

# Contents

	<b>Page</b>
<b>Summary</b> .....	<b>S-1</b>
Project Location and Project Objectives .....	S-1
Proposed Project .....	S-1
Alternatives to the Proposed Project .....	S-2
Timber Barrier Alternative .....	S-3
No-Project Alternative .....	S-3
Summary of Environmental Impacts and Mitigation Measures .....	S-4
Terminology Used in this Environmental Impact Report.....	S-5
Known Areas of Controversy .....	S-5
Environmentally Preferred Alternative .....	S-5
Preferred Alternative .....	S-7
<b>Chapter 1 Introduction</b> .....	<b>1-1</b>
Scope of the Environmental Impact Report .....	1-1
Organization of the Environmental Impact Report.....	1-3
<b>Chapter 2 Project Description</b> .....	<b>2-1</b>
Project Location .....	2-1
Project Area Description .....	2-1
Project Purpose and Need.....	2-2
Project Purpose .....	2-2
Project Need .....	2-2
Project Background .....	2-3
Proposed Project Description .....	2-5
Bridge/Culvert Design .....	2-7
Utility Information .....	2-7
Proposed Sound Barrier .....	2-8
Hazardous Materials .....	2-11
Right-of-Way .....	2-11
Construction Information.....	2-12
Extent of Ground-Disturbing Construction Activity.....	2-12
Equipment Storage/Vehicle Storage/Staging Areas .....	2-12
Construction Information and Traffic Handling .....	2-12
Project Schedule.....	2-13
Project Funding.....	2-13
Alternatives to the Proposed Project .....	2-14
Alternatives and Design Options Considered but Withdrawn .....	2-14
Timber Barrier Alternative .....	2-17

	No-Project Alternative .....	2-18
	Anticipated Permits and Consultations .....	2-18
	Related Projects .....	2-18
	SR 99 Auxiliary Lane Project .....	2-18
	Oak Valley Conceptual Master Plan and Subdivision Project.....	2-19
	Humboldt Road Burn Dump.....	2-19
	Meriam Park .....	2-20
	Environmental Review Process .....	2-20
	Mitigation Monitoring Program.....	2-20
<b>Chapter 3</b>	<b>Noise .....</b>	<b>3-1</b>
	Introduction .....	3-1
	Environmental Setting.....	3-2
	Fundamentals of Environmental Noise .....	3-2
	Regulatory Setting .....	3-7
	Existing Conditions .....	3-9
	Impact Analysis.....	3-10
	Approach and Methodology.....	3-10
	Significance Thresholds.....	3-11
	Impacts and Mitigation Measures of Proposed Project and Alternatives .....	3-11
	No-Project Alternative.....	3-15
	Cumulative Impacts .....	3-16
<b>Chapter 4</b>	<b>Air Quality.....</b>	<b>4-1</b>
	Environmental Setting.....	4-1
	Regulatory Setting .....	4-1
	Existing Conditions .....	4-4
	Impact Analysis.....	4-10
	Approach and Methodology.....	4-10
	Impacts and Mitigation Measures of Proposed Project and Alternatives .....	4-15
	No-Project Alternative.....	4-21
	Cumulative Impacts .....	4-21
<b>Chapter 5</b>	<b>Biological Resources .....</b>	<b>5-1</b>
	Introduction .....	5-1
	Environmental Setting.....	5-1
	Regulatory Setting .....	5-2
	Existing Conditions .....	5-8
	Impact Analysis.....	5-20
	Approach and Methodology.....	5-21
	Impacts and Mitigation Measures of Proposed Project and Alternatives .....	5-23
	Timber Barrier Alternative.....	5-45
	No-Project Alternative.....	5-45
	Cumulative Impacts .....	5-46

<b>Chapter 6</b>	<b>Visual Resources.....</b>	<b>6-1</b>
	Introduction.....	6-1
	Criteria for Visual Assessment.....	6-2
	Environmental Setting.....	6-3
	Regulatory Setting .....	6-3
	Existing Conditions .....	6-5
	Impact Analysis.....	6-11
	Approach and Methodology.....	6-11
	Impacts and Mitigation Measures of Proposed Project and Timber Barrier Alternative.....	6-12
	No-Project Alternative.....	6-21
	Cumulative Impacts .....	6-21
<b>Chapter 7</b>	<b>Cumulative and Growth-Inducing Impacts.....</b>	<b>7-1</b>
	Introduction.....	7-1
	Environmental Setting.....	7-1
	Regulatory Setting .....	7-1
	Existing Conditions and Development Trends.....	7-2
	Cumulative Impacts .....	7-4
	Growth Inducing Impacts .....	7-5
<b>Chapter 8</b>	<b>References Cited and Agencies Consulted .....</b>	<b>8-1</b>
	Printed References.....	8-1
	Personal Communications.....	8-6
	List of Agencies Consulted .....	8-6
	Federal Agencies.....	8-6
	State Agencies.....	8-7
	Local and Regional Agencies .....	8-7
	Other Organizations.....	8-7
<b>Chapter 9</b>	<b>List of Preparers .....</b>	<b>9-1</b>

Provided on the compact disc attached to the inside back cover of this report.

- Appendix A Notice of Preparation/State Route 32 Widening Project: State Route 99 to Yosemite Drive Initial Study**
- Appendix B Public Workshop Comments**
- Appendix C Roundabouts Evaluation**
- Appendix D Mitigation Monitoring Plan**
- Appendix E State Route 32 Widening Project Noise Impact Assessment, Chico, California**

- Appendix F** Arborist Report for the State Route 32 Widening Project:  
State Route 99 to Yosemite Drive
- Appendix G** Delineation of Waters of the United States,  
State Route 32 Widening Project
- Appendix H** Natural Environment Study, State Route 32 Road Widening Project
- Appendix I** Biological Assessment, State Route 32 Road Widening Project
- Appendix J** U.S. Fish and Wildlife Service Biological Opinion
- Appendix K** Traffic Report for the SR-32 Widening Project Report/  
Environmental Document
- Appendix L** Historic Property Survey Report, State Route 32 Widening Project
- Appendix M** Preliminary Geotechnical Report, SR 32 Widening – Project Study  
Report
- Appendix N** Initial Site Assessment—Draft, SR 32 Widening
- Appendix O** Revised Hazardous Materials Report For Humboldt Road Burn Dump  
Area, State Route 32 Widening Project
- Appendix P** Draft Bridge Design Hydraulic Study For the State Route 32  
Widening Between Fir Street and Yosemite Drive at Dead Horse  
Slough and South Fork Dead Horse Slough in the City of Chico,  
California
- Appendix Q** Draft Location Hydraulic Study Report For the State Route 32  
Widening Between Fir Street and Yosemite Drive at Dead Horse  
Slough and South Fork Dead Horse Slough in the City of Chico,  
California
- Appendix R** Storm Water Data Report For the State Route 32 Widening Between  
State Route 99 and Yosemite Drive in the City of Chico, California

# Tables

	<b>Page</b>
S-1 Summary of Proposed Project Impacts and Mitigation Measures Identified in the State Route 32 Widening Project Initial Study (February 2007) .....	follows S-4
S-2 Summary of Proposed Project Impacts and Mitigation Measures Identified in the State Route 32 Widening Project EIR.....	follows S-4
2-1 Anticipated Permits and Consultations .....	follows 2-18
3-1 Definitions of Acoustical Terms .....	3-2
3-2 Typical Noise Levels in the Environment.....	3-4
3-3 Maximum Allowable Noise Exposure Transportation Noise Sources .....	3-7
3-6 Construction Equipment Noise Emission Levels .....	3-14
3-4 Summary of Long-Term and Short-Term Noise Measurement Data .....	follows 3-10
3-5 Predicted Noise Impact Associated with the Proposed Project .....	follows 3-12
4-1 Ambient Air Quality Standards Applicable in California .....	4-6
4-2 State and National Air Attainment Status Summary .....	4-6
4-3 Air Quality Monitoring Data Summary (2005–2007) for the Project Area (Chico – Manzanita Avenue Monitoring Station) .....	4-7
4-4 BCAQMD Significance Thresholds (Pounds/Day).....	4-11
4-5 Construction-Related Road Widening Emissions (Unmitigated) (Pounds/Day) .....	4-16

4-6	Construction-Related Road Widening Emissions (Mitigated) (Pounds/Day).....	4-16
4-7	Criteria Pollutant Emissions.....	4-18
4-8	Carbon Monoxide Concentrations in 2010 .....	follows 4-18
4-9	Carbon Monoxide Concentrations in 2030 .....	follows 4-18
4-10	Carbon Dioxide Emissions (Metric Tons/Year).....	4-20
5-1	Special-Status Plant Species with Potential to Occur in the Project Area .....	follows 5-14
5-2	Special-Status Wildlife Species with Potential to Occur in the State Route 32 Widening Project Area .....	follows 5-16
5-3	Invasive Plant Species Located in the Project Area .....	5-20
5-4	Required Compensation for VELB for the State Route 32 Widening Project.....	5-35
6-1	Tree Removal by Barrier Design for Each Location Option.....	6-16

# Figures

	<b>Follows Page</b>
2-1	Regional Location ..... 2-2
2-2	Project Location ..... 2-2
2-3 (a–f)	Proposed Project, Including Proposed Sound Barrier ..... 2-20
2-4	Preliminary Design for Proposed Dead Horse Slough Bridge ..... 2-8
2-5 (a–f)	Timber Barrier Alternative, Including Proposed Sound Barrier ..... 2-20
3-1 (a–f)	Noise Measurement and Modeled Receiver Locations ..... 3-16
5-1 (a–h)	Biological Resources in the Project Area ..... 5-46
6-1	Landscape Units, Key Viewpoints, and Photosimulation Locations ..... 6-8
6-2 (a–b)	Key Viewpoints ..... 6-10
6-3a	6' High Barrier, Photosimulations—Location A ..... 6-21
6-3b	8' High Barrier, Photosimulations—Location A ..... 6-21
6-4a	6' High Barrier with Timber Barrier Alternative, Photosimulations—Location A ..... 6-21
6-4b	8' High Barrier with Timber Barrier Alternative, Photosimulations—Location A ..... 6-21
6-5a	6' High Barrier, Photosimulations—Location B ..... 6-21
6-5b	8' High Barrier, Photosimulations—Location B ..... 6-21
6-6a	6' High Barrier, Photosimulations—Location C ..... 6-21
6-6b	8' High Barrier, Photosimulations—Location C ..... 6-21

6-7a	6' High Barrier, Photosimulations—Location D.....	6-21
6-7b	8' High Barrier, Photosimulations—Location D.....	6-21
6-8a	6' High Barrier, Photosimulations—Location E.....	6-21
6-8b	8' High Barrier, Photosimulations—Location E.....	6-21

# Acronyms and Abbreviations

$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
$\mu\text{Pa}$	micropascals
AB	Assembly Bill
AB32	California Global Warming Solutions Act of 2006
ACMs	asbestos-containing materials
AG	California Attorney General
AQAP	air quality attainment plan
ARB	California Air Resources Board
ATCMs	air toxic control measures
BA	biological assessment
BCAG	Butte County Association of Governments
BCAQMD	Butte County Air Quality Management District
BCM	Butte County meadowfoam
BEC	Butte Environmental Council
BMPs	best management practices
CAAQS	California ambient air quality standards
Cal-EPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CAT	Climate Action Team
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CHP	California Highway Patrol
City	City of Chico
CNDDB	California Natural Diversity Database
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
Corps	U.S. Army Corps of Engineers
County	Butte County
CRZ	Clear Recovery Zone
CWA	Clean Water Act
dB	decibel
dbh	diameter at breast height
DFG	California Department of Fish and Game

EIR	environmental impact report
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ETW	edge of traveled way
FHWA	Federal Highway Administration
FR	Federal Register
FTIP	federal transportation improvement program
GHG	greenhouse gas
Guidelines	Conservation Guidelines for the Valley Elderberry Longhorn Beetle
HDM	Highway Design Manual
HM	Habitat Management
Hot Spots Act	Air Toxics Hot Spots Information and Assessment Act
Hz	Hertz
IS	initial study
ISA	initial site assessment
kV	kilovolt
LOS	level of service
MBGR	metal beam guardrail
MOU	memorandum of understanding
mph	miles per hour
MSATs	mobile source air toxics
NAAQS	national ambient air quality standards
NESHAP	National Emission Standard for Hazardous Air Pollutants
NO <sub>2</sub>	nitrogen dioxide
NOA	naturally occurring asbestos
NOAA Fisheries	National Marine Fisheries Service
NOP	Notice of Preparation
NO <sub>x</sub>	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NSVAB	Northern Sacramento Valley Air Basin
OGAC	open graded asphalt concrete
OHP	State Office of Historic Preservation
OPR	Governor's Office of Planning and Research
PCN	pre-construction notification
PM	particulate matter
PM10	PM 10 microns in diameter or less
PM2.5	PM 2.5 microns in diameter or less
POAC	projects of air quality concern
Porter-Cologne	Porter-Cologne Water Quality Control Act
ppd	pounds per day
ppm	parts per million

PS&E	Plans, Specifications and Estimate
PSR/PR	Project Study Report/Project Report
ROG	reactive organic gases
SB	Senate Bill
SIP	state implementation plan
SO <sub>2</sub>	sulfur dioxide
SO <sub>x</sub>	sulfur oxides
SR	State Route
SWANCC	Solid Waste Agency of Northern Cook County
SWPPP	Storm Water Pollution Prevention Plan
TACs	toxic air contaminants
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VELB	Valley elderberry longhorn beetle
VHT	vehicle hours traveled
VMT	vehicle miles traveled

