ES EXECUTIVE SUMMARY

This Executive Summary is provided in accordance with the California Environmental Quality Act (CEQA) Guidelines Section 15123. As stated in the State CEQA Guidelines Section 15123(a), "[a]n EIR shall contain a brief summary of the proposed actions and its consequences. The language of the summary should be as clear and simple as reasonably practical." State CEQA Guidelines Section 15123(b) states, "[t]he summary shall identify: (1) each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect; (2) areas of environmental controversy known to the Lead Agency, including issues raised by agencies and the public; and (3) issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects." Accordingly, this summary includes a brief synopsis of the project and project alternatives, environmental impacts and mitigation, areas of known environmental controversy, and issues to be resolved during environmental review. Table ES-1 (at the end of this section) presents the summary of potential environmental impacts, their level of significance without mitigation measures, proposed mitigation measures, and the levels of significance following the implementation of mitigation measures.

ES.1 PURPOSE AND INTENDED USES OF THIS DRAFT EIR

This draft environmental impact report (EIR) has been prepared to inform decision makers, representatives of affected and responsible agencies, the public, and other interested parties of the potential environmental effects that may result from implementation of the proposed Bilby Ridge Sphere of Influence Amendment (SOIA) (LAFC# 04-16; State Clearinghouse# 2017042071). This document is prepared in conformance with CEQA (California Public Resources Code, Section 21000, et seq.) and the State CEQA Guidelines (California Code of Regulations, Title 14, Section 15000, et seq.).

ES.2 SUMMARY OF THE PROJECT

The project is a landowner-initiated proposal to amend the City of Elk Grove's sphere of influence (SOI) to include the 480-acre project site, which abuts the southern portion of the City of Elk Grove's existing jurisdictional boundary. This SOIA would allow the City of Elk Grove and other service providers to plan for future urbanization, but it does not authorize changes in land use or governance. Lands within an amended SOI would not be under the City's jurisdiction until future prezoning and/or development applications are received and requests for annexation of those parcels are approved by Sacramento LAFCo. The project does not include an annexation request. There will not be any change to the land use jurisdiction in the event that LAFCo approves the proposed SOIA. The project is being considered pursuant to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (CKH), which includes provisions for amending spheres of influence.

The following summarizes key aspects of the project. A detailed description of the project components is included in Chapter 2, "Project Description," of this document.

ES.2.1 Project Setting

The Bilby Ridge site consists of approximately 480 acres and is in the unincorporated area of Sacramento County, just south of the City of Elk Grove. The City's existing jurisdictional boundaries are adjacent to the project site's western, northern, eastern boundaries. Roadway access to the project site is provided by Willard Parkway, Bilby Road, Bruceville Road, and Kammerer Road.

Most of the Bilby Ridge site is in agricultural production (e.g., row crops, irrigated and non-irrigated pasture land). There are currently 10 single-family residences on the site, as well as several accessory structures. The Sacramento County General Plan land use designation for the site is Agricultural Cropland, which designates lands most suitable for intensive agricultural activities, including row crops, tree crops, irrigated grains, and dairies. The project site is located within the County General Plan's Urban Services Boundary.

Adjacent land uses to the project site include agricultural operations to the south and east, and single-family residential and related uses to the west and north. The City of Elk Grove East Franklin Specific Plan, Laguna Ridge Specific Plan, the Southeast Policy Area border the site and designate residential, park, and open space uses adjacent to the project site. Land areas south of the project site are designated Agricultural Cropland by the Sacramento County General Plan.

ES.2.2 Project Description

There are no changes to land uses proposed as part of the project. The project does not include a land use plan or related pre-zoning entitlement requests. Annexation of the project site to the City is not an action under consideration for this project. Land use and zoning designations for the site would be proposed at the time a request for annexation is submitted to LAFCo. However, for LAFCo to understand and fully evaluate the direct and indirect impacts associated with consideration of the Bilby Ridge SOIA, it must also consider the reasonable development pattern and intensity that could occur at the site from subsequent land use approvals. To facilitate environmental analysis for this SOIA request, the applicant has developed a conceptual land use scenario and holding capacity. These proposed land uses are the applicant's representations of intended development for the site. Approval of the SOIA would not authorize changes in land use or governance. Land use activities within the SOIA area would remain under the jurisdiction of Sacramento County until annexation is approved by LAFCo at some future time. A municipal services review (MSR) has been prepared for the project as required under CKH. The MSR assesses the adequacy of required infrastructure and services capacity and means of financing as part of a sphere of influence amendment request. The MSR is not a project subject to CEQA review. The MSR is being prepared concurrently with this EIR. While the MSR is not subject to CEQA review, it may serve to inform the environmental review process.

ES.2.3 Project Objectives

Sacramento LAFCo has identified the following objectives for the project:

- Amend the Sphere of Influence (SOI) boundary beyond the existing Elk Grove city limits to accommodate orderly and sustainable growth compatible with the Sacramento LAFCo, City of Elk Grove, and Sacramento County growth goals and policies, including promoting a sustainable jobs to housing ratio;
- ▲ Implement the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 consistent with public service conditions present or reasonably foreseeable in the proposed Bilby Ridge SOIA area;
- Establish a logical boundary within which future annexation requests to the City of Elk Grove may be considered; and
- Establish an expanded SOI for the City of Elk Grove that will facilitate the protection of important environmental, cultural, and agricultural resources.

ES.3 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Under CEQA, a significant effect on the environment is defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project. This draft EIR evaluates impacts to environmental resources that could result from implementation of the Bilby Ridge SOIA, and discusses mitigation measures that could be implemented by Sacramento LAFCo to reduce potential adverse impacts to a level that is considered less than significant. The impacts and mitigation measures are identified Chapter 3, "Affected Environment, Environmental Consequences, and Mitigation Measures," and are summarized in Table ES-1 at the end of this chapter. Chapter 4, "Cumulative Impacts," provides a discussion of cumulative impacts. The mitigation measures presented in this draft EIR will form the basis of the Mitigation Monitoring Program.

ES.3.1 Significant and Unavoidable Adverse Impacts

An impact that remains significant after mitigation is considered an unavoidable adverse impact of the project. Implementation of the project would result in significant and unavoidable impacts in the following resource areas:

- ▲ Aesthetics (Section 3.1)
- ▲ Agricultural Resources (Section 3.2)
- ▲ Air Quality (Section 3.3)
- ▲ Biological Resources (Section 3.4)
- ▲ Energy (Section 3.6)
- ▲ Greenhouse Gases (Section 3.7)
- ▲ Land Use (Section 3.9)
- ▲ Noise and Vibration (Section 3.10)
- Population and Housing (Section 3.11)
- Public Services and Recreation (Section 3.12)
- ▲ Transportation and Circulation (Section 3.13)
- ▲ Utilities (Section 3.14)

ES.4 SUMMARY OF PROJECT ALTERNATIVES

Pursuant to Section 15126.6(c) of the State CEQA Guidelines, this draft EIR includes a reasonable range of alternatives to the project that meet most of the objectives of the project and avoid or substantially lessen the identified likely environmental impacts. The following summary describes the alternatives to the project that are evaluated in this draft EIR. For further discussion, refer to Chapter 6, "Project Alternatives."

This draft EIR provides an analysis of the comparative impacts anticipated from three alternatives to the project:

- Alternative 1: No Project This alternative would consist of not approving the Bilby Ridge SOIA and the SOIA area would remain under the jurisdiction of Sacramento County with no changes to current agricultural land use designation and zoning.
- Alternative 2: Reduced Sphere of Influence This alternative would reduce the SOIA area from 480 acres to 240 acres.
- Alternative 3: Off-Site Alternative This alternative would involve the establishment of the SOIA area adjacent to the proposed Elk Grove Multi Sport Complex that is proposed for annexation south of Grant Line Road.

As discussed in Chapter 6, "Project Alternatives," the Reduced Sphere of Influence Alternative is considered the environmentally superior alternative because it reduces several impacts associated with the project and would generally meet the stated project objectives. However, the Reduced Sphere of Influence Alternative may result in irregular jurisdictional boundaries if the Kammerer Road extension is completed in the future.

ES.5 AREAS OF POTENTIAL CONTROVERSY

Section 15123 of the State CEQA Guidelines requires the summary section of a draft EIR to identify areas of controversy known to the lead agency, including issues raised by agencies and the public. The following provides a summary of issues raised through scoping and comments on the Notice of Preparation (NOP) that could be considered controversial. The comment letters received on the NOP are included in Appendix A of this document.

- ▲ Effects to adjacent agricultural land
- ▲ Effects on Swainson's Hawk
- Participation in the South Sacramento Habitat Conservation Plan
- ▲ Effects on area roadways
- ▲ Utility service in the SOIA area
- Growth inducement

The draft EIR addresses the above issues to the extent that substantial evidence permits, and to the extent that the issue is an environmental issue. However, it does not address impacts that are speculative and not reasonably foreseeable. All the substantive environmental issues raised in the NOP comment letters have been addressed in this draft EIR.

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
3.1 Aesthetics	<u>.</u>		
Impact 3.1-1: Substantially degrade the existing visual character or quality of the site and its surroundings. The visual character surrounding the SOIA area consists of suburban uses that transition to rural residential and agricultural conditions. While approval of the SOIA alone would not result in physical visual changes to the site, future development of the SOIA area could convert the open space character of project site to suburban uses, which would further expand suburban development conditions south of the existing City of Elk Grove. This may substantially alter public views. Because of the size of SOIA area and its location adjacent to agricultural lands in unincorporated Sacramento County, the change in visual character would be considered a significant impact.	S	Mitigation Measure 3.1-1: Design future projects consistent with City development standards. At the time of any application to annex territory within the Bilby Ridge SOIA area, the City of Elk Grove shall require that the applicants demonstrate compliance with the City's Design Guidelines in effect at the time of the annexation application or the establishment of its own design guidelines that are consistent with the City's Design Guidelines to ensure that future development will be compatible with the desired character of the City and to ensure physical, visual, and functional compatibility between uses. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.	SU
Impact 3.1-2: Create a new source of substantial light or glare. The SOIA would not result in any changes in existing land uses and, as such, would not result in new sources of substantial light or glare. If the site is annexed and developed in the future, development could result in the introduction of buildings and facilities that may create lighting and glare on adjoining areas. This impact would be significant.	S	Mitigation Measure 3.1-2: Design development to reduce lighting and glare. At the time of any application to annex territory within the Bilby Ridge SOIA area, the City of Elk Grove shall require that the applicants demonstrate compliance with the City's Design Guidelines and City Municipal Code standards in effect at the time of the project approval associated with reflective building materials and lighting fixture design and orientation that avoid day time glare and nighttime spillover effects on adjacent areas and nighttime sky glow conditions. Compliance with this mitigation measure may be combined with Mitigation Measure 3.1-1 and shall be provided in the annexation application to LAFCo.	SU
3.2 Agricultural Resources			
Impact 3.2-1: Direct conversion of Important Farmland and prime agricultural land to non-agricultural use. While the SOIA would not result in direct physical changes to the site, future development facilitated by subsequent annexation within the Bilby Ridge site could result in the direct conversion of up to 362 acres of Farmland of Statewide Importance and 113 acres of Farmland of Local Importance, 70 of which are also considered prime agricultural land by LAFCo, to nonagricultural urban uses. This impact would be a significant impact.	S	Mitigation Measure 3.2-1: Preserve agricultural land. At the time of submittal of any application to annex territory within the Bilby Ridge site, the City of Elk Grove shall require that applicants protect 1 acre of existing farmland land of equal or higher quality for each acre of Farmland of Statewide Importance, Farmland of Local Importance, and prime agricultural land that would be developed as a result of the project. In quantifying the amount of protected farmland needed to mitigate impacts, 1 acre of protected farmland that is designated as both Farmland of Statewide Importance and prime agricultural land, for example, would count towards mitigation in both categories. This protection may consist of the establishment of a farmland conservation easement, farmland deed restriction, or other appropriate farmland conservation mechanism to ensure the preservation of the land from conversion in perpetuity, but may also be utilized for compatible wildlife habitat	SU

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		conservation efforts (e.g., Swainson's hawk foraging habitat mitigation) that do not substantially impair or diminish the agricultural productivity of the land. The farmland/wildlife habitat land to be preserved must have adequate water supply to support agricultural use. The City shall consider the benefits of preserving farmlands in proximity to other protected lands.	
		The total acres of land conserved shall be based on the total on-site agriculture acreage converted to urban uses. Conserved agriculture areas may include areas on the project site, lands secured for permanent habitat enhancement (e.g., giant garter snake habitat, Swainson's hawk habitat), or additional land identified by the City. The City shall attempt to locate preserved farmland within 5 miles of the Bilby Ridge site; however, the preserved farmland shall at a minimum be located inside Sacramento County. The City shall impose the conservation easement content standards to include, at a minimum: land encumbrance documentation; documentation that the easements are permanent, monitored, and appropriately endowed; prohibition of activity which substantially impairs or diminishes the agricultural productivity of the land; and protection of water rights.	
		 In addition, the City shall impose the following minimum conservation easement content standards upon annexation: All owners of the agricultural/wildlife habitat mitigation land shall execute the document encumbering the land. The document shall be recordable and contain an accurate legal description of the agricultural/wildlife habitat mitigation land. 	
		The document shall prohibit any activity that substantially impairs or diminishes the agricultural productivity of the land. If the conservation easement is also proposed for wildlife habitat mitigation purposes, the document shall also prohibit any activity that substantially impairs or diminishes the wildlife habitat suitability of the land.	
		 The document shall protect any existing water rights necessary to maintain agricultural uses on the land covered by the document and retain such water rights for ongoing use on the agricultural/wildlife habitat mitigation land. Interests in agricultural/habitat mitigation land shall be held in trust by an entity acceptable to the City and/or by the City in perpetuity. The entity shall 	

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		 not sell, lease, or convey any interest in agricultural/wildlife habitat mitigation land that it acquires without the City's prior written approval. The applicant shall pay to the City an agricultural/wildlife habitat mitigation monitoring fee to cover the costs of administering, monitoring, and enforcing the document in an amount determined by the receiving entity or City. The City shall be named a beneficiary under any document conveying the interest in the agricultural/wildlife habitat mitigation land to an entity acceptable to the City. If any qualifying entity owning an interest in agricultural/wildlife habitat mitigation land ceases to exist, the duty to hold, administer, monitor, and enforce the interest shall be transferred to another entity acceptable to the City. Before committing to the preservation of any particular farmland pursuant to this measure, the applicant shall obtain the City's approval of the farmland proposed for preservation. Evidence of compliance with this mitigation measure shall be provided 	
Impact 3.2-2: Conflict with existing Williamson Act contracts. Future development within the Bilby Ridge site could result in conflicts with existing Williamson Act contracts that that protect farmland in the SOIA and require filing of non- renewals or cancelations of the contracts. This impact would be a significant impact.	S	in the annexation application to LAFCo. Implement Mitigation Measure 3.2-1.	SU
Impact 3.2-3: Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use. The project would establish an expanded sphere of influence for the City of Elk Grove that would likely facilitate the subsequent annexation and development of the project site. New urban land uses in the project area could impair or result in conflicts with adjacent agricultural activities. This impact would be significant.	S	Mitigation Measure 3.2-3 Provision of agricultural buffering as part of future project design. At the time of submittal of any application to annex territory within the Bilby Ridge SOIA area, the City shall require the applicant to establish agricultural buffering features in the development site design. This shall include implementation of City Municipal Code, Chapter 14.05, "Agricultural Activities," in effect at the time of the annexation application that may include screening, fencing, landscaping, setbacks, and other provisions to buffer agricultural uses. Prospective buyers of property adjacent to agricultural land shall be notified through the title report that they could be subject to inconvenience or discomfort resulting from accepted farming activities. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.	SU

Table ES-1	Summary of Impacts and Mitigation Measures
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Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
3.3 Air Quality	•		
Impact 3.3-1: Construction emissions of criteria air pollutants and ozone precursors. Construction-related activities associated with future development within the SOIA area upon annexation could result in emissions of ROG, NOX, PM10 and PM2.5 from site preparation (e.g., excavation, clearing), off-road equipment, material and equipment delivery trips, and worker commute trips, and other miscellaneous activities (e.g., building construction, asphalt paving, application of architectural coatings). Construction activities could result in mass emissions of NOX and PM10 that exceed SMAQMD's thresholds of 85 lb/day and 80 lb/day, respectively. Therefore, construction-generated emissions of NOX and PM10 could contribute to the existing nonattainment status of the SVAB with respect to the CAAQS and NAAQS for ozone, the CAAQS forPM10 and the NAAQS for PM2.5. This would be a significant impact.	S	 Mitigation Measure 3.3-1: Construction exhaust and fugitive dust emissions controls At the time of any application to annex territory within the Bilby Ridge SOIA area, the City of Elk Grove shall require that the applicants implement SMAQMD's Basic Construction Emission Control Practices and SMAQMD's Enhanced Exhaust Control Practices during any construction or ground disturbance activities to reduce construction-related fugitive dust emissions, diesel PM, and NOX emissions. These measures are included below and are consistent with General Plan Policy CAQ-30 and Policy CAQ-33. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo. Basic Construction Fugitive Dust Emissions Control Practices 4 Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads. 4 Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered. 4 Use wet power vacuum street sweepers to remove any visible trackout mud or dir onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited. 4 Limit vehicle speeds on unpaved roads to 15 miles per hour (mph). 4 All roadways, driveways, sidewalks, parking lots to be paved should completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used. 4 Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site. 4 Mainta	SU

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		 Enhanced Exhaust Control Practices Prior to any activities on the site, the applicant shall submit to the City and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project before any grading activities. The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment. The project applicant shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. The information shall be submitted at least 4 business days before the use of subject heavy-duty off-road equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. Prior to any grading activities, the applicant shall provide a plan for approval by the City and SMAQMD demonstrating that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20-90 percent NOX reduction (depending on available technology and engine Tier) and 45 percent particulate reduction compared to the most recent CARB fleet average. This plan shall be submitted in conjunction with the equipment inventory. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. The applicant shall ensure that emissions from all off-road, diesel-powered equipment will be documented and a summary provided to the lead agency and SMAQMD monthly.	

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		 Enhanced Fugitive PM Dust Control Practices Soil Disturbance Areas Water exposed soil with adequate frequency for continued moist soil. However, do not overwater to the extent that sediment flows off the site. Suspend excavation, grading, and/or demolition activity when wind speeds exceed 20 mph. Install wind breaks (e.g., plant trees, solid fencing) on windward side(s) of construction areas. Plant vegetative ground cover (fast-germinating native grass seed) in disturbed areas as soon as possible. Water appropriately until vegetation is established. Unpaved Roads Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site. Treat site accesses to a distance of 100 feet from the paved road with a 6 to 12-inch layer of wood chips, mulch, or gravel to reduce generation of road dust and road dust carryout onto public roads. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The phone number of the District shall also be visible to ensure compliance.	
Impact 3.3-2: Long-term operational emissions of air pollutants. While approval of the SOIA would not result in any physical changes to the environment, development in the SOIA area upon future annexation could result in long-term operational emissions of ROG, NOX, PM10 and PM2.5 that exceed SMAQMD- recommended mass emission thresholds and, therefore, could conflict with the air quality planning efforts and contribute substantially to the nonattainment status of the SVAB with respect to the CAAQS and NAAQS for ozone, the CAAQS forPM10 and the NAAQS forPM2.5. This would be significant impact.	S	Mitigation Measure 3.3-2: Prepare an Air Quality Mitigation Plan to reduce potential operational emissions At the time of any application to annex territory within the Bilby Ridge SOIA area, the City of Elk Grove shall require that the applicants prepare and implement an operational air quality mitigation plan (AQMP) that achieves a 35 percent reduction in operational emissions of ROG and NOX compared to unmitigated project emissions. The AQMP shall be prepared in accordance with guidance from SMAQMD's Recommended Guidance for Land Use Emission Reductions, Version 3.3 (SMAQMD 2016c). A 35 percent reduction is recommended by SMAQMD, rather than SMAQMD's standard 15 percent reduction, because SOIA area was not included in the 2016 Sacramento Area Council of Governments (SACOG) Metropolitan Transportation Plan/Sustainable Communities Strategy, which is used to develop mobile-source emissions inventories for the region, and used to show consistency	SU

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		with adopted air quality plans and not conflict with the ability to bring the SVAB into attainment of the CAAQS and NAAQS for ozone (SMAQMD 2016b:4). The AQMP shall also include all feasible measures to reduce operational emissions of PM10, and PM2.5, though SMAQMD has not determined any specific percent reductions for PM10, and PM2.5 to be feasible (SMAQMD 2016c:4). The AQMP can include policies and emissions reduction measures demonstrating compliance with the City of Elk Grove's General Plan Conservation and Air Quality Element. The City's development of an AQMD may be conducted in parallel with implementation of Mitigation Measure 3.7-1a of this EIR, which requires implementation of on-site greenhouse gas reduction measures. The AQMP shall be approved by SMAQMD before the construction of any new land use development on the SOIA site. The City can require future developers of the SOIA site to be responsible for funding preparation of the AQMP. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo. The AQMP can be prepared after a more detailed development plan is determined. However, in addition to the conditions of approval required by this mitigation measure, the following text shall also be included as a condition of approval for the annexation of territory in the SOIA area into the City of Elk Grove: "All amendments to the detailed land use plan on which the AQMP is based and that have the potential to result in a change in ozone precursor emissions shall include an analysis which quantifies, to the extent practicable, the effect of the established AQMP on ozone precursor emissions. The amendment shall not increase total ozone precursor emissions above what was considered in the AQMP to meet that requirement, then the proponent of the amendment shall consult with SMAQMD on the revised analysis and shall prepare a revised AQMP for approval by the City, in consultation with SMAQMD."	
Impact 3.3-3: Mobile-source CO concentrations. While approval of the SOIA would not result in any physical changes to the environment, long-term operational mobile-source emissions of CO potentially generated by vehicle trips associated with future annexation and development of the SOIA area would not be large enough to violate or contribute substantially to localized	LTS	None required.	LTS

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
concentrations of CO that exceed the CAAQS or NAAQS for CO. As a result, this impact would be less than significant.			
Impact 3.3-4: Exposure of sensitive receptors to TACs. Approval of the SOIA would not result in any physical changes to the environment. Further, development associated with future annexation of the site would not result in the generation of TACs during construction that would result in an incremental increase in cancer risk greater than 10 in one million or a hazard index greater than 1.0 at existing or future sensitive receptors based on the short duration of construction activities and distance to existing sensitive receptors. However, new operational TAC sources associated with commercial development may expose existing or new receptors to TAC emissions. This impact would be significant.	S	 Mitigation Measure 3.3-4: Incorporate design features to minimize exposure of sensitive receptors to TACs generated at commercial land uses. At the time of any application to annex territory within the Bilby Ridge SOIA area, the City of Elk Grove shall require that the applicants implement the measures to address TAC exposure identified below. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo. To reduce exposure of existing or future receptors to diesel PM generated at commercial loading docks, the following design measures shall be incorporated into land uses developed within the SOIA area: Proposed commercial land uses that have the potential to emit TACs or host TAC-generating activity (e.g., loading docks) shall be located as far away from existing and proposed on-site sensitive receptors as possible such that they do not expose sensitive receptors to TAC emissions that exceed an incremental increase of 10 in 1 million for the cancer risk and/or a noncarcinogenic Hazard Index of 1.0. Commercial facilities with truck loading areas shall be designed such that buildings or walls shield locations of truck activity from nearby residences or other sensitive land uses. Commercial facilities with truck loading areas that accommodate more than 100 trucks per day, or 40 trucks equipped with transportation refrigeration units (TRUs), shall be located further than 1,000 feet of sensitive receptors. Require electrification hook-ups for at all commercial land uses that will receive deliveries from trucks with TRUs so that TRU engines need not be operated at loading docks. Signs shall be posted at all loading docks and truck loading areas which indicate that diesel powered delivery trucks must be shut off when not in use for longer than 5 minutes on the premises to reduce idling emissions of diesel PM. 	LTS

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
Impact 3.3-5: Exposure of sensitive receptors to odors. While approval of the SOIA would not result in any physical changes to the environment, future development of the SOIA area upon annexation could introduce new odor sources into the area (e.g., temporary diesel exhaust emissions during construction and delivery trucks associated with commercial land uses). Thus, receptors located near the commercial land uses may be exposed to odorous emissions depending upon the specific land uses developed. As a result, potential exposure of sensitive receptors to odors would be considered a significant impact.	S	 Mitigation Measure 3.3-5: Incorporation of design features for suburban center to address potential odor sources. At the time of any application to annex territory within the Bilby Ridge SOIA area, the City of Elk Grove shall require that the applicants implement the following measures: Land uses that have the potential to emit objectionable odorous emissions (e.g., dry cleaning establishments, restaurants, and gasoline stations) shall be located as far away as possible from existing and proposed sensitive receptors or downwind of nearby receptors. If an odor-emitting facility is to occupy space in the retail area, odor control devices shall be installed to reduce the exposure of receptors to objectionable odorous emissions. SMAQMD shall be consulted to determine applicable/feasible control devices to be installed. Use of setbacks, site design considerations, and emission controls are typically sufficient to ensure that receptors located near retail uses would not be exposed to odorous emissions on a frequent basis. 	LTS
3.4 Biological Resources			
Impact 3.4-1: Disturbance to or loss of special-status plant species and habitat. Potential land uses and development projects that may be approved and implemented in the future in the proposed SOIA area could result in disturbance or loss of several special-status plant species. Because the loss of special-status plants can substantially affect the abundance, distribution, and viability of local and regional populations of these species, this would be a potentially significant impact.	PS	 Mitigation Measure 3.4-1: Protection and mitigation of special-status plants. At the time of submittal of any application to annex territory with the Bilby Ridge SOIA area, the City of Elk Grove shall impose the following conditions on all discretionary projects. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo. Prior to construction and during the blooming period for the special-status plant species with potential to occur in the project site and in areas of any required off-site improvements, a qualified botanist shall conduct protocollevel surveys for special-status plants following the most recent CDFW rare plant survey protocols in areas where potentially suitable habitat would be removed or disturbed by project activities. Table 3.4-3 summarizes the normal blooming periods for special-status plant species with potential to occur on the project site, which generally indicates the optimal survey periods when the species are most identifiable. 	LTS

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		If no special-status plants are found, the botanist shall document the findings in a letter report to USFWS, CDFW, and the project applicant and no further mitigation shall be required.	
		 If special-status plant species are found that cannot be avoided during construction, the applicant shall consult with CDFW and/or USFWS, as appropriate depending on species status, to determine the appropriate mitigation measures for direct and indirect impacts that could occur as a result of project construction and shall implement the agreed-upon mitigation measures to achieve no net loss of occupied habitat or individuals. Mitigation measures may include preserving and enhancing existing populations, creation of off-site populations on mitigation sites through seed collection or transplantation, and/or restoring or creating suitable habitat in sufficient quantities to achieve no net loss of occupied habitat and/or individuals. A mitigation and monitoring plan shall be developed describing how unavoidable losses of special-status plants will be compensated. If relocation efforts are part of the mitigation plan, the plan shall include details on the methods to be used, including collection, storage, propagation, 	
		receptor site preparation, installation, long-term protection and management, monitoring and reporting requirements, success criteria, and remedial action responsibilities should the initial effort fail to meet long-term monitoring requirements.	
		▲ Success criteria for preserved and compensatory populations shall include:	
		The extent of occupied area and plant density (number of plants per unit area) in compensatory populations shall be equal to or greater than the affected occupied habitat.	
		 Compensatory and preserved populations shall be self-producing. Populations shall be considered self-producing when: 	
		 plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and 	
		reestablished and preserved habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types in the project vicinity.	
		 If off-site mitigation includes dedication of conservation easements, purchase of mitigation credits, or other off-site conservation measures, the details of these measures shall be included in the mitigation plan, 	

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, success criteria such as those listed above and other details, as appropriate to target the preservation of long term viable populations.	
Impact 3.4-2: Disturbance to or loss of special-status wildlife species and habitat. Potential land uses and development projects that may be approved and implemented in the future under the proposed SOIA area could adversely affect several special- status wildlife species, including reptiles, nesting birds, invertebrates, and mammals. Future development construction activities such as ground disturbance and vegetation removal, as well as overall conversion of habitat to urban uses, could result in the disturbance or loss of individuals and reduced breeding productivity of these species. Special-status wildlife species are protected under ESA, CESA, California Fish and Game Code, CEQA, or other regulations. The loss of special-status wildlife species and their habitat would be a potentially significant impact.	PS	 Mitigation Measure 3.4-2a: Protection of giant gartersnake. At the time of submittal of any application to annex territory with the Bilby Ridge SOIA area, the City of Elk Grove shall impose the following conditions on all discretionary projects. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo. For projects or ground-disturbing activities with potential to disturb suitable aquatic or adjacent upland habitat for giant gartersnake, the following measures will be implemented. The applicant shall retain a qualified biologist to conduct a field investigation to delineate giant gartersnake aquatic habitat within the project and any required off-site improvements and adjacent areas within 300 feet of the construction footprint. Giant gartersnake aquatic habitat includes agricultural ditches. During construction, an approved biologist experienced with giant gartersnake identification and behavior shall be on-site daily when construction activities within aquatic habitat or within 300 feet of aquatic habitat or within 300 feet of aquatic habitat prior to construction activities. The biologist will also conduct environmental awareness training for all construction personnel on required avoidance procedures and protocols if a giant gartersnake enters an active construction zone. All construction activity within giant garter snake aquatic and upland habitat in and around the site shall be conducted between May 1 and September 15, the active period for giant gartersnake aquatic habitat, aquatic habitat shall be dewatered and then remain dry and absent of aquatic prey (e.g., fish and tadpoles) for 15 days prior to initiation of construction activities. 	SU

Table ES-1 Summary of Impacts and Mitigation M	Measures
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Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		 consult with CDFW and USFWS to determine what additional measures may be necessary to minimize effects to giant gartersnake. After aquatic habitat has been dewatered 15 days prior to construction activities, exclusion fencing shall be installed extending a minimum of 300 feet into adjacent uplands to isolate both the aquatic and adjacent upland habitat. Exclusionary fencing shall be erected 36 inches above ground and buried at least 6 inches below the ground to prevent snakes from attempting to move under the fence into the construction area. In addition, high-visibility fencing shall be erected to identify the construction limits and to protect adjacent habitat form encroachment of personnel and equipment. Giant gartersnake habitat outside construction fencing shall be avoided by all construction personnel. The fencing and the work area shall be inspected by the approved biologist to ensure that the fencing is intact and that no snakes have entered the work area before the start of each work day. The fencing shall be avoided by 200 construction activities will be suspended in a 100-foot radius of the gartersnake until the snake leaves the site on its own volition. If necessary, the biologist shall consult with CDFW and USFWS regarding appropriate procedures for relocation. If the animal is handled, a report shall be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect giant gartersnake within 1 business day to CDFW and USFWS. The biologist shall report any take of listed species to USFWS immediately. Any worker who inadvertently injures or kills a giant gartersnake or who finds one dead, injured, or entrapped must immediately report the incident to the approved biologist. All excavated steep-walled holes and trenches more than 6 inches deep shall be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to suns	

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		 habitat shall be inspected for giant gartersnake by the approved biologist prior to being moved. If erosion control is implemented on the project site, non-entangling erosion control material shall be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure snakes are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials. The applicant shall ensure that there is no-net-loss of giant gartersnake habitat by compensating for loss of habitat at a ratio of 1:1, by purchasing credits from a USFWS-approved conservation bank. Prior to construction, USFWS shall be consulted pursuant to Section 7 of the ESA. The activities may qualify to use the "Programmatic Formal Consultation for U.S. Army Corps of Engineers 404 Permitted Projects with Relatively Small Effects on the Giant Garter Snake within Butte, Colusa, Glenn, Fresno, Merced, Sacramento, San Joaquin, Solano, Stanislaus, Sutter and Yolo Counties, California" (USFWS 1999). The Habitat Replacement & Restoration Guidelines (Appendix A), Items Necessary for Formal Consultation (Appendix B), Avoidance & Minimization Measures During Construction (Appendix C), and Monitoring Requirements (Appendix D) shall be followed. 	
		 Mitigation Measure 3.4-2b: Avoidance of western pond turtle. At the time of submittal of any application to annex territory with the Bilby Ridge SOIA area, the City of Elk Grove shall impose the following conditions on all discretionary projects. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo. For projects or ground-disturbing activities (including any required off-site improvements) with potential to disturb suitable aquatic or adjacent upland habitat for western pond turtle, the following measures shall be implemented. Within 24 hours before beginning construction activities within 200 feet of suitable aquatic habitat for western pond turtle, a qualified biologist shall survey areas of anticipated disturbance for the presence of western pond turtle. The construction area shall be re-inspected whenever a lapse in 	

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		construction activity of two weeks or more has occurred. If pond turtles are found during the survey or observed within the construction area at any other time, they shall be relocated by a qualified biologist to upstream or adjacent aquatic habitat that would not be disturbed by construction activity.	
		Mitigation Measure 3.4-2c: Protection of burrowing owl. At the time of submittal of any application to annex territory with the Bilby Ridge SOIA area, the City of Elk Grove shall impose the following conditions on all discretionary projects. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.	
		For projects or ground-disturbing activities with potential to disturb suitable habitat for burrowing owl, the following measures shall be implemented.	
		▲ The applicant shall retain a qualified biologist to conduct focused breeding and nonbreeding season surveys for burrowing owls in areas of suitable habitat on and within 1,500 feet of the project site and any required off-site improvements. Surveys shall be conducted prior to the start of construction activities and in accordance with Appendix D of CDFW's Staff Report on Burrowing Owl Mitigation (CDFW 2012) or the most recent CDFW protocols.	
		If no occupied burrows are found, a letter report documenting the survey methods and results shall be submitted to CDFW and no further mitigation will be required.	
		✓ If an active burrow is found during the nonbreeding season (September 1 through January 31), the applicant shall consult with CDFW regarding protection buffers to be established around the occupied burrow and maintained throughout construction. If occupied burrows are present that cannot be avoided or adequately protected with a no-disturbance buffer, a burrowing owl exclusion plan shall be developed, as described in Appendix E of CDFW's 2012 Staff Report. Burrowing owl exclusion plan shall include a plan for creation, maintenance, and monitoring of artificial burrows in suitable habitat proximate to the burrows to be destroyed, that provide substitute burrows for displaced owls.	
		▲ If an active burrow is found during the breeding season (February 1 through August 31), occupied burrows shall not be disturbed and will be provided with	

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		 a 150- to 1,500-foot protective buffer unless a qualified biologist verifies through noninvasive means that either: (1) the birds have not begun egg laying, or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. The size of the buffer shall depend on the time of year and level disturbance as outlined in the CDFW Staff Report (CDFW 2012) or the most recent CDFW protocols. The size of the buffer may be reduced if a broad-scale, long-term, monitoring program acceptable to CDFW is implemented to ensure burrowing owls are not detrimentally affected. Once the fledglings are capable of independent survival, the owls can be evicted and the burrow can be destroyed per the terms of a CDFW-approved burrowing owl exclusion plan developed in accordance with Appendix E of CDFW's 2012 Staff Report or the most recent CDFW protocols. If active burrowing owl nests are found on the site and are destroyed by project implementation, the project applicant shall mitigate the loss of occupied habitat in accordance with guidance provided in the CDFW 2012 Staff Report or the most recent CDFW protocols, which states that permanent impacts to nesting, occupied and satellite burrows, and burrowing owl impacted are replaced through permanent conservation of comparable or better habitat with similar vegetation communities and burrowing mammals (e.g., ground squirrels) present to provide for nesting, foraging, wintering, and dispersal. The applicant shall retain a qualified biologist to develop a burrowing owl mitigation and management plan that incorporates the following goals and standards: Mitigation lands shall be selected based on comparison of the habitat lost to the compensatory habitat, including type and structure of habitat, disturbance levels, potential for conflicts with humans, pets, and other wildlife, density of burrowing owls, and relative importance of the habitat to the species range wide. If feasible, mitigation lands shall be provid	

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		 If suitable habitat is not available for conservation adjacent or proximate to the project site, mitigation lands shall be focused on consolidating and enlarging conservation areas outside of urban and planned growth areas and within foraging distance of other conservation lands. Mitigation may be accomplished through purchase of mitigation credits at a CDFW-approved mitigation bank, if available. If mitigation credits are not available from an approved bank and mitigation lands are not available adjacent to other conservation lands, alternative mitigation sites and acreage shall be determined in consultation with CDFW. If mitigation is not available through an approved mitigation bank and will be completed through permittee-responsible conservation lands, the mitigation plan shall include mitigation objectives, site selection factors, site management roles and responsibilities, vegetation management goals, financial assurances and funding mechanisms, performance standards and success criteria, monitoring and reporting protocols, and adaptive management measures. Success shall be based on the number of adult burrowing owls and pairs using the site and if the numbers are maintained over time. Measures of success, as suggested in the 2012 Staff Report, shall include site tenacity, number of adult owls present and reproducing, colonization by burrowing owls from elsewhere, changes in distribution, and trends in stressors. 	
		Mitigation Measure 3.4-2d: Protection measures for Swainson's hawk and other nesting raptors. At the time of submittal of any application to annex territory with the Bilby Ridge SOIA area, the City of Elk Grove shall impose the following conditions on all discretionary projects. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.	
		For projects or ground-disturbing activities (including any required off-site improvements) with potential to affect Swainson's hawk and other raptor nests, or remove Swainson's hawk foraging habitat, the project applicant shall consult with CDFW with respect to the following measures proposed to mitigate for habitat removal and potential nest disturbance. As part of the consultation, the project applicant may seek take authorization under Section 2081 of the Fish and Game	

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		 Code. The following measures will be implemented and are intended to avoid, minimize, and fully mitigate impacts to Swainson's hawk, as well as other raptors: For construction activities that would occur within 0.25 mile of a known or likely Swainson's hawk nest site (identified based on previous years' use by Swainson's hawk), the project applicant shall attempt to initiate construction activities prior to nest initiation phase (i.e., before March 1). Depending on the timing, regularity, and intensity of construction activity, construction in the area prior to nest initiation may discourage a Swainson's hawk pair from using that site and eliminate the need to implement further nest-protection measures, such as buffers and limited construction operating periods around active nests. Other measures to deter establishment of nests (e.g., reflective striping or decoys) may be used prior to the breeding season in areas planned for active construction. However, if breeding raptors establish an active nest site, as evidenced by nest building, egg laying, incubation, or other nesting behavior, near the construction area, they shall not be harassed or deterred from continuing with their normal breeding activities. For project activities, including tree removal, that begin between March 1 and September 15, qualified biologists shall conduct preconstruction surveys for Swainson's hawk and other nesting raptors and to identify active nests on and within 0.5 mile of the project site. The surveys shall be conducted before the beginning of any construction activities between March 1 and September 15, following the Recommended Timing and Methodology for Swainson's Hawk Technical Advisory Committee 2000). 	
		▲ Impacts to nesting Swainson's hawks and other raptors shall be avoided by establishing appropriate buffers around active nest sites identified during preconstruction raptor surveys. Project activity shall not commence within the buffer areas until a qualified biologist has determined, in coordination with CDFW, that the young have fledged, the nest is no longer active, or reducing the buffer would not likely result in nest abandonment. CDFW guidelines recommend implementation of 0.25-mile-wide buffer for Swainson's hawk and 500-feet for other raptors, but the size of the buffer may be adjusted if a qualified biologist and the project applicant, in consultation with CDFW, determine that such an adjustment would not be likely to adversely affect the nest. Monitoring of the nest by a qualified biologist during and after	

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		construction activities shall be required if the activity has potential to adversely affect the nest.	
		Trees shall not be removed during the breeding season for nesting raptors unless a survey by a qualified biologist verifies that there is not an active nest in the tree.	
		▲ Mitigation for loss of Swainson's hawk foraging habitat will follow the provisions of City of Elk Grove Municipal Code Chapter 16.130, which requires projects to mitigate loss the of Swainson's hawk foraging habitat through the purchase of conservation easements (if the project will impact greater than 40 acres of habitat) or by paying a mitigation fee (if the project will impact less than 40 acres of habitat). The amount of land preserved shall be governed by a one-to-one (1:1) mitigation ratio for each acre developed as set forth in Chapter 16.130.	
		Mitigation Measure 3.4-2e: Protection measures for tricolored blackbird and song sparrow ("Modesto" population). At the time of submittal of any application to annex territory with the Bilby Ridge SOIA area, the City of Elk Grove shall impose the following conditions on all discretionary projects. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.	
		For projects or ground-disturbing activities that could affect tricolored blackbird and song sparrow nesting habitat (primarily within ruderal vegetation (e.g., blackberry) along irrigation ditches), the following measures shall be implemented to avoid or minimize loss of active tricolored blackbird or song sparrow nests:	
		▲ To minimize the potential for loss of tricolored blackbird nesting colonies, song sparrow nests, or other bird nests, structure and vegetation removal activities shall commence during the nonbreeding season (September 1-January 31). If all suitable nesting habitat is removed during the nonbreeding season, no further mitigation would be required.	
		▲ Prior to removal of any structure or vegetation, or any ground-disturbing activities between February 1 and August 31, a qualified biologist shall conduct preconstruction surveys for nests on any structure or vegetation slated for removal, as well as for potential tricolored blackbird nesting habitat. The surveys shall be conducted no more than 14 days before construction	

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		commences. If no active nests or tricolored blackbird colonies are found during focused surveys, no further action under this measure will be required. If active nests are located during the preconstruction surveys, the biologist shall notify CDFW. If necessary, modifications to the project design to avoid removal of occupied habitat while still achieving project objectives shall be evaluated, and implemented to the extent feasible. If avoidance is not feasible or conflicts with project objectives, construction shall be prohibited within a minimum of 100 feet of the nest to avoid disturbance until the nest colony is no longer active. These recommended buffer areas may be reduced or expanded through consultation with CDFW. Monitoring of all occupied nests shall be conducted by a qualified biologist during construction activities to adjust the 100-foot buffer if agitated behavior by the nesting bird is observed.	
		Mitigation Measure 3.4-2f: Mitigation for aquatic invertebrates; vernal pool fairy shrimp and vernal pool tadpole shrimp. At the time of submittal of any application to annex territory with the Bilby Ridge SOIA area, the City of Elk Grove shall impose the following conditions on all discretionary projects. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.	
		This mitigation measure applies to projects or ground-disturbing activities with potential to disturb habitat for vernal pool crustaceans; it incorporates the conservation measures from the USFWS Programmatic Biological Opinion (USFWS 1996) that provide for both habitat preservation and habitat creation for vernal pool fairy shrimp and vernal pool tadpole shrimp.	
		If suitable wetland or vernal pool habitat is determined to be present on the project site (see Mitigation Measure 3.4-3), the project applicant shall implement the following measures to minimize and compensate for loss of vernal pool fairy shrimp and vernal pool tadpole shrimp.	
		Habitat Preservation: The applicant, in consultation with USFWS, shall compensate for direct effects of the project on potential habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp at a ratio of 2:1, by purchasing vernal pool preservation credits from a USFWS-approved	

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		 conservation bank. Compensation credits shall be purchased prior to any ground-disturbing activities. Habitat Creation: The applicant shall compensate for the direct effects of the project on potential habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp at a ratio of 1:1, by purchasing vernal pool creation credits from a USFWS-approved conservation bank. Mitigation shall occur before the approval of any grading or improvement plans for any project phase that would allow work within 250 feet of such habitat, and before any ground-disturbing activity within 250 feet of such habitat. For seasonal wetlands and drainages that shall be retained on the site (i.e., those not proposed to be filled), a minimum setback of at least 50 feet from these features will be avoided on the project site. The buffer area shall be fenced with high visibility construction fencing prior to commencement of ground-disturbing activities, and shall be maintained for the duration of construction personnel regarding the potential presence of listed species and the importance of avoiding impacts to these species and their habitat. The applicant shall secure any necessary take authorization prior to project construction through formal consultation between USACE and USFWS pursuant to Section 7 of the ESA, and shall implement all measures included in the Biological Opinion issued by USFWS. Mitigation 3.4-2g. Protection measures for American badger. At the time of submittal of any application to annex territory with the Bilby Ridge SOIA area, the City of Elk Grove shall impose the following conditions on all discretionary projects. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo. 	
		 potential to disturb suitable habitat for American badger. Prior to construction activities within suitable habitat for American badger (e.g., ruderal grassland, gain fields), a qualified wildlife biologist shall conduct surveys to identify any American badger burrows/dens. These surveys shall 	

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		be conducted not more than 15 days prior to the start of construction. If occupied burrows are not found, further mitigation will be not required. If occupied burrows are found, impacts to active badger dens shall be avoided by establishing exclusion zones around all active badger dens, within which construction-related activities shall be prohibited until denning activities are complete or the den is abandoned. A qualified biologist shall monitor each den once per week to track the status of the den and to determine when a den area has been cleared for construction.	
Impact 3.4-3: Disturbance and loss of wetlands, other waters of the United States, and waters of the state. Wetlands, including vernal pools, and other waters of the United States and waters of the state may be present in the SOIA. Future land use changes and development related to the proposed establishment of the SOIA and future annexation could result in conversion of wetland habitat to urban uses. Loss or degradation of wetland habitat would be a potentially significant impact.	PS	 Mitigation Measure 3.4-3: Wetlands, other waters of the U.S., and waters of the state. At the time of submittal of any application to annex territory with the Bilby Ridge SOIA area, the City of Elk Grove shall impose the following conditions on all discretionary projects. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo. For projects that could disturb wetlands, other waters of the United States, or waters of the state, the project applicant shall retain a qualified biologist to survey the project site for sensitive natural communities, including wetland and vernal pool habitats. Wetlands and vernal pools are of special concern to resource agencies and are afforded specific consideration, based on Section 404 of the CWA and other applicable regulations. If wetlands or vernal pool habitats are determined to be present, a delineation of waters of the United States, including wetlands that would be affected by the project, shall be prepared by a qualified biologist through the formal Section 404 wetland delineation process. The delineation shall be submitted to and verified by USACE. If, based on the verified delineation, it is determined that fill of waters of the United States would result from implementation of the project, authorization for such fill shall be secured from USACE through the Section 404 permitting process. Any waters of the United States that would be affected by project development shall be replaced or restored on a "no-net-loss" basis in accordance with USACE mitigation guidelines (or the applicable USACE guidelines in place at the time of construction). In association with the Section 404 permit (if applicable) and prior to the issuance of any grading permit, Section 404 permit (if applicable) and prior to the RWQCB shall be obtained. 	LTS

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
Impact 3.4-4: Consistency with the South Sacramento Habitat Conservation Plan (SSHCP). The SOIA area is within the proposed SSHCP area, and is designated as an Urban Development Area; however, the City of Elk Grove is not a participant in the SSHCP. Should future developers participate in the HCP, development within the SOIA area would be permitted because it is within an Urban Development Area and is not within a preserve area. Impacts to implementation of the SSHCP would be less than significant.	LTS	None required.	LTS
3.5 Cultural and Paleontological Resources Impact 3.5-1: Change in the significance of an historical resource.	PS	Mitigation Measure 3.5-1: Conduct project-specific level surveys and identify	LTS
The NCIC records search revealed no historical resources on the project site. There are a number of historic-age buildings on the projects site that have not been evaluated for NRHP- or CRHR-eligibility. If the SOIA is approved and subsequent annexation of all or a portion of the site to the City of Elk Grove occurs, development of the SOIA area could result in damage to or destruction to these buildings. If they are found to be historically significant, the impact to historical resources would be potentially significant.		 measures to protect identified historic resources. At the time of submittal of any application to annex territory with the Bilby Ridge SOIA area, the City of Elk Grove shall impose the following conditions on all discretionary projects: Prior to construction activities, project sponsors shall identify and evaluate all historic-age (over 45-years in age) buildings and structures that could potentially be impacted by the project. This would include preparation of an historic structure report and evaluation of resources to determine their eligibility for recognition under State, federal, or local historic preservation criteria. The evaluation shall be prepared by an architectural historian, or historical architect meeting the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, Professional Qualification Standards. The evaluation should comply with CEQA Guidelines section 15064.5(b), and, if federal funding or permits are required, with Section 106 of the National Historic Preservation Act (NHPA) of 1966 (16 U.S.C. § 470 et seq.). Study recommendations shall be implemented. If resources eligible for inclusion in the NRHP or CRHR are identified, an assessment of project impacts on these resources shall be included in the report, as well as detailed measures to avoid impacts. If avoidance of a significant architectural/built environment resource is not feasible, additional mitigation options include, but are not limited to, specific design plans for historic districts, or plans for alteration or adaptive re-use of a historical resource that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitation, Restoring, and Reconstructing Historic Buildings and City of Elk Grove General Plan Policy HR-1 and HR-3. 	

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.	
Impact 3.5-2: Disturb unique archaeological resources. Based on the results of the records search, there are no known archaeological sites within the Bilby Ridge SOIA area. However, ground-disturbing activities from development upon annexation to the City of Elk Grove could result in discovery or damage of as yet undiscovered archaeological resources as defined in CEQA Guidelines Section 15064.5. This would be a potentially significant impact.	PS	 Mitigation Measure 3.5-2: Avoid potential effects on unique archaeological resources. At the time of submittal of any application to annex territory with the Bilby Ridge SOIA area, the City of Elk Grove shall impose the following conditions on all discretionary projects: Before construction activities, the applicant shall retain a qualified archaeologist to conduct archaeological surveys for the site and any required off-site improvements, in accordance with the current City of Elk Grove General Plan Policy HR-6-Action 1. Project sponsors shall follow recommendations identified in the survey, which may include activities such as subsurface testing, designing and implementing a Worker Environmental Awareness Program, construction monitoring by a qualified archaeologist, avoidance of sites, or preservation in place. In the event that evidence of any prehistoric or historic-era subsurface archaeological features or deposits are discovered during construction-related earth-moving activities (e.g., ceramic shard, trash scatters, lithic scatters), in accordance with current Elk Grove General Plan Policy HR-6-Action 2, all ground-disturbing activity in the area of the discovery shall be halted and the City of Elk Grove Planning Division shall be notified immediately. A qualified archaeologist shall be retained to assess the significance of the find. If the find is a prehistoric archeological site, the appropriate Native American group shall be prograde. If the archaeologist determines that further information is needed to evaluate significance, a data recovery plan shall be prepared. If the find is determined to be significance to the qualified archaeologist (i.e., because the find is determined to constitute either an historical resource or a unique archaeological resource), the archaeologist (i.e., because the find is determined to constitute either an historical resource or a unique archaeological resource), the archaeologist find more factors, follow accepted professional standards in re	LTS

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.	
Impact 3.5-3: Accidental discovery of human remains. Although unlikely, construction and excavation activities associated with future development of the SOIA area could unearth previously undiscovered or unrecorded human remains, if they are present. Compliance with California Health and Safety Code Sections 7050.5 and 7052 and PRC Section 5097 in the event that human remains are found would make this impact less than significant.	LTS	None required.	LTS
Impact 3.5-4: Disturb a unique paleontological resource. Any future development within the SOIA area could potentially affect undiscovered paleontological resources. This would be a potentially significant impact.	PS	 Mitigation Measure 3.5-4: Avoid impact to unique paleontological resources. At the time of submittal of any application to annex territory with the Bilby Ridge SOIA area, the City of Elk Grove shall impose the following conditions on all discretionary projects: Consistent with General Plan Policy HR-6-Action 1 and Action 2, before the start of on- or off-site earthmoving activities that would disturb 1 acre of land or more within the Riverbank Formations, project applicants shall inform all construction personnel involved with earthmoving activities regarding the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction, and proper notification procedures should fossils be encountered. If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately cease work near the find and notify the City of Elk Grove. The applicant shall retain a qualified paleontologist to evaluate the resource and prepare a recovery plan. The recovery plan may include, but is not limited to, a field survey, construction for any specimen recovered, and a report of findings. Recommendations in the recovery plan that are determined by the City to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resource or resources were discovered. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo. 	LTS
Impact 3.5-5: Change in the significance of a tribal cultural resource. Consultation with UIAC has resulted in no resources identified as TCRs as described under AB 52 on or near the SOIA area. However, subsequent discretionary projects	LTS	None required.	LTS

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
upon annexation to the City of Elk Grove may be required to prepare site-specific project-level analysis to fulfill CEQA requirements, which may include additional AB 52 consultation that could lead to the identification of TCRs. Compliance with PRC 21080.3.1 would make this impact less than significant.			
3.6 Energy			
Impact 3.6-1: Wasteful, inefficient, or unnecessary consumption of energy, during project construction or operation. Future development of the SOIA area could increase electricity and natural gas consumption at the site relative to existing conditions. Thus, this impact would be potentially significant.	PS	 Mitigation Measure 3.6-1: Implement Mitigation Measures 3.7-1a and 3.13-1. Mitigation Measure 3.7-1a: On-site GHG emission reduction measures. At the time of any application to annex territory within the Bilby Ridge SOIA area, the City of Elk Grove shall require that the applicants to implement all reduction measures necessary to comply with the City of Elk Grove CAP in place at the time and implement the following additional measures if they are not included in the City of Elk Grove CAP: Construction Enforce idling time restrictions for construction vehicles Require construction vehicles to operate with the highest tier engines commercially available Divert and recycle construction and demolition waste, and use locally-sourced building materials with a high recycled material content to the greatest extent feasible Minimize tree removal, and mitigate indirect GHG emissions increases that occur because of vegetation removal, loss of sequestration, and soil disturbance Utilize existing grid power for electric energy rather than operating temporary gasoline/diesel powered generators Increase use of electric and renewable fuel powered construction equipment and require renewable diesel fuel where commercially available Require diesel equipment fleets to be lower emitting than any current emission standard Operation Comply with lead agency's standards for mitigating transportation impacts under SB 743 Require on-site EV charging capabilities for parking spaces serving the project to meet jurisdiction-wide EV proliferation goals 	LTS

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		 Allow for new construction to install fewer on-site parking spaces than required by local municipal building code, if appropriate 	
		Dedicate on-site parking for shared vehicles	
		Provide adequate, safe, convenient, and secure on-site bicycle parking and storage in multi-family residential projects and in non-residential projects	
		Provide on- and off-site safety improvements for bike, pedestrian, and transit connections, and/or implement relevant improvements identified in the City of Elk Grove Bicycle, Pedestrian, and Trails Master Plan	
		Require on-site renewable energy generation	
		 Prohibit wood-burning fireplaces in new development, and require replacement of wood-burning fireplaces for renovations over certain size developments 	
		 Require cool roofs and "cool parking" that promotes cool surface treatment for new parking facilities as well as existing surface lots undergoing resurfacing 	
		Require solar-ready roofs	
		Require organic collection in new developments	
		Require low-water landscaping in new developments. Require water efficient landscape maintenance to conserve water and reduce landscape waste	
		▲ Achieve Zero Net Energy performance targets before dates required by CALGreen	
		Where ZNE is deemed infeasible, building energy may also be reduced in the following ways:	
		Reduce building energy-related GHG emissions through the use of on-site renewable energy (e.g., solar photovoltaic panels) where technologically feasible and at a minimum of 15 percent of the project's total energy demand. Building design, landscape plans, and solar installation shall take into account solar orientation, and building roof size to maximize solar exposure.	
		✓ Provide incentives to future residents to purchase Energy Star™ appliances (including clothes washers, dish washers, fans, and refrigerators).	
		Install high efficiency lighting (i.e., light emitting diodes) in all streetlights, security lighting, and all other exterior lighting applications.	

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		Provide electrical outlets on the exterior of project buildings to allow sufficient powering of electric landscaping equipment.	
		Install low-flow kitchen faucets that comply with CALGreen residential voluntary measures (maximum flow rate not to exceed 1.5 gallons per minute at 60 psi).	
		 Install low-flow bathroom faucets that exceed the CALGreen residential mandatory requirements (maximum flow rate not to exceed 1.5 gallons per minute at 60 psi). 	
		Install low-flow toilets that exceed the CALGreen residential mandatory requirements (maximum flush volume less not to exceed 1.28 gallons per flush).	
		 Install low-flow showerheads that exceed the CALGreen residential mandatory requirements (maximum flow rate not to exceed 2 gallons per minute at 80 psi). 	
		 Reduce turf area and use water-efficient irrigation systems (i.e., smart sprinkler meters) and landscaping techniques/design. 	
		 Require new construction, including municipal building construction, to achieve third-party green building certifications, such as the GreenPoint Rated program or the LEED rating system 	
		Require the design of bike lanes to connect to the regional bicycle network	
		Expand urban forestry and green infrastructure in new land development	
		 Require preferential parking spaces for park and ride to incentivize carpooling, vanpooling, commuter bus, electric vehicles, and rail service use 	
		 Require a transportation management plan for specific plans which establishes a numeric target for non-SOV travel and overall VMT 	
		 Develop a rideshare program targeting commuters to major employment centers 	
		 Require the design of bus stops/shelters/express lanes in new developments to promote the usage of mass-transit 	
		 Require gas outlets in residential backyards for use with outdoor cooking appliances such as gas barbeques if natural gas service is available 	

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		Require the installation of electrical outlets on the exterior walls of both the front and back of residences to promote the use of electric landscape maintenance equipment	
		 Require the design of the electric boxes in new residential unit garages to promote electric vehicle usage 	
		 Require electric vehicle charging station (conductive/inductive) and signage for non-residential developments 	
		 Provide electric outlets to promote the use of electric landscape maintenance equipment to the extent feasible on parks and public/quasi-public lands 	
		Require each residential unit to be "solar ready," including installing the appropriate hardware and proper structural engineering	
		 Require the installation of energy conserving appliances such as on-demand tank-less water heaters and whole-house fans 	
		 Require each residential and commercial building equip buildings with energy efficient AC units and heating systems with programmable thermostats/timers 	
		 Require large-scale residential developments and commercial buildings to report energy use, and set specific targets for per-capita energy use 	
		Require each residential and commercial building to utilize low flow water fixtures such as low flow toilets and faucets	
		 Require the use of energy-efficient lighting for all street, parking, and area lighting 	
		Require the landscaping design for parking lots to utilize tree cover	
		Incorporate water retention in the design of parking lots and landscaping	
		Require the development project to propose an off-site mitigation project which should generate carbon credits equivalent to the anticipated GHG emission reductions. This would be implemented via an approved protocol for carbon credits from CAPCOA, CARB, or other similar entities determined acceptable by the local air district	
		 Require the project to purchase carbon credits from the CAPCOA GHG Reduction Exchange Program, American Carbon Registry, Climate Action Reserve or other similar carbon credit registry determined to be acceptable by the local air district 	

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		Encourage the applicant to consider generating or purchasing local and California-only carbon credits as the preferred mechanism to implement its off-site mitigation measure for GHG emissions and that will facilitate the State's efforts in achieving the GHG emission reduction goal	
		Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo. Mitigation Measure 3.13-1: Participation in transportation system improvements. At the time of any application to annex territory within the Bilby Ridge SOIA area, the City of Elk Grove shall consult with Sacramento County and Caltrans to establish local and state highway transportation improvement plans and funding mechanisms to provide service levels consistent with the City's and County's general plans consistent with City of Elk Grove General Plan Policy CI-2. This will include on-site transportation improvements for pedestrian, bicycle, and transit facilities that will interconnect with existing and planned City pedestrian, bicycle, and transit improvements consistent	
		with the City of Elk Grove Bicycle, Pedestrian, and Trails Master Plan. Future development within the SOIA area will be responsible for constructing or contributing on a fair-share basis to roadway improvements necessary to serve development within the SOIA area. This may include participation in the I-5 Freeway Subregional Corridor Mitigation Program.	
		In addition, a detailed traffic study will be completed after a more defined land use plan has been developed. Improvements needed from development in the SOIA area will be established by subsequent traffic studies and LOS standards of affected agencies in effect at the time. Annexation and development activity within the SOIA area will require the preparation of traffic impact report/s to establish the fair share and costing of required improvements. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.	
Impact 3.6-2: Demand for energy services and facilities. Electrical and natural gas infrastructure would need to be extended by PG&E and SMUD to meet the energy needs of future development within the SOIA area upon annexation. If determined to be necessary, off-site improvements to electrical and natural gas facilities would be the responsibility of the utility and would be analyzed by the utility provider under separate environmental review. Physical environmental	S	Mitigation Measure 3.6-2: Prepare utility service plans that demonstrate adequate electrical and natural gas service and infrastructure are available. At the time of submittal of any application to annex territory within the SOIA area, the City of Elk Grove shall require that the applicants prepare utility service plans that identify the projected electrical and natural gas demands and that appropriate infrastructure sizing and locations to serve future development will be provided. The	SU

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
impacts from construction or operation of off-site improvements could remain significant after implementation of mitigation (i.e., significant and unavoidable) or no feasible mitigation may be available to fully reduce impacts to a less-than-significant level. Neither LAFCo nor the City of Elk Grove would have control over the approval, timing, or implementation of any electrical or natural gas facility improvements. This impact would be significant.		utility service plans shall verify that SMUD and PG&E have adequate electrical and natural gas supplies and infrastructure to serve the annexation territory. For any new off-site facility improvements, the City shall provide LAFCo information on the environmental review for the improvement and mitigation measures have been identified to address identified significant environmental impacts. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.	
3.7 Greenhouse Gas Emissions			
Impact 3.7-1: Project-generated greenhouse gas emissions. Future development of the SOIA area upon annexation is estimated to generate 5,116 MTCO2e from construction activities and 71,113 MTCO2e operation-related emissions at assumed buildout of the conceptual land use plan. Total emissions attributed to the conceptual land use plan would be 71,318 MTCO2e/year with combined amortized construction emissions. This level of GHG emissions has the potential to result in a considerable contribution to cumulative emissions related to global climate change and conflict with State GHG reduction targets established for 2030 and 2050. This cumulative impact would be significant and the project's contribution would be cumulatively considerable.	CC	 Mitigation Measure 3.7-1a: On-site GHG emission reduction measures. At the time of any application to annex territory within the Bilby Ridge SOIA area, the City of Elk Grove shall require that the applicants to implement all reduction measures necessary to comply with the City of Elk Grove CAP in place at the time and implement the following additional measures if they are not included in the City of Elk Grove CAP: <u>Construction</u> Enforce idling time restrictions for construction vehicles Require construction vehicles to operate with the highest tier engines commercially available Divert and recycle construction and demolition waste, and use locally-sourced building materials with a high recycled material content to the greatest extent feasible Minimize tree removal, and mitigate indirect GHG emissions increases that occur because of vegetation removal, loss of sequestration, and soil disturbance Utilize existing grid power for electric energy rather than operating temporary gasoline/diesel powered generators Increase use of electric and renewable fuel powered construction equipment and require renewable diesel fuel where commercially available Require diesel equipment fleets to be lower emitting than any current emission standard Operation Comply with lead agency's standards for mitigating transportation impacts under SB 743 	CC SU

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		Require on-site EV charging capabilities for parking spaces serving the project to meet jurisdiction-wide EV proliferation goals	
		Allow for new construction to install fewer on-site parking spaces than required by local municipal building code, if appropriate	
		Dedicate on-site parking for shared vehicles	
		Provide adequate, safe, convenient, and secure on-site bicycle parking and storage in multi-family residential projects and in non-residential projects	
		Provide on- and off-site safety improvements for bike, pedestrian, and transit connections, and/or implement relevant improvements identified in the City of Elk Grove Bicycle, Pedestrian, and Trails Master Plan	
		Require on-site renewable energy generation	
		Prohibit wood-burning fireplaces in new development, and require replacement of wood-burning fireplaces for renovations over certain size developments	
		 Require cool roofs and "cool parking" that promotes cool surface treatment for new parking facilities as well as existing surface lots undergoing resurfacing 	
		Require solar-ready roofs	
		Require organic collection in new developments	
		Require low-water landscaping in new developments. Require water efficient landscape maintenance to conserve water and reduce landscape waste.	
		 Achieve Zero Net Energy performance targets before dates required by CALGreen 	
		Where ZNE is deemed infeasible, building energy may also be reduced in the following ways:	
		Reduce building energy-related GHG emissions through the use of on-site renewable energy (e.g., solar photovoltaic panels) where technologically feasible and at a minimum of 15 percent of the project's total energy demand. Building design, landscape plans, and solar installation shall take into account solar orientation, and building roof size to maximize solar exposure.	
		▲ Provide incentives to future residents to purchase Energy Star [™] appliances (including clothes washers, dish washers, fans, and refrigerators).	

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		Install high efficiency lighting (i.e., light emitting diodes) in all streetlights, security lighting, and all other exterior lighting applications.	
		Provide electrical outlets on the exterior of project buildings to allow sufficient powering of electric landscaping equipment.	
		Install low-flow kitchen faucets that comply with CALGreen residential voluntary measures (maximum flow rate not to exceed 1.5 gallons per minute at 60 psi).	
		 Install low-flow bathroom faucets that exceed the CALGreen residential mandatory requirements (maximum flow rate not to exceed 1.5 gallons per minute at 60 psi) 	
		 Install low-flow toilets that exceed the CALGreen residential mandatory requirements (maximum flush volume less not to exceed 1.28 gallons per flush) 	
		 Install low-flow showerheads that exceed the CALGreen residential mandatory requirements (maximum flow rate not to exceed 2 gallons per minute at 80 psi) 	
		 Reduce turf area and use water-efficient irrigation systems (i.e., smart sprinkler meters) and landscaping techniques/design. 	
		Require new construction, including municipal building construction, to achieve third-party green building certifications, such as the GreenPoint Rated program or the LEED rating system	
		▲ Require the design of bike lanes to connect to the regional bicycle network	
		Expand urban forestry and green infrastructure in new land development	
		 Require preferential parking spaces for park and ride to incentivize carpooling, vanpooling, commuter bus, electric vehicles, and rail service use 	
		 Require a transportation management plan for specific plans which establishes a numeric target for non-SOV travel and overall VMT 	
		 Develop a rideshare program targeting commuters to major employment centers 	
		 Require the design of bus stops/shelters/express lanes in new developments to promote the usage of mass-transit 	
		 Require gas outlets in residential backyards for use with outdoor cooking appliances such as gas barbeques if natural gas service is available 	

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		Require the installation of electrical outlets on the exterior walls of both the front and back of residences to promote the use of electric landscape maintenance equipment	
		 Require the design of the electric boxes in new residential unit garages to promote electric vehicle usage 	
		 Require electric vehicle charging station (conductive/inductive) and signage for non-residential developments 	
		 Provide electric outlets to promote the use of electric landscape maintenance equipment to the extent feasible on parks and public/quasi-public lands 	
		Require each residential unit to be "solar ready," including installing the appropriate hardware and proper structural engineering	
		 Require the installation of energy conserving appliances such as on-demand tank-less water heaters and whole-house fans 	
		 Require each residential and commercial building equip buildings with energy efficient AC units and heating systems with programmable thermostats/timers 	
		Require large-scale residential developments and commercial buildings to report energy use, and set specific targets for per-capita energy use	
		Require each residential and commercial building to utilize low flow water fixtures such as low flow toilets and faucets	
		 Require the use of energy-efficient lighting for all street, parking, and area lighting 	
		Require the landscaping design for parking lots to utilize tree cover	
		▲ Incorporate water retention in the design of parking lots and landscaping	
		Require the development project to propose an off-site mitigation project which should generate carbon credits equivalent to the anticipated GHG emission reductions. This would be implemented via an approved protocol for carbon credits from CAPCOA, CARB, or other similar entities determined acceptable by the local air district	
		Require the project to purchase carbon credits from the CAPCOA GHG Reduction Exchange Program, American Carbon Registry, Climate Action Reserve or other similar carbon credit registry determined to be acceptable by the local air district	

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		Encourage the applicant to consider generating or purchasing local and California-only carbon credits as the preferred mechanism to implement its off-site mitigation measure for GHG emissions and that will facilitate the State's efforts in achieving the GHG emission reduction goal	
		Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.	
		Mitigation Measure 3.7-1b: Purchase carbon offsets. In addition to Mitigation Measure 3.7-1a, at the time of any application to annex territory within the Bilby Ridge SOIA area, the City of Elk Grove shall require that the applicants offset GHG emissions to zero by funding activities that directly reduce or sequester GHG emissions or, if necessary, obtaining carbon credits. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.	
		To the degree a project relies on GHG mitigation measures, SMAQMD and CARB recommend that lead agencies prioritize on-site design features (Mitigation Measures 3.7-1a and 3.3-2) and direct investments in GHG reductions near the project, to help provide potential air quality and economic co-benefits locally. For example, direct investment in a local building retrofit program can pay for cool roofs, solar panels, solar water heaters, smart meters, energy efficient lighting, energy efficient appliances, energy efficient windows, insulation, and water conservation measures for homes within the geographic area of the project. Other examples of local direct investments include financing installation of regional electric vehicle charging	
		stations, paying for electrification of public school buses, and investing in local urban forests. However, it is critical that any such investments in actions to reduce GHG emissions are real and quantifiable. Where further project design or regional investments are infeasible or not proven to be effective, it may be appropriate and feasible to mitigate project emissions through purchasing and retiring carbon credits issued by a recognized and reputable accredited carbon registry. The CEQA Guidelines recommend several options for mitigating GHG emissions. State CEQA Guidelines Section 15126.4(C)(3) states that measures to mitigate the significant effects of GHG emissions may include "off-site measures, including offsets that are not otherwise required" Through the purchase of GHG credits through	

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
Impacts	before	Mitigation Measure voluntary participation in an approved registry, GHG emissions may be reduced at the project level. GHG reductions must meet the following criteria: • Real—represent reductions actually achieved (not based on maximum permit levels), • Additional/Surplus—not already planned or required by regulation or policy (i.e., not double counted), • Quantifiable—readily accounted for through process information and other reliable data, • Enforceable—acquired through legally-binding commitments/agreements, • Validated—verified through accurate means by a reliable third party, and • Permanent—will remain as GHG reductions in perpetuity. In partnership with offset providers, any future project applicant shall purchase carbon offsets (from available programs that meet the above criteria) that fully offset the project's remaining (i.e., post implementation of Mitigation Measures 3.7-1a and 3.3-2) operational GHG emissions over the 25-year project life. It should be noted that purchases of offsets would occur once and remain effective throughout the lifetime of the project (i.e., 25 years per SMAQMD guidance). In order for an offset to be considered viable, it must exhibit "permanence." To adequately reduce emissions of GHGs, carbon offsets must be able to demonstrate the ability to counterbalance GHG emissions over the lifespan of a project or "in perpetuity." For example, the purchase of a carbon offset generated by a reforestation project would entail the replanting or maintenance of carbon-sequestering trees, which would continue to sequester carbon over several years, decades, or centuries (Forest Trends 2015). It is important to note that the offsets purchased must offer an	after
		project's remaining (i.e., post implementation of Mitigation Measures 3.7-1a and 3.3- 2) operational GHG emissions over the 25-year project life associated with such building permits by relying upon one of the following compliance options, or a combination thereof:	

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Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		 demonstrate that the project applicant has directly undertaken or funded activities that reduce or sequester GHG emissions that are estimated to result in GHG reduction credits (if such programs are available), and retire such GHG reduction credits in a quantity equal to the remaining operational GHG emissions; provide a guarantee that it shall retire carbon credits issued in connection with direct investments (if such programs exist at the time of building permit issuance) in a quantity equal to the remaining operational GHG emissions; undertake or fund direct investments (if such programs exist at the time of building permit issuance) and retire the associated carbon credits in a quantity equal to the remaining operational GHG emissions; or if it is impracticable to fully offset operational emissions through direct investments or quantifiable and verifiable programs do not exist, the project applicant or its designee may purchase and retire carbon credits that have been issued by a recognized and reputable, accredited carbon registry in a quantity equal to the remaining operational GHG Emissions. 	
Impact 3.7-2: Impacts of climate change on the project. The project is not located within an area projected to experience a substantial increase in wildland fire risk or flooding as a result of climate changes in the future. Anticipated changes in future climate patterns are not anticipated to have any substantial adverse effects on the project. Therefore, the impacts of climate change on the project would be less than significant.	LTS	None required.	LTS
3.8 Hydrology Drainage, and Water Quality	•		
Impact 3.8-1: Short-term construction-related and operational water quality degradation. Development of the SOIA area as a result of future annexation could result in water quality degradation from construction activities, as well as from operational sources of water pollutants. This impact would be potentially significant.	PS	 Mitigation Measure 3.8-1: Development of a drainage master plan for the SOIA area. At the time of any application to annex territory within the Bilby Ridge SOIA area, the City of Elk Grove shall require that the applicants prepare and implement an updated to the City of Elk Grove Storm Drainage Master Plan that incorporates the SOIA area or a drainage master plan for the entire SOIA area that includes the following items and shall be consistent with the City of Elk Grove Storm Drainage Master Plan: An accurate calculation of pre-project and post-development runoff scenarios, obtained using appropriate engineering methods that accurately evaluate potential changes to runoff, including increased surface runoff; 	LTS

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		details on on-site detention basin and drainage channel design that are consistent with the requirements of the City of Elk Grove and provide enough storage to accommodate peak storm events and no increase post- development flows or flood conditions off-site;	
		▲ identification of any drainage facility connections or coordination with the planned Southeast Area Plan drainage channel east of the SOIA area;	
		▲ identification of design features that avoid site development from occurring in the 200-year floodplain;	
		▲ implementation of appropriate BMPs to address construction and operational stormwater quality consistent with City requirements;	
		▲ a description of any treatments necessary to protect earthen channels from erosion, and modifications that may be needed to existing underground pipe and culvert capacities;	
		▲ a description of the proposed maintenance program for the on-site drainage system; and	
		▲ a description of the project-specific standards for installing drainage systems.	
		Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.	
Impact 3.8-2: Deplete groundwater supplies or interfere substantially with groundwater recharge. Future development of the SOIA area upon annexation could result in groundwater usage and creation of impervious surfaces that could block groundwater recharge. Sacramento County Water Agency manages its water supply in a conjunctive manner to protect groundwater resources and has adequate water supplies available for the project. Further, the SOIA area soil conditions do not provide for effective groundwater recharge in the region. Project groundwater impacts would be less than significant.	LTS	None required.	LTS
Impact 3.8-3: Alteration of drainage pattern or increase in rate or amount of surface runoff in a manner that would result in substantial erosion or siltation. Future development of the SOIA area upon annexation could lead to alteration of the drainage pattern of the site. This could result in increased stormwater runoff and an increase in susceptibility to downstream flooding and sediment issues. This would be a potentially significant impact.	PS	Implement Mitigation Measure 3.8-1.	LTS

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
Impact 3.8-4: Place structures or housing within a flood hazard area or result in loss, injury, or death due to flooding. A portion of the SOIA area is mapped as 200-year floodplain that could expose future SOIA area residents to flooding. This would be a potentially significant impact.	PS	Implement Mitigation Measure 3.8-1.	LTS
3.9 Land Use	-		
Impact 3.9-1: Consistency with Sacramento County and City of Elk Grove general plans and zoning. Establishment of the SOIA area and future annexation and development would not conflict with adopted County or City general plan policies, land use designations, or zoning that would generate any adverse physical impacts beyond those addressed in detail in the environmental sections of this EIR. Thus, this impact would be less than significant.	LTS	None required.	LTS
Impact 3.9-2: Consistency with SACOG Metropolitan Transportation Plan/Sustainable Communities Strategy. The SOIA area is included in the MTP/SCS as an area not identified for development by 2036. However, it anticipated for eventual development under the SACOG Blueprint. As such, the impact related to consistency with the MTP/SCS would be less than significant.	LTS	None required.	LTS
Impact 3.9-3: Consistency with Sacramento LAFCo Policy, Standards, and Procedures Guidelines. Establishment of the SOIA and the future annexation and development of the area would not conflict with Sacramento LAFCo Policy, Standards, and Procedure Guidelines Manual. Therefore, this impact would be less than significant.	LTS	None required.	LTS
Impact 3.9-4: Conversion of open space. Establishment of the SOIA and the future annexation and development of the area could result in the loss of open space resources, as defined by Sacramento LAFCo, to urban uses. Therefore, this impact would be significant.	S	Implement Mitigation Measure 3.2-1 (protection of 1 acre of existing agricultural land of equal or higher quality for each acre of Farmland of Statewide Importance, Farmland of Local Importance, and prime agricultural land that would be developed by the project).	SU
3.10 Noise			
Impact 3.10-1: Construction-generated noise Short-term construction-generated noise levels associated with the future development of the SOIA area upon annexation could expose nearby noise-sensitive receptors to noise levels that exceed applicable local standards. In addition, if construction activity	S	Mitigation Measure 3.10-1a: Implement construction-noise reduction measures. At the time of any application to annex territory within the Bilby Ridge SOIA area, the City of Elk Grove shall require that the applicants to comply with the following	SU

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
were to occur during more noise-sensitive nighttime hours it could result in annoyance and sleep disruption to occupants of nearby residential land uses and substantial periodic increases in ambient noise levels. This would be a significant impact.		 construction noise requirements. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo. To minimize noise levels during construction activities, the applicant and their construction contractors to comply with the following measures during all construction work: Consistent with Elk Grove General Plan Policy NO-3-Action 3, all construction equipment and equipment staging areas shall be located as far as feasible 	
		 from nearby noise-sensitive land uses. All construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturer's recommendations. Equipment engine shrouds shall be closed during equipment operation. 	
		▲ Individual operations and techniques shall be replaced with quieter procedures (e.g., using welding instead of riveting, mixing concrete off-site instead of on-site) where feasible and consistent with building codes and other applicable laws and regulations.	
		✓ Consistent with Elk Grove General Plan Policy NO-3-Action 1, and to the maximum extent feasible, construction activity shall take place within the City of Elk Grove construction noise exemption timeframes (i.e., 7:00 a.m. and 7:00 p.m., Monday through Sunday). Noise associated with construction activities not located adjacent residential uses may occur between the hours of 6:00 a.m. and 8:00 p.m., Monday through Sunday.	
		Mitigation Measure 3.10-1b: Implement construction-noise reduction measures during noise sensitive time periods. At the time of any application to annex territory within the Bilby Ridge SOIA area, the City of Elk Grove shall require that the applicants to comply with the following construction noise requirements. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo. For all construction activity that would take place outside of the City of Elk Grove construction noise exemption timeframe when located adjacent to residential uses (i.e., 7:00 a.m. and 7:00 p.m., Monday through Sunday), and that is anticipated to generate more than 45 Leq, the City shall require the applicant and their construction contractors to comply with the following measures:	

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		 Implement noticing to adjacent landowners at least one week in advance if construction activity would take place outside of the City of Elk Grove's construction noise exemption timeframe when located adjacent to residential uses (i.e., 7:00 a.m. and 7:00 p.m., Monday through Sunday, as identified in General Plan Policy NO-3 – Action 1), and is anticipated to generate more than 45 Leq. Install temporary noise curtains as close as feasible to noise-generating activity and that blocks the direct line of sight between the noise source and the nearest noise-sensitive receptor(s). Temporary noise curtains shall consist of durable, flexible composite material featuring a noise barrier layer bounded to sound-absorptive material on one side. The noise barrier layer shall consist of rugged, impervious, material with a surface weight of at least one pound per square foot. Noise-reducing enclosures and techniques shall be used around stationary noise-generating equipment (e.g., concrete mixers, generators, compressors). Operate heavy-duty construction equipment at the lowest operating power possible. 	
Impact 3.10-2: Exposure of existing sensitive receptors to excessive traffic noise levels and/or substantial increases in traffic noise. Future development within the SOIA area upon annexation could generate vehicle trips and result in an increase in ADT volumes on affected roadway segments and an increase in traffic source noise levels. However, existing receptors would not be exposed to traffic noise levels or traffic noise level increases that exceed applicable City of Elk Grove or Sacramento County noise standards. This impact would be less than significant.	LTS	None required.	LTS
Impact 3.10-3: Long-term operational non-transportation noise levels The SOIA area could result in the future development of commercial land uses in proximity to existing noise-sensitive land uses. Noise sources generally associated with commercial/retail land uses include vehicular and human activity in parking lots, and loading dock and delivery activities. Existing off-site receptors could experience commercial-related noise levels that exceed the City and County's daytime and nighttime noise levels standards. This impact would be significant.	S	Mitigation Measure 3.10-3: Reduce noise exposure to existing sensitive receptors from proposed stationary noise sources. At the time of any application to annex territory within the Bilby Ridge SOIA area, the City of Elk Grove shall require that the applicants to comply with the following noise requirements in the design of the development. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo. The applicant shall locate and design loading docks so that noise emissions do not exceed the applicable stationary noise source criteria (i.e., exterior daytime [7:00 a.m. to 10:00 p.m.] standards of 55 Leq for receptors within the City and County, exterior	LTS

Table ES-1	Summary of Impacts and Mitigation Measures
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Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		nighttime [10:00 p.m. to 7:00 a.m.] standards of 45 Leq for receptors within the City, and exterior nighttime [10:00 p.m. to 7:00 a.m.] standards of 50 Leq for receptors within the County). At the time of approval of special permits and/or development plan review, the project applicant shall provide to the City a site-specific noise analysis to evaluate design and ensure compliance with City of Elk Grove and Sacramento County noise standards. Reduction of loading dock noise can be achieved by locating loading docks as far away as feasible from noise-sensitive land uses, constructing noise barriers between loading docks and noise-sensitive land uses, or using buildings and topographic features to provide acoustic shielding for noise-sensitive land uses. If needed, loading dock activity shall be prohibited during nighttime hours (i.e., 10:00 p.m. to 7:00 a.m.). This time-of-day restriction would be consistent with Section 6.32.140 Prohibited Activities of the City of Elk Grove Code, which states, "loading, unloading, opening, closing or other handling of boxes, crates, containers, building materials, garbage cans, or similar objects on private property between the hours of 10:00 p.m. and 7:00 a.m. in a manner to cause a noise disturbance," is prohibited. Additionally, as stated in City of Elk Grove General Plan, Policy NO-3 – Action 2, limiting the hours of operation for loading docks, trash compactors, and other noise-producing uses in commercial areas which are adjacent to residential uses should be considered. Final design, location, orientation and use restrictions shall be dictated by findings in the noise analysis and approved by City staff.	
Impact 3.10-4: Compatibility of project with on-site noise levels Future annexation of the SOIA area could enable the development of a mix of various land uses, including residential, commercial, office, park, and school uses. Traffic and stationary noise sources near the project could expose newly developed noise-sensitive uses in the SOIA area to noise levels generated by generated by traffic on adjacent roadways and by stationary sources that exceed applicable noise standards established by the City of Elk Grove. This impact would be significant.	S	Mitigation Measure 3.10-4a: Reduce transportation noise exposure to new on-site noise-sensitive receptors At the time of any application to annex territory within the Bilby Ridge SOIA area, the City of Elk Grove shall require that the applicants to comply with the following noise requirements in the design of the development. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo. For new noise-sensitive receptors developed on the SOIA site and located within 77 feet of the centerline of Bruceville Road, within 211 feet of the centerline of Bilby Road between Willard Parkway and Coop Drive, within 524 feet of the centerline of Bilby Road between Coop Drive and Bruceville Road, within 182 feet of the centerline of Willard Parkway, or within 433 feet of the centerline of Kammerer Road between Willard Parkway and Bruceville Road (i.e., the distance from the centerline that is estimated, based on the noise modelling, to result in exceedance of the City of Elk	LTS

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		Grove exterior noise compatibility standard of 60 Ldn for low density residential), the following design criteria shall be adhered to:	
		▲ Where feasible, locate new sensitive receptors such that the primary outdoor activity area (e.g., backyard, balcony, or porch) is on the opposite side of the structure from major roadways such that the structure itself would provide a barrier between transportation noise and the primary outdoor activity area.	
		▲ Locate new sensitive receptors such that buildings/structures are located between the sensitive land use and nearby major roadways.	
		Setback sensitive receptors from major roadways sufficient distance to ensure they will not be exposed to noise levels that exceed the City of Elk Grove's exterior noise compatibility standard of 60 Ldn for low-density residential land uses.	
		Consistent with City of Elk Grove General Plan, Policy NO-8, if, and only if, implementation of the above measures does not reduce transportation-related noise levels to comply with the City of Elk Grove exterior noise compatibility standard of 60 Ldn for low-density residential and 70 Ldn school uses, and City of Elk Grove interior noise compatibility standards of 45 Leq for office and school uses, then as part of improvement plans for land uses along Bilby Road, Bruceville Road, Willard Parkway, and Kammerer Road, landscaped noise barriers that demonstrate compliance with City noise standards (interior and exterior) shall be implemented.	
		Mitigation Measure 3.10-4b: Reduce noise exposure to proposed sensitive receptors from proposed stationary noise sources. At the time of any application to annex territory within the Bilby Ridge SOIA area, the City of Elk Grove shall require that the applicants to comply with the following noise requirements in the design of the development. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo. The applicant shall locate and design loading docks so that noise emissions do not exceed the applicable stationary noise source criteria (i.e., exterior daytime [7:00 a.m. to 10:00 p.m.] standards of 55 Leq for receptors, and exterior nighttime [10:00 p.m. to 7:00 a.m.] standards of 45 Leq for receptors, within the City of Elk Grove). At the time of approval of special permits and/or development plan review, the project applicant shall provide to the City a site-specific noise analysis to evaluate design and ensure compliance with City of Elk Grove and Sacramento County noise standards.	

Table ES-1	Summary of Impacts and Mitigation Measures
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Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		Reduction of loading dock noise can be achieved by locating loading docks as far away as feasible from noise-sensitive land uses, constructing noise barriers between loading docks and noise-sensitive land uses, or using buildings and topographic features to provide acoustic shielding for noise-sensitive land uses. If needed, loading dock activity shall be prohibited during nighttime hours (i.e., 10:00 p.m. to 7:00 a.m.). This time-of-day restriction would be consistent with Section 6.32.140 Prohibited Activities of the City of Elk Grove Code, which states, "loading, unloading, opening, closing or other handling of boxes, crates, containers, building materials, garbage cans, or similar objects on private property between the hours of 10:00 p.m. and 7:00 a.m. in a manner to cause a noise disturbance," is prohibited. Additionally, as stated in City of Elk Grove General Plan, Policy NO-3 – Action 2, limiting the hours of operation for loading docks, trash compactors, and other noise-producing uses in commercial areas which are adjacent to residential uses should be considered. Final design, location, orientation and use restrictions shall be dictated by findings in the noise analysis and approved by City staff.	
3.11 Population and Housing	•		
Impact 3.11-1: Induce substantial population growth. The SOIA could indirectly induce substantial population growth through removing an obstacle to future annexation of the SOIA area and development. This would be a significant impact.	S	None available.	SU
3.12 Public Services and Recreation	•		
Impact 3.12-1: Increased demand for fire protection and emergency medical services. Future development within the Bilby Ridge SOIA area could result in an increase in demand for fire protection and emergency services, which could require construction of new facilities that would result in environmental impacts. This impact would be a potentially significant.	PS	Mitigation Measure 3.12-1: Demonstrate adequate fire protection facilities are available before annexation of territory within the SOIA area. At the time of submittal of any application to annex territory within the SOIA area, the City of Elk Grove shall demonstrate that CCSD fire protection and life safety facilities will meet the service demands of development identified for the annexation territory, or that fair-share funding will be provided for the construction of new or expansion of existing fire protection facilities, as needed, to accommodate the increase in demand resulting from development of the annexation territory. The City of Elk Grove shall demonstrate future development has incorporated adequate water supply and fire flow pressure, fire hydrants, and access to structures by firefighting equipment and personnel and where appropriate, identified on-site fire suppression systems for all new commercial and industrial development into design plans consistent with	SU

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		General Plan polices PF-7, PF-21, and SA-32 and Action SA-37-Action 1, SA-37-Action 2, and SA-37-Action 4. Any expansion of service shall not adversely affect current service levels. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.	
Impact 3.12-2: Increased demand for law enforcement services. Future development within the Bilby Ridge SOIA area could result in an increase in demand for law enforcement services, which could require construction of new facilities that would result in environmental impacts. This would be a potentially significant impact.	PS	Mitigation Measure 3.12-2: Prepare a plan for service that demonstrates adequate police protection facilities are available before the annexation of territory within the SOIA area. At the time of submittal of any application to annex territory within the SOIA area, the City of Elk Grove shall demonstrate that EGPD police protection and public safety facilities will meet the service demands of development identified for the annexation territory, or that fair-share funding will be provided for the construction of new on-site or off-site police protection facilities or expansion of existing police protection facilities, as needed, to accommodate the increase in demand resulting from development of the annexation territory. For any new off-site facility improvements, the City will demonstrate to LAFCo that the environmental review for the improvement has been completed and mitigation measures have been adopted to address identified significant environmental impacts. Any expansion of service shall not adversely affect current service levels. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.	SU
Impact 3.12-3: Increased demand for schools. Future development within the Bilby Ridge SOIA area could result in an increase in demand for schools, which could also require construction of new facilities that would result in environmental impacts. Payment of a school impact fee would reduce school demand impacts to less than significant.	LTS	None required.	LTS
Impact 3.12-4: Increased demand for park and recreation facilities. Future development within the Bilby Ridge SOIA area could result in an increase in demand for park and recreation facilities, which would require construction of new facilities that would result in environmental impacts. New residential development within the SOIA Area would be required to comply with the Elk Grove Municipal Code Chapter 22.40, General Plan policies listed above, and Elk Grove Trails Master Plan requiring the dedication of park, recreation and trails facilities and/or the payment of an in-lieu fees. These impact fees could fund the development of new recreational facilities, or the maintenance of existing recreational facilities. Impacts would be less than significant.	LTS	None required.	LTS

Table ES-1	Summary of Impacts and Mitigation Measures
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Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
3.13 Traffic, Transportation, and Circulation	-		
Impact 3.13-1: Impacts to Roadway Operation. Approval of the SOIA and future development of the SOIA area upon annexation could result in unacceptable operations and add traffic to study roadway segments that are projected to operate unacceptably. Potential future development of the SOIA would also result in an increase in VMT in the project area. This would be a significant impact.	S	 Mitigation Measure 3.13-1: Participation in transportation system improvements. At the time of any application to annex territory within the Bilby Ridge SOIA area, the City of Elk Grove shall consult with affected agencies to establish local and state highway transportation improvement plans and funding mechanisms to provide service levels consistent with the City's and County's general plans consistent with City of Elk Grove General Plan Policy CI-2. This shall include on-site transportation improvements for pedestrian, bicycle, and transit facilities that will interconnect with existing and planned City pedestrian, bicycle, and transit improvements consistent with the City of Elk Grove Bicycle, Pedestrian, and Trails Master Plan. This will also include measures to achieve compliance with adopted VMT standards that may be established under the City of Elk Grove General Plan Update. Future development within the SOIA area shall be responsible for constructing or contributing on a fair-share basis to roadway improvements necessary to serve development within the SOIA area. This may include participation in the I-5 Freeway Subregional Corridor Mitigation Program. In addition, a detailed traffic study shall be completed after a more defined land use plan has been developed. Improvements needed from development in the SOIA area shall be established by subsequent traffic studies and LOS standards of affected agencies in effect at the time. Annexation and development activity within the SOIA area shall require the preparation of traffic impact report/s to establish the fair share and costing of required improvements. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo. 	SU
Impact 3.13-2: Impacts to Freeway Facilities. Approval of the SOIA and future development of the SOIA area upon annexation would add traffic to segments of SR 99 and I-5 that are projected to operate unacceptably. This would be a significant impact.	S	Implement Mitigation Measure 3.13-1.	SU
Impact 3.13-3: Impacts to Transit. Approval of the SOIA and future development of the SOIA area upon annexation would increase demand for public transit service. No transit services or facilities are currently planned for the SOIA area. This would be a significant impact.	S	Implement Mitigation Measure 3.13-1.	LTS

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
Impact 3.13-4: Impacts to Bicycle and Pedestrian Facilities Approval of the SOIA and future development of the SOIA area upon annexation would increase demand for bicycle and pedestrian facilities. This would be a significant impact.	S	Implement Mitigation Measure 3.13-1.	LTS
Impact 3.13-5: Hazardous Design Features All roadway improvements associated with future development of the SOIA area would be constructed in accordance with applicable City, County, and Caltrans design and safety standards. Thus, the project would not increase hazards because of a design feature or incompatible uses. This would be a less-than-significant impact.	LTS	None required.	LTS
Impact 3.13-6: Impair Emergency Vehicle Access Emergency access would be subject to review by the City of Elk Grove and responsible emergency service agencies; thus, ensuring any future development with the SOIA area would be designed to meet all City of Elk Grove emergency access and design standards. Therefore, adequate emergency access would be provided. This would be a less-than-significant impact.	LTS	None required.	LTS
3.14 Utilities			
Impact 3.14-1: Require or result in the construction of new or expanded water or wastewater treatment facilities, the construction of which could cause significant environmental effects. The SOIA would not directly require or result in the construction of new utilities. Rather, the SOIA and associated conceptual land use plan informs the long-term planning of applicable utility providers. If determined to be necessary, off-site improvements to water or wastewater treatment or conveyance facilities would be the responsibility of the utility and would be analyzed by the utility provider under separate environmental review. Physical environmental impacts from construction or operation of off-site improvements could remain significant after implementation of mitigation (i.e., significant and unavoidable) or no feasible mitigation may be available to fully reduce impacts to a less-than-significant level. This impact would be significant.	S	None available.	SU
Impact 3.14-2: Require new or expanded entitlements to water. Presently, there are no public water supply facilities within the SOIA area and water supplies are provided by irrigation wells. There are no changes to land uses proposed as part of this SOIA application. Therefore, the project would not immediately increase the demand for water. Future development of the SOIA area would require new water	LTS	None required.	LTS

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
supply facilities to serve the site. Because there are identified adequate sources of water supply and the City would be required to demonstrate water availability prior to annexation, this impact would be less than significant.			
Impact 3.14-3: Exceed the capacity or the wastewater treatment provider. The SRWTP has a design capacity of 181 mgd with the potential to expand to 218 mgd. Future development of the SOIA area according to the conceptual land use plan is estimated to generate less than 1 mgd of wastewater. It is anticipated that the SRWTP would have adequate capacity to treat wastewater flows generated by future development. This impact would be less than significant.	LTS	None required.	LTS
Impact 3.14-4: Generate solid waste that would exceed the permitted capacity of the landfill serving the area. The SOIA would not change the existing rate of solid waste generation on the project site. If annexation and development occurs in the future, it would be required to be compliant with regulations pertaining to the reduction of solid waste. Based on the current rates of solid waste generation and the capacity of the landfills that serve the area, development of the project site in a manner consistent with the conceptual land use plan would have a less-than-significant impact on the permitted capacity of the affected landfills.	LTS	None required.	LTS
3.15 Hazards and Hazardous Materials	•		
Impact 3.15-1: Create a significant hazard through transport, use, or disposal of hazardous materials. Future development of the SOIA area upon annexation could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during demolition, construction, or operation activities. However, because of compliance with applicable rules and regulations specifically designed to protect the public health through improved procedures for the handling of hazardous materials, the impact to the public through routine, transport, use, and disposal would be less than significant.	LTS	None required.	LTS
Impact 3.15-2: Create potential human hazards from exposure to existing on-site hazardous materials. Future development of the SOIA area upon annexation could expose construction workers to hazardous materials present on-site during construction activities and	PS	Mitigation Measure 3.15-2a: Prepare Environmental Site Assessments At the time of any application to annex territory within the Bilby Ridge SOIA area, the City of Elk Grove shall require a site assessment, including an updated review of environmental risk databases, for the presence of potential hazardous materials. If this assessment indicates the presence or likely presence of contamination, the	LTS

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
zardous materials on-site could create an environmental or health hazard for later sidents or occupants, if left in place. This impact would be potentially significant.		project sponsor shall prepare a Phase I ESA in accordance with the American Society for Testing and Materials' E-1527-05 standard. For work requiring any demolition, the Phase I ESA shall make recommendations for any hazardous building materials survey work that shall be done. All recommendations included in a Phase I ESA prepared for a site shall be implemented. If a Phase I ESA indicates the presence or likely presence of contamination, the City of Elk Grove shall require a Phase II ESA, and recommendations of the Phase II ESA shall be fully implemented prior to ground disturbance. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.	
		Mitigation Measure 3.15-2b: Prepare a Hazardous Materials Contingency Plan for Construction Activities At the time of any application to annex territory within the Bilby Ridge SOIA area, the City of Elk Grove shall require that the applicants provide a hazardous materials contingency plan to Sacramento County EMD. The plan will describe the necessary actions that would be taken if evidence of contaminated soil or groundwater is encountered during construction. The contingency plan shall identify conditions that could indicate potential hazardous materials contamination, including soil discoloration, petroleum or chemical odors, and presence of underground storage tanks or buried building material.	
		The plan shall include the provision that, if at any time during the course of constructing the project, evidence of soil and/or groundwater contamination with hazardous material is encountered, the project applicant shall immediately halt construction and contact Sacramento County EMD. Work shall not recommence until the discovery has been assessed/treated appropriately (through such mechanisms as soil or groundwater sampling and remediation if potentially hazardous materials are detected above threshold levels) to the satisfaction of Sacramento County EMD, RWQCB, and DTSC (as applicable). The plan, and obligations to abide by and implement the plan, shall be incorporated into the construction and contract specifications of the project. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.	

Impacts	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
Impact 3.15-3: Create a significant hazard to the public or environment due to upset and accident conditions. Future development of the SOIA area upon annexation would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment through compliance with existing regulations. This impact would be less than significant.	LTS	None required.	LTS
Impact 3.15-4: Emit hazardous emissions or handle hazardous materials within 0.25 mile of a school. Future development of the SOIA area upon annexation could include the construction of new on-site schools. However, compliance with CDE school siting criteria ensures schools would not be located near hazardous material handlers and emitters. This impact would be less than significant.	LTS	None required.	LTS
Impact 3.15-6: Create a significant risk from wildfires. Future development of the SOIA area upon annexation would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. This impact would be less than significant.	LTS	None required.	LTS

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