

TABLE OF CONTENTS

Section	Page
EXECUTIVE SUMMARY	ES-1
ES.1 Purpose and Intended Uses of this Draft EIR	ES-1
ES.2 Summary of the Project	ES-1
ES.3 Summary of Environmental Impacts and Mitigation Measures	ES-3
ES.4 Summary of Project Alternatives	ES-3
ES.5 Areas of Potential Controversy	ES-4
1 INTRODUCTION	1-1
1.1 Agency Roles and Responsibilities	1-1
1.2 Project Review and CEQA Process	1-2
1.3 Scope of Environmental Analysis	1-4
1.4 Organization of this Draft EIR	1-6
1.5 Standard Terminology	1-7
2 PROJECT DESCRIPTION	2-1
2.1 Project Location.....	2-1
2.2 Project Background	2-1
2.3 Existing Conditions	2-3
2.4 Project Objectives.....	2-6
2.5 Project Characteristics	2-6
2.6 Approvals and Permits	2-8
3 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES	3-1
Format of the Environmental Analysis	3-1
3.1 Aesthetics.....	3.1-1
3.2 Agricultural Resources	3.2-1
3.3 Air Quality	3.3-1
3.4 Biological Resources	3.4-1
3.5 Cultural and Paleontological Resources	3.5-1
3.6 Energy.....	3.6-1
3.7 Greenhouse Gases Emissions.....	3.7-1
3.8 Hydrology, Drainage, and Water Quality	3.8-1
3.9 Land Use	3.9-1
3.10 Noise and Vibration	3.10-1
3.11 Population and Housing.....	3.11-1
3.12 Public Services and Recreation.....	3.12-1
3.13 Traffic, Transportation, and Circulation	3.13-1
3.14 Utilities	3.14-1
3.15 Hazards and Hazardous Materials	3.15-1
4 CUMULATIVE IMPACTS.....	4-1
4.1 CEQA Requirements	4-1
4.2 Cumulative Impact Analysis.....	4-1
4.3 Analysis of Cumulative Effects.....	4-6

5	OTHER CEQA CONSIDERATIONS.....	5-1
5.1	Growth Inducement.....	5-1
5.2	Significant Irreversible Environmental Changes	5-3
5.3	Significant and Unavoidable Impacts.....	5-3
6	PROJECT ALTERNATIVES	6-1
6.1	California Environmental Quality Act Requirements	6-1
6.2	Considerations for Selection of Alternatives.....	6-1
6.3	Alternatives Dismissed from Detailed Evaluation	6-6
6.4	Evaluation of Alternatives	6-7
6.5	Environmentally Superior Alternative.....	6-17
7	LIST OF PREPARERS	7-1
8	REFERENCES	8-1

Appendices (provided on CD on the back cover)

- A NOP and Comments Received
- B Air Quality Modeling Data
- C Noise Modeling Data
- D Traffic Modeling Data

Exhibits

Exhibit 2-1	Project Location.....	2-2
Exhibit 2-2	Existing Site Conditions.....	2-4
Exhibit 2-3	Surrounding Land Uses.....	2-5
Exhibit 2-4	Bilby Ridge SOIA Conceptual Land Use Plan	2-7
Exhibit 3.1-1	Location of Representative Viewpoints.....	3.1-4
Exhibit 3.1-2	Viewpoint 1: South from Henry Backer Sr. Park.....	3.1-5
Exhibit 3.1-3	Viewpoint 2: Southeast from Henry Backer Sr. Park.....	3.1-5
Exhibit 3.1-4	Viewpoint 3: East from South End of Willard Parkway.....	3.1-6
Exhibit 3.1-5	Viewpoint 4: Northeast from South End of Willard Parkway.....	3.1-6
Exhibit 3.2-1	Surrounding Zoning.....	3.2-2
Exhibit 3.2-2	Important Farmland	3.2-4
Exhibit 3.2-3	Williamson Act Map.....	3.2-6
Exhibit 3.4-1	Wetlands	3.4-9
Exhibit 3.4-2	CNDDB Occurrences	3.4-23
Exhibit 3.8-1	Watersheds in the Project Vacinity.....	3.8-2
Exhibit 3.8-2	200-year Floodplain	3.8-6

Exhibit 3.10-1 Noise Measurement Locations.....	3.10-6
Exhibit 3.10-2 Existing Highway Noise Contours	3.10-8
Exhibit 3.10-3 Existing Roadway Noise Contours	3.10-9
 Exhibit 3.13-1 Study Area.....	3.13-3
Exhibit 3.13-2 Roadway Lanes (Two-Way Total) - Existing Conditions.....	3.13-5
Exhibit 3.13-3 Average Daily Traffic Volumes – Existing Conditions	3.13-9
Exhibit 3.13-4 Peak Hour Traffic Volumes – Existing Conditions	3.13-11
Exhibit 3.12-5 e-Trans System Map.....	3.13-16
Exhibit 3.12-6 Existing Bicycle Facilities.....	3.13-17
Exhibit 3.13-7 Roadway Lanes (Two-Way Total) – Cumulative Conditions	3.13-23
Exhibit 3.13-8 Average Daily Traffic Volumes – Cumulative Conditions	3.13-29
Exhibit 3.13-9 Peak Hour Traffic Volumes – Cumulative Conditions	3.13-31
Exhibit 3.13-10Average Daily Traffic Volumes – Cumulative Plus Project Conditions	3.13-33
Exhibit 3.13-11Peak Hour Traffic Volumes – Cumulative Plus Project Conditions.....	3.13-35
 Exhibit 6-1 Alternative 2: Reduced Sphere of Influence.....	6-8
Exhibit 6-2 Alternative 3: Off-Site Alternative	6-9
 Tables	
Table ES-1 Summary of Impacts and Mitigation Measures	ES-5
 Table 1-1 List of Commenters	1-2
 Table 2-1 Conceptual Land Use Plan for Bilby Ridge SOIA Area	2-8
 Table 3.2-1 Agricultural Land Conversion in Sacramento County.....	3.2-3
 Table 3.3-1 Attainment Status Designations for Sacramento County	3.3-2
Table 3.3-2 Summary of Annual Data on Ambient Air Quality (2013-2015)1.....	3.3-4
Table 3.3-3 Ambient Air Quality Standards.....	3.3-6
Table 3.3-4 Summary of Maximum Daily Emissions of Criteria Air Pollutants and Precursors Associated with Project Construction.....	3.3-14
Table 3.3-5 Summary of Maximum (Unmitigated) Operational Emissions of Criteria Air Pollutants and Precursors at Full Buildout (2019)	3.3-16
 Table 3.4-1 Special-Status Plant Species Known to Occur in the Project Region and their Potential for Occurrence on the Project Site	3.4-3
Table 3.4-2 Special-Status Wildlife Species Known to Occur in the Project Region and their Potential for Occurrence on the Project Site	3.4-5

Table 3.4-3	Normal Blooming Period for Special-Status Plants with Potential to Occur on the Project Site.....	3.4-20
Table 3.5-1	Divisions of Geologic Time	3.5-2
Table 3.6-1	Construction Energy Consumption	3.6-12
Table 3.6-2	Operational Energy Consumption.....	3.6-13
Table 3.6-3	Gasoline and Diesel Consumption	3.6-13
Table 3.7-1	Conceptual Land Use Scenario Greenhouse Gas Emissions	3.7-11
Table 3.9-1	Sacramento County General Plan Consistency Analysis.....	3.9-12
Table 3.9-2	Elk Grove General Plan Consistency Analysis.....	3.9-12
Table 3.9-3	Sacramento LAFCo Policy, Standards, and Procedures Guidelines Consistency Analysis	3.9-14
Table 3.10-1	Typical Noise Levels	3.10-2
Table 3.10-2	Human Response to Different Levels of Ground Noise and Vibration.....	3.10-3
Table 3.10-3	Summary of Modeled Existing Traffic Noise Levels	3.10-7
Table 3.10-4	Noise Measurement Summary.....	3.10-10
Table 3.10-5	Ground-Borne Vibration Impact Criteria for General Assessment.....	3.10-11
Table 3.10-6	Caltrans Recommendations Regarding Vibration Levels.....	3.10-11
Table 3.10-7	Maximum Allowable Noise Exposure from Transportation Noise Sources by Land Use Type	3.10-12
Table 3.10-8	Performance Standards for Typical Stationary Noise Sources.....	3.10-13
Table 3.10-9	Exterior Noise Standards	3.10-14
Table 3.10-10	Noise Standards for New Uses Affected by Traffic and Railroad Noise.....	3.10-17
Table 3.10-11	Non-Transportation Noise Standards.....	3.10-19
Table 3.10-12	Significant Increase in Transportation Noise.....	3.10-20
Table 3.10-13	Exterior Noise Standards	3.10-20
Table 3.10-14	Noise Emission Levels from Construction Equipment	3.10-23
Table 3.10-15	Levels of Noise Exposure at Off-Site Noise-Sensitive Receptors during Typical Daytime Construction Activity	3.10-24
Table 3.10-16	Summary of Modeled Traffic Noise Levels under Existing and Existing -Plus-Project Conditions	3.10-26
Table 3.10-17	Summary of Modeled Traffic Noise Contour Distances Under Cumulative-Plus-Project Conditions	3.10-30
Table 3.10-18	Summary of Modeled L_{eq} Traffic Noise Contour Distances Under Cumulative-Plus-Project Conditions	3.10-31

Table 3.13-1	Roadway Level of Service Definitions	3.13-8
Table 3.13-2	Daily Roadway Segment Operations – Existing Conditions	3.13-12
Table 3.13-3	Peak Hour Directional Roadway Segment Operations – Existing Conditions.....	3.13-13
Table 3.13-4	City of Elk Grove Vehicle Miles Traveled Baseline (2015) by Land Use Designation	3.13-14
Table 3.13-5	Travel Demand Forecasting Model Sub-Area Validation.....	3.13-22
Table 3.13-6	Bilby Ridge Sphere of Influence Amendment Travel Forecasting Model Land Use Inputs	3.13-25
Table 3.13-7	Bilby Ridge Vehicle Trip Generation – Modified SACMET TDF Model	3.13-26
Table 3.13-8	Bilby Ridge Vehicle Trip Generation – Published Rates.....	3.13-26
Table 3.13-9	Daily Roadway Segment Operations – Cumulative Plus Project Conditions	3.13-36
Table 3.13-10	Peak Hour Directional Roadway Segment Operations – Cumulative Plus Project Conditions	3.13-39
Table 3.13-11	Comparison of Planned Facilities for Kammerer and Grant Line Roads	3.13-41
Table 3.14-1	Projected Zone 40 Water Demand.....	3.14-2
Table 3.14-2	Zone 40 Water Supply in Acre-Feet Per Year.....	3.14-2
Table 3.14-3	Capacity of Area Landfills.....	3.14-5
Table 3.14-4	Conceptual Buildout Unit Water Demand for Bilby Ridge SOIA Area	3.14-14
Table 3.15-1	Reasonably Foreseeable Probability of Occurrence.....	3.15-8
Table 3.15-2	Maximum Acceptable Exposure Criteria for Agricultural, Residential, and Non- Residential Land Uses (City of Elk Grove General Plan Table SA-A).....	3.15-9
Table 4-1	Geographic Scope of Cumulative Impacts.....	4-2
Table 4-2	Cumulative Project List	4-3
Table 4-3	Summary of Modeled Traffic Noise Levels under Cumulative and Cumulative Plus Project Conditions	4-14
Table 6-1	Comparison of the Environmental Impacts of the Alternatives in Relation to the Proposed Project	6-16

ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius
°F	degrees Fahrenheit
2030 General Plan	<i>Sacramento County General Plan of 2005–2030</i>
AB	Assembly Bill
AB 939	California Integrated Waste Management Act of 1989
ADT	average daily traffic
AFVs	alternative fuel vehicles
afy	acre-feet per year
AQMP	operational air quality mitigation plan
B.P.	before present
BMPs	best management practices
BPTMP	Bicycle, Pedestrian, and Trails Master Plan
Btu	British thermal unit
CAA	Clean Air Act
CAAQS	California ambient air quality standards
CAFE	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
Cal OSHA	California Occupational Safety and Health Administration
Cal/EPA	California Environmental Protection Agency
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
CalTrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Standards Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CCSD	Cosumnes Community Service District
CCSDFD	Cosumnes Community Services District Fire Department
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CESA	California Endangered Species Act

CFC	California Fire Code
CFD	Community Facilities District
CFR	Code of Federal Regulations
City	City of Elk Grove
CKH Act	Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	CO ₂ -equivalent
Cortese-Knox-Hertzberg Act	Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CSCGMP	Central Sacramento County Groundwater Management Plan
CTC	California Transportation Commission
CTR	California Toxics Rule
CUPA	Certified Unified Program Agency
CVFPB	Central Valley Flood Protection Board
CWA	Clean Water Act
dB	decibels
dBA	A weighted decibels
dbh	diameter at breast height
DBH	diameter at breast height
Delta	Sacramento River–San Joaquin River Delta
diesel PM	PM exhaust from diesel engines
DOC	California Department of Conservation
DOF	California Department of Finance
DOT	Department of Transportation
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EAP	Energy Action Plan
EGCSD	Elk Grove Community Services District
EGPD	City of Elk Grove Police Department
EGUSD	Elk Grove Unified School District
EIA	U.S. Energy Information Administration
EIR	environmental impact report
EMD	Environmental Management Department

EO	Executive Order
EPA	U.S. Environmental Protection Agency
EPAct	Energy Policy Act of 1992
ESA	Environmental Site Assessment
ez-tran	e-Tran neighborhood shuttle service
FEMA	Federal Emergency Management Agency
FHWA	Federal Highways Administration
FIRM	flood insurance rate map
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GHG	greenhouse gas
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plans
GWTPs	groundwater treatment plants
HAP	hazardous air pollutants
HCP	Habitat Conservation Plan
HOV	high occupancy vehicle
HUD	U.S. Department of Housing & Urban Development
Hz	hertz
I-5	Interstate 5
IEPR	Integrated Energy Policy Report
IPCC	Intergovernmental Panel on Climate Change
ISO	Insurance Service Office
ITPs	Incidental Take Permits
kV	kilovolt
LAFCo	Local Agency Formation Commission
lb/day	pounds per day
LDL	Larson Davis Laboratories
L _{dn}	Day-Night Sound Level
LEED	Leadership in Energy and Environmental Design
L _{eq}	Equivalent Continuous Sound Level
LID	low impact development
L _{max}	Maximum Sound Level
LOS	Level of Service
LRSP	Laguna Ridge Specific Plan

MBTA	Migratory Bird Treaty Act
MCLs	maximum contaminant levels
MEIR	maximum exposed individual resident
mm/s	millimeters per second
MMT	million metric tons
mPa	micro-Pascals
mpg	miles per gallon
MPOs	metropolitan planning organizations
MS4s	Municipal Separate Storm Sewer Systems
MSR	Municipal Services Review
MTIP	Metropolitan Transportation Improvement Program
MTP/SCS	Metropolitan Transportation Plan/Sustainable Communities Strategy
MWELO	Model Water Efficient Landscape Ordinance
MWs	megawatts
NAAQS	national ambient air quality standards
NAHC	Native American Heritage Commission
NCIC	North Central Information Center
NHPA	National Historic Preservation Act of 1966
NHTSA	U.S. Department of Transportation's National Highway Traffic Safety Administration
NMFS	National Marine Fisheries Service
NO	nitric oxide
NO ₂	nitrogen dioxide
NOP	notice of preparation
NOX	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
NTR	National Toxics Rule
OEHHA	Office of Environmental Health Hazard Assessment
OES	California Office of Emergency Services
OPR	California Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
PCBs	polychlorinated biphenyls
PCR	Public Resources Code
PG&E	Pacific Gas and Electric Company
PM ₁₀	respirable particulate matter
PM _{2.5}	fine particulate matter
Porter-Cologne Act	Porter-Cologne Water Quality Control Act of 1969

PPV	peak particle velocity
PRC	Public Resources Code
PV	photovoltaic
RCRA	Resource Conservation and Recovery Act of 1976
Regional San	Sacramento Regional County Sanitation District
River Road	State Route 160
RMS	root-mean-square
RMSE	Root Mean Square Error
ROG	reactive organic gases
RPS	renewable portfolio standard
RWQCB	regional water quality control boards
SACOG	Sacramento Area Council of Governments
SAF Plan	State Alternative Fuels Plan
SARA	Superfund Amendments and Reauthorization Act of 1986
SASD	Sacramento Area Sewer District
SB	Senate Bill
SCGA	Sacramento Central Groundwater Authority
SCMP	Subregional Corridor Mitigation Program
SCS	Sustainable Communities Strategy
SCWA	Sacramento County Water Agency
SEMS	Standard Emergency Management System
SEPA	Southeast Policy Area Community Plan
SFD	City of Sacramento Fire Department
SGMA	Sustainable Groundwater Management Act
SIP	State implementation plan
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMFD	Sacramento Metropolitan Fire District
SMUD	Sacramento Municipal Utilities District
SO ₂	sulfur dioxide
SOI	sphere of influence
SOIA	sphere of influence amendment
SPL	sound pressure level
SR	State Route
SRWTP	Sacramento Regional Wastewater Treatment Plant
SSA	South Service Area
SSHCP	South Sacramento Habitat Conservation Plan
STA	Sacramento Transportation Authority
SUVs	sport utility vehicles
SVAB	Sacramento Valley Air Basin

SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TACs	toxic air contaminants
TAZs	traffic analysis zones
TCRs	tribal cultural resources
TDF	travel demand forecasting
TMDL	total maximum daily load
TRU	transportation refrigeration unit
UAIC	United Auburn Indian Community
UCMP	University of California Museum of Paleontology
UDA	Urban Development Area
UPA	Urban Policy Area
USACE	US Army Corps of Engineers
USB	Urban Services Boundary
USC	U.S. Code
USDA	U.S. Department of Agriculture
USDOT	U.S. Department of Transportation
USFWS	U.S. Fish and Wildlife Service
V/C	volume-to-capacity ratio
VdB	vibration decibels
VMT	vehicle miles traveled
WRCC	Western Regional Climate Center
WSA	Water Supply Assessment
ZNE	Zero Net Energy

This page intentionally left blank.