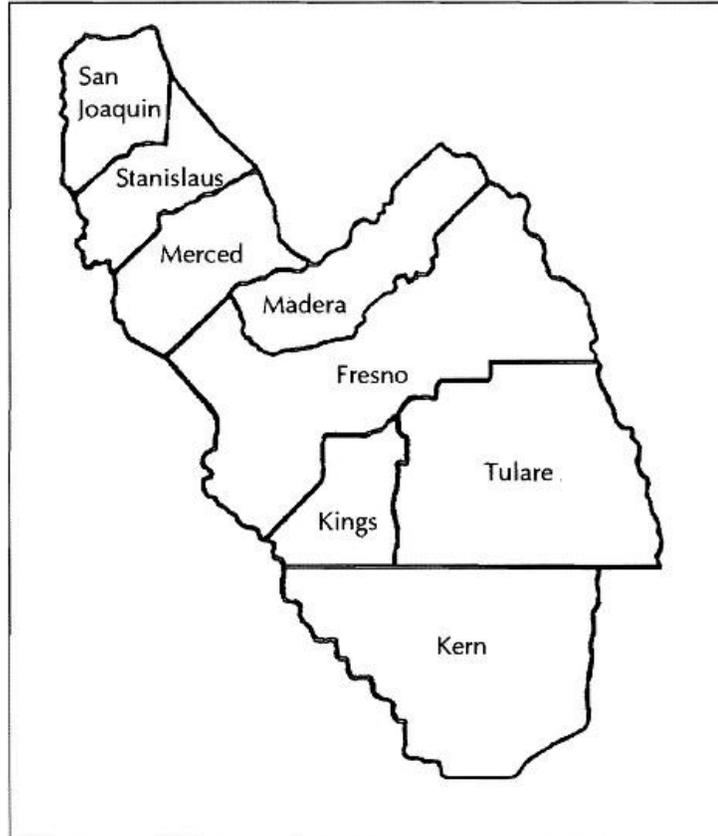
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EMMISSION REDUCTION DESIGN FEATURES

- The project will improve local east-west circulation, facilitate construction management and reduce the commute time through a major freight corridor, thus reducing emissions. The project will shift inter-regional traffic from local roads to the newly constructed highway.
- Park and Ride facilities will encourage carpooling.
- Bike and pedestrian features, including over- and under-crossings, will encourage alternate modes of transportation.
- Soundwalls will channel particulates away from receptors.
- Soil and slopes will be stabilized with permanent landscaping.
- Preservation of mature trees will occur as practical; replacement planting will occur on a 1:1 ratio.
- Compliance with the San Joaquin Valley Air Pollution Control District's Rule 9510 will help reduce emissions during construction.
- Caltrans and the contractor shall comply with the San Joaquin Valley Air Pollution Control District's Regulation VIII, reducing fugitive PM₁₀ emissions during construction.

EXHIBIT C
DISTRICT BOUNDARIES



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SJVUAPCD
1990 E. Gettysburg
Fresno, CA 93726
(559) 230-6000

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**EXHIBIT D
PROJECT EMISSIONS
AND APPROXIMATE REDUCTIONS GENERATED**

Table 1 - VERA Cost to Net-Zero

Pollutant:	Reactive Organic Gases (ROG)	Oxides of Nitrogen (NOx)	Particulate Matter 10 microns or less in size (PM10)
Tons to be Reduced (tons)- Year 1	1.88	33.64	7.64
Tons to be Reduced (tons) - Year 2	1.45	16.49	7.3
Tons to be Reduced (tons) - Year 3	0.38	2.55	0.71
Cost per Ton (\$/ton)	\$9,350	\$9,350	\$9,011
Emission Reduction Cost	\$34,689	\$492,558	\$141,022
4% Administrative Fee	\$1,388	\$19,702	\$5,641
Total Cost Estimate for net-zero emissions	\$695,000		

Table 2 – Approximate Air Quality Betterment

Total Air Quality Betterment Cost (\$1,500,000 - \$695,000)	\$805,000		
Air Quality Betterment Investment	\$774,038		
4% Administrative Fee	\$30,962		
Approx. Cost Per ton	\$9,350		
Estimated Air Quality Betterment Emission Reductions (tons) <small>(Note: pollutant distribution based on historical distribution)</small>	83 total		
	5 (ROG)	73 (NOx)	5 (PM10)

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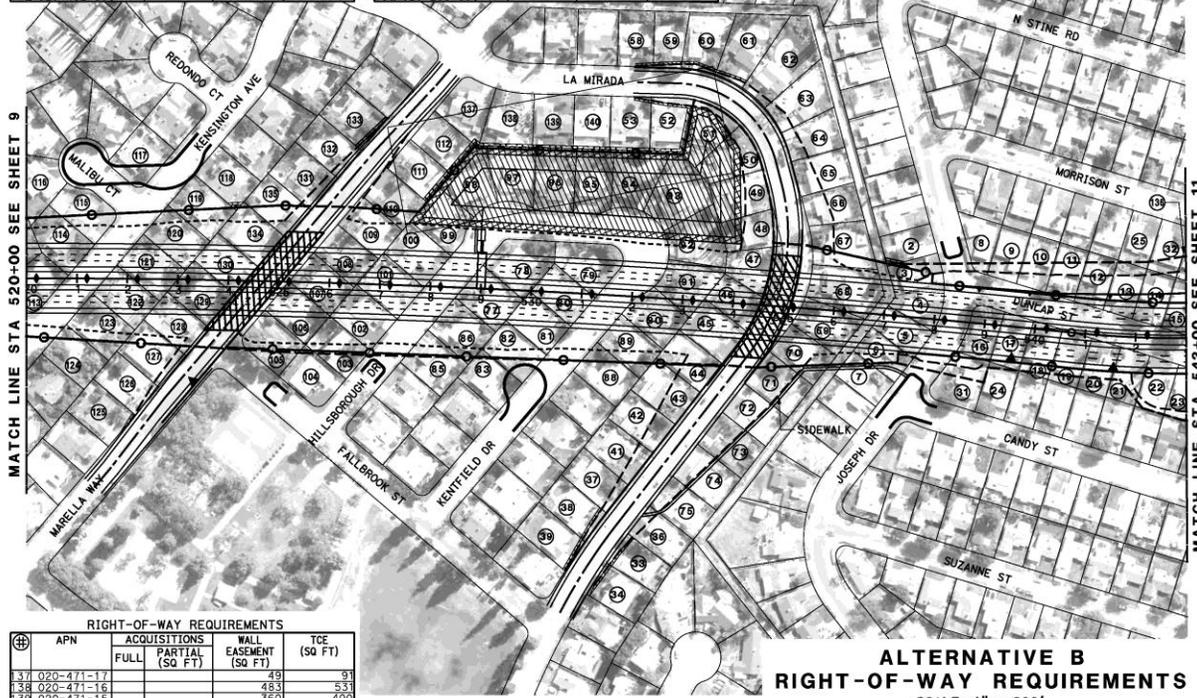
Attachment 7
Joseph Drive Pedestrian Crossing

RIGHT-OF-WAY REQUIREMENTS			
APN	ACQUISITIONS	WALL EASEMENT	TCE
	FULL	(SQ FT)	(SQ FT)
1	NOT USED		
2	020-261-02	35	101
3	020-261-03	X	
4	020-261-04	X	
5	020-261-05	X	
6	020-261-06	X	
7	020-261-07	X	
8	020-262-01	78	
9	020-262-02	X	
10	020-262-03	X	
11	020-262-04	X	
12	020-262-05	X	
13	020-262-06	X	
14	020-262-07	X	
15	020-262-08	X	
16	020-265-01	X	
17	020-265-02	X	
18	020-265-03	X	
19	020-265-04	X	
20	020-265-05	X	
21	020-265-06	X	
22	020-265-07	X	
23	020-265-08	X	
24	020-265-09	X	
25	020-265-01	322	
26	NOT USED		
27	NOT USED		
28	NOT USED		
29	NOT USED		
30	NOT USED		
31	020-265-22	X	
32	020-265-02	X	
33	020-351-52	551	354
34	020-351-53	347	314
35	NOT USED		
36	020-351-55	X	
37	020-352-01	X	
38	020-352-02	X	
39	020-352-03	590	354
40	NOT USED	198	356
41	020-471-01	X	
42	020-471-02	X	
43	020-471-03	X	
44	020-471-04	X	
45	020-471-05	X	
46	020-471-06	X	
47	020-471-07	X	
48	020-471-08	X	
49	020-471-09	X	
50	020-471-10	X	
51	020-471-11	X	
52	020-471-12	919	694
53	020-471-13	167	400
54	NOT USED		
55	NOT USED		
56	NOT USED		
57	NOT USED		
58	020-474-04	74	171
59	020-474-05	325	283
60	020-474-06	785	366
61	020-474-07	1109	327
62	020-474-08	X	
63	020-474-09	X	
64	020-474-10	X	
65	020-474-11	X	
66	020-474-12	X	
67	020-474-13	X	
68	020-474-14	X	
69	020-474-15	X	
70	020-474-16	X	
71	020-474-17	X	
72	020-474-18	X	
73	020-474-19	X	
74	020-474-23	X	
75	020-474-24	X	
76	NOT USED	X	
77	020-481-05	X	
78	020-481-06	X	
79	020-481-07	X	
80	020-481-08	X	
81	020-481-09	X	
82	020-481-10	X	
83	020-481-11	X	
84	NOT USED		
85	020-481-15	X	
86	020-481-16	X	
87	NOT USED		
88	020-482-06	X	

RIGHT-OF-WAY REQUIREMENTS			
APN	ACQUISITIONS	WALL EASEMENT	TCE
	FULL	(SQ FT)	(SQ FT)
89	020-482-07	X	
90	020-482-08	X	
91	020-482-09	X	
92	020-482-10	X	
93	020-482-11	X	
94	020-482-12	X	
95	020-482-13	X	
96	020-482-14	X	
97	020-482-15	X	
98	020-482-16	X	
99	020-482-17	X	
100	020-482-18	X	
101	020-482-19	X	
102	020-482-20	X	
103	020-482-21	X	
104	020-482-22	X	
105	020-482-23	X	
106	020-482-24	X	
107	020-482-25	X	
108	020-482-26	X	
109	020-482-27	X	
110	020-482-28	X	
111	020-482-29	393	366
112	020-482-30	553	370

RIGHT-OF-WAY REQUIREMENTS			
APN	ACQUISITIONS	WALL EASEMENT	TCE
	FULL	(SQ FT)	(SQ FT)
137	020-471-17		49
138	020-471-16		483
139	020-471-15		360
140	020-471-14		324
141	020-471-13		360
142	020-471-12		324
143	020-471-11		360

RIGHT-OF-WAY REQUIREMENTS			
APN	ACQUISITIONS	WALL EASEMENT	TCE
	FULL	(SQ FT)	(SQ FT)
113	020-522-02	X	
114	020-522-03	X	
115	020-522-04	X	
116	020-522-05		747
117	020-522-09	X	
118	020-524-06		32
119	020-524-07	X	87
120	020-524-08	X	
121	020-524-09	X	
122	020-524-10	X	
123	020-524-11	X	
124	020-524-12	X	
125	020-524-16	X	
126	020-524-17	X	
127	020-524-18	X	
128	020-524-19	X	
129	020-524-20	X	
130	020-524-21	X	
131	020-524-24	X	
132	020-524-25	X	
133	020-524-26	X	
134	020-524-28	X	
135	020-524-29	X	
136	020-524-30	X	
137	020-525-03	X	



Dist	COUNTY	ROUTE	POST MILES	SHEET	TOTAL
06	Ker	99	131.7 / 1855.6	10	211.2 / 281.2

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

PARSONS
110 WEST A STREET, SUITE 1050
SAN DIEGO, CALIFORNIA 92101

THOMAS ROAD IMPROVEMENT PROGRAM
900 TRUXTON AVENUE, SUITE 200
BAKERSFIELD, CALIFORNIA 93301

DRAFT

ALTERNATIVE B
RIGHT-OF-WAY REQUIREMENTS
SCALE: 1" = 200'

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