# 4 MITIGATION MONITORING AND REPORTING PROGRAM

CEQA and the State CEQA Guidelines (PRC Section 21081.6 and State CEQA Guidelines Sections 15091[d] and 15097) require public agencies "to adopt a reporting and monitoring program for changes to the project which it has adopted or made a condition of project approval to mitigate or avoid significant effects on the environment." A Mitigation Monitoring and Reporting Program (MMRP) is required for the proposed project because the EIR identifies potential significant adverse impacts related to the project implementation, and mitigation measure have been identified to reduce those impacts. Adoption of the MMRP would occur along with approval of the Bilby Ridge Sphere of Influence Amendment (SOIA).

## 4.1 PURPOSE OF MITIGATION MONITORING AND REPORTING PROGRAM

This MMRP has been prepared to ensure that all required mitigation measures are implemented and completed in a satisfactory manner prior to approval of annexation of any territory within the Bilby Ridge SOIA area. The attached table has been prepared to assist Sacramento Local Agency Formation Commission (Sacramento LAFCo) and the City of Elk Grove (City) in implementing the mitigation measures. The table identifies the impact, mitigation measures (as amended through the FEIR), monitoring responsibility, mitigation timing, and provides space to confirm implementation of the mitigation measures. The numbering of mitigation measures follows the numbering sequence found in the EIR. Mitigation measures that are referenced more than once in the DEIR are not duplicated in the MMRP table.

## 4.2 ROLES AND RESPONSIBILITIES

The City will be responsible for taking all actions necessary to implement the mitigation measures according to the specifications provided for each measure and demonstration of mitigation measure compliance to the satisfaction of Sacramento LAFCo.

Inquiries should be directed to:

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The location of this information is:

▲ Sacramento Local Agency Formation Commission at 1112 | Street, Suite 100 Sacramento, CA 95814

## 4.3 MITIGATION MONITORING AND REPORTING PROGRAM TABLE

The categories identified in the attached MMRP table are described below.

- ▲ Impact This column provides the verbatim text of the identified impact.
- ▲ Mitigation Measure This column provides the verbatim text of the adopted mitigation measure

- Implementation Responsibility This column identifies the party responsible for implementing the mitigation measure.
- ▲ Timing This column identifies the time frame in which the mitigation will be implemented.
- Verification This column is to be dated and signed by the person (either project manager or his/her designee) responsible for verifying compliance with the requirements of the mitigation measure.

| Impact  | Mitigation Measure   | Implementation<br>Responsibility | Timing  | Verification |
|---|--|----------------------------------|---|--------------|
| 3.1 Aesthetics  |  |                                  |   |              |
| Impact 3.1-1: Substantially degrade the existing visual character or quality of the site and its surroundings.  |  | City of Elk Grove                | Implementation of this<br>mitigation measure will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA<br>area. |              |
| Impact 3.1-2: Create a new source of substantial light or glare.  | <b>Mitigation Measure 3.1-2: Design development to reduce lighting and glare.</b><br>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. | City of Elk Grove                | Implementation of this<br>mitigation measure will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA<br>area. |              |
| 3.2 Agricultural Resources  | 1  |                                  | 1   |              |
| Impact 3.2-1: Direct conversion of<br>Important Farmland and prime<br>agricultural land to non-agricultural us<br>Impact 3.2-2: Conflict with existing<br>Williamson Act contracts.<br>Impact 3.9-4: Conversion of open space | 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  | City of Elk Grove                | Implementation of this<br>mitigation measure will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA<br>area. |              |

| Impact | Mitigation Measure   | Implementation<br>Responsibility | Timing | Verification |
|--------|--|----------------------------------|--------|--------------|
|        | 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 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<br>monitoring fee to cover the costs of administering, monitoring, and enforcing the<br>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<br>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<br>land ceases to exist, the duty to hold, administer, monitor, and enforce the interest<br>shall be transferred to another entity acceptable to the City or transferred to the<br>City.   |                                  |        |              |

| Impact   | Mitigation Measure  | Implementation<br>Responsibility | Timing  | Verification |
|--|---|----------------------------------|---|--------------|
|  | 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 in the annexation application to LAFCo.  |                                  |   |              |
| mpact 3.2-3: Involve other changes in<br>the existing environment which, due to<br>their location or nature, could result in<br>conversion of Farmland, to non-<br>agricultural use. | Mitigation Measure 3.2-3 Provision of agricultural buffering as part of future project design.<br>At the time of submittal of any application to annex territory within the Bilby Ridge SOIA<br>area, the City shall demonstrate a requirement that future development implements City<br>Municipal Code, Chapter 14.05, "Agricultural Activities," in effect at the time of the<br>annexation application that include notice to prospective buyers of the property adjacent to<br>agricultural land that they could be subject to inconvenience or discomfort resulting from<br>accepted farming activities. Further, the City shall consider appropriate design elements (as<br>determined by the City) that provide continued agricultural operations beyond the Bilby<br>Ridge SOIA area. Evidence of compliance with this mitigation measure shall be provided in<br>the annexation application to LAFCo. | City of Elk Grove                | Implementation of this<br>mitigation measure will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA<br>area. |              |
| 3.3 Air Quality  |   | I                                | I   |              |
| Impact 3.3-1: Construction emissions of criteria air pollutants and ozone precursors.  | <b>Mitigation Measure 3.3-1: Construction exhaust and fugitive dust emissions controls</b><br>At the time of any application to annex territory within the Bilby Ridge SOIA area, the City of<br>Elk Grove shall require that the applicants implement SMAQMD's Basic Construction<br>Emission Control Practices and SMAQMD's Enhanced Exhaust Control Practices during any<br>construction or ground disturbance activities to reduce construction-related fugitive dust<br>emissions, diesel PM, and NOX emissions. These measures are included below and are<br>consistent with General Plan Policy CAQ-30 and Policy CAQ-33. Evidence of compliance with<br>this mitigation measure shall be provided in the annexation application to LAFCo.   | City of Elk Grove                | Implementation of this<br>mitigation measure will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA<br>area. |              |
|  | <ul> <li>Basic Construction Emissions Control Practices</li> <li>✓ 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.</li> </ul>  |                                  |   |              |
|  | ✓ 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.  |                                  |   |              |
|  | ✓ Use wet power vacuum street sweepers to remove any visible trackout mud or dirt<br>onto adjacent public roads at least once a day. Use of dry power sweeping is<br>prohibited.  |                                  |   |              |
|  | ▲ Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).   |                                  |   |              |
|  | ▲ All roadways, driveways, sidewalks, parking lots to be paved should completed as  |                                  |   |              |

| Table 4-1 | Mitigation Monitoring and Reporting Program - Bilby Ridge Sphere of Influence Amendment |
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| Impact | Mitigation Measure  | Implementation<br>Responsibility | Timing | Verification |
|--------|---|----------------------------------|--------|--------------|
|        | soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.  |                                  |        |              |
|        | Minimize idling time either by shutting equipment off when not in use or reducing<br>the time of idling to 5 minutes [required by California Code of Regulations, Title 13,<br>sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement<br>for workers at the entrances to the site.  |                                  |        |              |
|        | Maintain all construction equipment in proper working condition according to<br>manufacturer's specifications. The equipment must be checked by a certified<br>mechanic and determined to be running in proper condition before it is operated.   |                                  |        |              |
|        | <ul> <li>Enhanced Exhaust Control Practices</li> <li>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 applied.</li> </ul>  |                                  |        |              |
|        | <ul> <li>day period in which no construction activity occurs.</li> <li>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, aftertreatment products, and/or other options as they become available.</li> <li>The applicant shall ensure that emissions from all off-road, diesel-powered equipment used on the project area do not exceed 40 percent opacity for more</li> </ul> |                                  |        |              |
|        | equipment used on the project area do not exceed 40 percent opacity for more<br>than three minutes in any one hour. Use of any equipment found to exceed 40<br>percent opacity (or Ringelmann 2.0) shall be discontinued immediately until<br>equipment is repaired or replaced. Non-compliant equipment will be documented   |                                  |        |              |

| Impact | Mitigation Measure  | Implementation<br>Responsibility | Timing | Verification |
|--------|---|----------------------------------|--------|--------------|
|        | and a summary provided to the lead agency and SMAQMD monthly. A visual survey<br>of all in-operation equipment shall be made at least weekly. A monthly summary of<br>the visual survey shall not be required for any 30-day period in which no<br>construction activity occurs. The monthly summary shall include the quantity and<br>type of vehicles surveyed as well as the dates of each survey.   |                                  |        |              |
|        | Enhanced Fugitive PM Dust Control Practices   |                                  |        |              |
|        | <ul> <li>Soil Disturbance Areas</li> <li>▲ Water exposed soil with adequate frequency for continued moist soil. However, do not overwater to the extent that sediment flows off the site.</li> </ul>  |                                  |        |              |
|        | ✓ 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<br>areas as soon as possible. Water appropriately until vegetation is established.  |                                  |        |              |
|        | <ul> <li>Unpaved Roads</li> <li>✓ Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site.</li> </ul>   |                                  |        |              |
|        | ✓ Treat site accesses to a distance of 100 feet from the paved road with a 6 to 12-<br>inch layer of wood chips, mulch, or gravel to reduce generation of road dust and<br>road dust carryout onto public roads.  |                                  |        |              |
|        | Post a publicly visible sign with the telephone number and person to contact at the<br>lead agency regarding dust complaints. This person shall respond and take<br>corrective action within 48 hours. The phone number of the District shall also be<br>visible to ensure compliance.  |                                  |        |              |
|        | Offsite Exhaust Mitigation ✓ If, based upon the incorporation of all onsite measures described above (e.g., basic construction fugitive dust emissions control practices, enhanced exhaust control practices, enhanced fugitive PM dust control practices), NOX and PM emissions still do not meet the SMAQMD recommended thresholds, an off-site mitigation fee for construction activities will be assessed for the purpose of offsetting NOX and PM emissions such that emissions are reduced to a less-than-significant level. The fee calculation to offset daily emissions is based on the SMAQMD-determined cost to reduce one ton of NOX (currently \$30,000 per ton). The mitigation fees will be determined by the City of Elk Grove and calculated in cooperation with the SMAQMD. The final mitigation fee will be based on contractor equipment inventories provided to SMAQMD and will reconcile any fee discrepancies due to |                                  |        |              |

| Impact  | Mitigation Measure  | Implementation<br>Responsibility | Timing  | Verification |
|---|---|----------------------------------|---|--------------|
|   | schedule adjustments and increased or decreased equipment inventories.<br>Equipment inventories and emissions estimates for subsequent construction<br>activities shall be coordinated with SMAQMD, and the off-site mitigation fee<br>measure shall be assessed to any construction phase that would result in an<br>exceedance of SMAQMD's mass emission threshold for NOX and PM.  |                                  |   |              |
| Impact 3.3-2: Long-term operational<br>emissions of air pollutants. | Mitigation Measure 3.3-2: Prepare an Air Quality Mitigation Plan to reduce potential operational emissions<br>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 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 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 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 whi | City of Elk Grove                | Implementation of this<br>mitigation measure will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA<br>area. |              |

| Impact   | Mitigation Measure  | Implementation<br>Responsibility | Timing  | Verification |
|--|---|----------------------------------|---|--------------|
|  | 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 for the entire project area and shall achieve the original 35 percent reduction in total operational emissions. If the amendment would require a change 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 3.3-4: Exposure of sensitive receptors to TACs. | Mitigation Measure 3.3-4: Incorporate design features to minimize exposure of sensitive<br>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<br>Elk Grove shall require that the applicants implement the measures to address TAC<br>exposure identified below. Evidence of compliance with this mitigation measure shall be<br>  | City of Elk Grove                | Implementation of this<br>mitigation measure will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA<br>area. |              |
|  | 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<br>or walls shield locations of truck activity from nearby residences or other sensitive<br>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<br>deliveries from trucks with TRUs so that TRU engines need not be operated at<br>loading docks.  |                                  |   |              |
|  | ▲ Signs shall be posted at all loading docks and truck loading areas which indicate<br>that diesel powered delivery trucks must be shut off when not in use for longer than<br>5 minutes on the premises to reduce idling emissions of diesel PM.   |                                  |   |              |

| Impact  | Mitigation Measure   | Implementation<br>Responsibility | Timing  | Verification |
|---|--|----------------------------------|---|--------------|
| Impact 3.3-5: Exposure of sensitive receptors to odors.                           | <ul> <li>Mitigation Measure 3.3-5: Incorporation of design features for suburban center to address potential odor sources.</li> <li>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:</li> <li>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.</li> <li>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.</li> </ul> | City of Elk Grove                | Implementation of this<br>mitigation measure will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA<br>area. |              |
|   | Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.  |                                  |   |              |
| 3.4 Biological Resources  |  |                                  |   |              |
| Impact 3.4-1: Disturbance to or loss of special-status plant species and habitat. | Mitigation Measure 3.4-1: Protection and mitigation of special-status plants.<br>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.<br>Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.  | City of Elk Grove                | Implementation of this<br>mitigation measure will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA          |              |
|   | ▲ 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 protocol-level 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.  |                                  | area.   |              |
|   | ✓ 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   |                                  |   |              |

| Impact   | Mitigation Measure   | Implementation<br>Responsibility | Timing   | Verification |
|--|--|----------------------------------|--|--------------|
|  | direct and indirect impacts that could occur as a result of project construction and<br>shall implement the agreed-upon mitigation measures to achieve no net loss of<br>occupied habitat or individuals. Mitigation measures may include preserving and<br>enhancing existing populations, creation of off-site populations on mitigation sites<br>through seed collection or transplantation, and/or restoring or creating suitable<br>habitat in sufficient quantities to achieve no net loss of occupied habitat and/or<br>individuals. A mitigation and monitoring plan shall be developed describing how<br>unavoidable losses of special-status plants will be compensated. |                                  |  |              |
|  | ✓ If relocation efforts are part of the mitigation plan, the plan shall include details on<br>the methods to be used, including collection, storage, propagation, receptor site<br>preparation, installation, long-term protection and management, monitoring and<br>reporting requirements, success criteria, and remedial action responsibilities<br>should the initial effort fail to meet long-term monitoring requirements.   |                                  |  |              |
|  | <ul> <li>Success criteria for preserved and compensatory populations shall include:</li> <li>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.</li> </ul>  |                                  |  |              |
|  | Compensatory and preserved populations shall be self-producing. Populations shall be considered self-producing when:   |                                  |  |              |
|  | <ul> <li>plants reestablish annually for a minimum of five years with no human<br/>intervention such as supplemental seeding; and</li> </ul>   |                                  |  |              |
|  | reestablished and preserved habitats contain an occupied area and flower<br>density comparable to existing occupied habitat areas in similar habitat types<br>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, 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. | Mitigation Measure 3.4-2a: Protection of giant gartersnake.<br>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.<br>Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.  | City of Elk Grove                | Implementation of these<br>mitigation measures will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA |              |

| Impact | Mitigation Measure  | Implementation<br>Responsibility | Timing | Verification |
|--------|---|----------------------------------|--------|--------------|
|        | ▲ For projects or ground-disturbing activities with potential to disturb suitable aquatic<br>or adjacent upland habitat for giant gartersnake, the following measures will be<br>implemented.   |                                  | area.  |              |
|        | The applicant shall retain a qualified biologist to conduct a field investigation to<br>delineate giant gartersnake aquatic habitat within the project and any required<br>off-site improvements and adjacent areas within 300 feet of the construction<br>footprint. Giant gartersnake aquatic habitat includes agricultural ditches.  |                                  |        |              |
|        | During construction, an approved biologist experienced with giant gartersnake<br>identification and behavior shall be on-site daily when construction activities<br>within aquatic habitat or within 300 feet of aquatic habitat are taking place. The<br>biologist shall inspect the project site daily for giant gartersnake prior to<br>construction activities. The biologist will also conduct environmental awareness<br>training for all construction personnel on required avoidance procedures and<br>protocols if a giant gartersnake enters an active construction zone.   |                                  |        |              |
|        | All construction activity within giant garter snake aquatic and upland habitat in<br>and around the site shall be conducted between May 1 and September 15, the<br>active period for giant gartersnakes. This would reduce direct impacts on the<br>species because the snakes would be active and respond to construction<br>activities by moving out of the way.  |                                  |        |              |
|        | If construction activities occur in 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. If complete dewatering is not possible, the project applicant shall 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 limits and to protect adjacent habitat from encroachment of personnel and equipment. Giant gartersnake habitat outside construction fencing 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 maintained by the contractor until completion of the project. |                                  |        |              |

| Impact | Mitigation Measure  | Implementation<br>Responsibility | Timing | Verification |
|--------|---|----------------------------------|--------|--------------|
|        | If a giant gartersnake is observed, the biologist shall notify CDFW and USFWS immediately. 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 sunset, whichever occurs first. All steep-walled holes and trenches shall be inspected by the approved biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within giant gartersnake modeled 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<br>by compensating for loss of habitat at a ratio of 1:1, by purchasing credits from a<br>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.  |                                  |        |              |

| Impact | Mitigation Measure   | Implementation<br>Responsibility | Timing | Verification |
|--------|--|----------------------------------|--------|--------------|
|        | Mitigation Measure 3.4-2b: Avoidance of western pond turtle.<br>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 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. |                                  |        |              |
|        | <b>Mitigation Measure 3.4-2c: Protection of burrowing owl.</b><br>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<br>nonbreeding season surveys for burrowing owls in areas of suitable habitat on and<br>within 1,500 feet of the project site and any required off-site improvements.<br>Surveys shall be conducted prior to the start of construction activities and in<br>accordance with Appendix D of CDFW's Staff Report on Burrowing Owl Mitigation<br>(CDFW 2012) or the most recent CDFW protocols.   |                                  |        |              |
|        | ▲ If no occupied burrows are found, a letter report documenting the survey methods<br>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   |                                  |        |              |

| Impact | Mitigation Measure   | Implementation<br>Responsibility | Timing | Verification |
|--------|--|----------------------------------|--------|--------------|
|        | owls shall not be excluded from occupied burrows until the project's burrowing owl exclusion plan is approved by CDFW. The 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 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<br>implementation, the project applicant shall mitigate the loss of occupied habitat in<br>accordance with guidance provided in the CDFW 2012 Staff Report or the most<br>recent CDFW protocols, which states that permanent impacts to nesting, occupied<br>and satellite burrows, and burrowing owl habitat shall be mitigated such that<br>habitat acreage, number of burrows, and burrowing owls impacted are replaced<br>through permanent conservation of comparable or better habitat with similar<br>vegetation communities and burrowing mammals (e.g., ground squirrels) present to<br>provide for nesting, foraging, wintering, and dispersal. The applicant shall retain a<br>qualified biologist to develop a burrowing owl mitigation and management plan that<br>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 provided adjacent or proximate to the site so<br>that displaced owls can relocate with reduced risk of take. Feasibility of providing<br>mitigation adjacent or proximate to the project site depends on availability of<br>sufficient suitable habitat to support displaced owls that may be preserved in  |                                  |        |              |

| Impact | Mitigation Measure   | Implementation<br>Responsibility | Timing | Verification |
|--------|--|----------------------------------|--------|--------------|
|        | <ul> <li>perpetuity.</li> <li>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.</li> </ul>   |                                  |        |              |
|        | ✓ 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.<br>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 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<br>Swainson's hawk nest site (identified based on previous years' use by Swainson's<br>hawk), the project applicant shall attempt to initiate construction activities prior to  |                                  |        |              |

| Impact | Mitigation Measure   | Implementation<br>Responsibility | Timing | Verification |
|--------|--|----------------------------------|--------|--------------|
|        | 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<br>September 15, qualified biologists shall conduct preconstruction surveys for<br>Swainson's hawk and other nesting raptors and to identify active nests on and<br>within 0.5 mile of the project site. The surveys shall be conducted before the<br>beginning of any construction activities between March 1 and September 15,<br>following the Recommended Timing and Methodology for Swainson's Hawk Nesting<br>Surveys in California's Central Valley (Swainson's Hawk Technical Advisory<br>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 consultation 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 construction activities shall be required if the activity has potential to adversely affect the nest. |                                  |        |              |
|        | <ul> <li>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.</li> <li>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)</li> </ul>   |                                  |        |              |

| Impact | Mitigation Measure   | Implementation<br>Responsibility | Timing | Verification |
|--------|--|----------------------------------|--------|--------------|
|        | 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).<br>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<br>sparrow nests, or other bird nests, structure and vegetation removal activities shall<br>commence during the nonbreeding season (September 1-January 31). If all suitable<br>nesting habitat is removed during the nonbreeding season, no further mitigation<br>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 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.<br>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  |                                  |        |              |

| Table 4-1 Mi | tigation Monitoring and Reporting Program - Bilby Ridge Sphere of Influence Amen<br>Mitigation Measure   | Implementation<br>Responsibility | Timing | Verification |
|--------------|--|----------------------------------|--------|--------------|
|              | 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<br>for direct effects of the project on potential habitat for vernal pool fairy shrimp and<br>vernal pool tadpole shrimp at a ratio of 2:1, by purchasing vernal pool preservation<br>credits from a USFWS-approved conservation bank. Compensation credits shall be<br>purchased prior to any ground-disturbing activities.       |                                  |        |              |
|              | Habitat Creation: The applicant shall compensate for the direct effects of the<br>project on potential habitat for vernal pool fairy shrimp and vernal pool tadpole<br>shrimp at a ratio of 1:1, by purchasing vernal pool creation credits from a USFWS-<br>approved conservation bank.   |                                  |        |              |
|              | Mitigation shall occur before the approval of any grading or improvement plans for<br>any project phase that would allow work within 250 feet of such habitat, and before<br>any ground-disturbing activity within 250 feet of the 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 activities. |                                  |        |              |
|              | ▲ A worker environmental awareness training shall be conducted to inform on-site<br>construction personnel regarding the potential presence of listed species and the<br>importance of avoiding impacts to these species and their habitat.  |                                  |        |              |
|              | The applicant shall secure any necessary take authorization prior to project<br>construction through formal consultation between USACE and USFWS pursuant to<br>Section 7 of the ESA, and shall implement all measures included in the Biological<br>Opinion issued by USFWS.  |                                  |        |              |
|              | <b>Mitigation 3.4-2g: Protection measures for American badger.</b><br>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  |                                  |        |              |

| Impact  | Mitigation Measure   | Implementation<br>Responsibility | Timing  | Verification |
|---|--|----------------------------------|---|--------------|
|   | 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 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 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<br>wetlands, other waters of the United<br>States, and waters of the state. | Mitigation Measure 3.4-3: Wetlands, other waters of the U.S., and waters of the state.<br>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.<br>Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.<br>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.<br>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 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 Water Quality Certification from the RWQCB shall be obtained. | City of Elk Grove                | Implementation of this<br>mitigation measure will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA<br>area. |              |

| Impact   |                 | Mitigation Measure  | Implementation<br>Responsibility | Timing  | Verification |
|--|-----------------|---|----------------------------------|---|--------------|
| 3.5 Cultural and                                     | Paleontological | Resources   | 1                                |   |              |
| Impact 3.5-1: Change in of an historical resource.   | -               | <ul> <li>Mitigation Measure 3.5-1: Conduct project-specific level surveys and identify measures to protect identified historic resources.</li> <li>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:</li> <li>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.</li> <li>If resources eligible for inclusion in the NRHP or CRHR are identified, an assessment of project impacts 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</li> </ul> | City of Elk Grove                | Implementation of this<br>mitigation measure will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA<br>area. |              |
|  |                 | Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.   |                                  |   |              |
| Impact 3.5-2: Disturb un<br>archaeological resources | •               | <ul> <li>Mitigation Measure 3.5-2: Avoid potential effects on unique archaeological resources.</li> <li>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:</li> <li>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</li> </ul>  | City of Elk Grove                | Implementation of this<br>mitigation measure will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA<br>area. |              |

| Impact   | Mitigation Measure  | Implementation<br>Responsibility | Timing  | Verification |
|--|---|----------------------------------|---|--------------|
|  | <ul> <li>archaeologist, avoidance of sites, or preservation in place.</li> <li>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 notified. If the archaeologist determines that the find does not meet NRHP or CRHR standards of significance for cultural resources, construction may proceed. 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 constitute either an historical resource or a unique archaeological resource), the archaeologist shall work with the project applicant to avoid disturbance to the resources, and if complete avoidance is not feasible in light of project design, economics, logistics, and other factors, follow accepted professional standards in recording any find including submittal of the standard DPR Primary Record forms (Form DPR 523) and location information to NCIC.</li> </ul> |                                  |   |              |
| Impact 3.5-4: Disturb a unique paleontological resource. | <ul> <li>application to LAFCo.</li> <li>Mitigation Measure 3.5-4: Avoid impact to unique paleontological resources.</li> <li>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:</li> <li>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.</li> <li>If paleontological resources are discovered during earthmoving activities, the</li> </ul>  | City of Elk Grove                | Implementation of this<br>mitigation measure will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA<br>area. |              |
|  | <ul> <li>construction crew shall immediately cease work near the find and notify the City of Elk Grove.</li> <li>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 monitoring, sampling and data recovery procedures, museum</li> </ul>  |                                  |   |              |

| Table 4-1   Mitigation Mo  | nitoring and Reporting Program - Bilby Ridge Sphere of Influence Amend  |                                  |   |              |
|--|---|----------------------------------|---|--------------|
| Impact   | Mitigation Measure  | Implementation<br>Responsibility | Timing  | Verification |
|  | curation 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.  |                                  |   |              |
| 3.6 Energy   | •   | •                                |   |              |
| Impact 3.6-1: Wasteful, inefficient, or<br>unnecessary consumption of energy,<br>during project construction or operation. | Mitigation Measure 3.6-1: Implement Mitigation Measures 3.7-1a and 3.13-1.  |                                  |   |              |
| Impact 3.6-2: Demand for energy services and facilities.   | Mitigation Measure 3.6-2: Prepare utility service plans that demonstrate adequate electrical and natural gas service and infrastructure are available.<br>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 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. | City of Elk Grove                | Implementation of this<br>mitigation measure will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA<br>area.   |              |
| 3.7 Greenhouse Gas Emissions   |   | <u></u>                          |   | ļ.           |
| Impact 3.7-1: Project-generated<br>greenhouse gas emissions.   | <ul> <li>Mitigation Measure 3.7-1a: On-site GHG emission reduction measures.</li> <li>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:</li> <li><u>Construction</u></li> <li>A Enforce idling time restrictions for construction vehicles</li> <li>A Require construction vehicles to operate with the highest tier engines commercially</li> </ul>   | City of Elk Grove                | Implementation of these<br>mitigation measures will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA<br>area. |              |
|  | <ul> <li>available</li> <li>Divert and recycle construction and demolition waste, and use locally-sourced building materials with a high recycled material content to the greatest extent feasible</li> </ul>   |                                  |   |              |

| Impact | Mitigation Measure   | Implementation | Timing | Verification |
|--------|--|----------------|--------|--------------|
|        | ▲ Minimize tree removal, and mitigate indirect GHG emissions increases that occur  | Responsibility |        |              |
|        | because of vegetation removal, loss of sequestration, and soil disturbance   |                |        |              |
|        | <ul> <li>Utilize existing grid power for electric energy rather than operating temporary<br/>gasoline/diesel powered generators</li> </ul>   |                |        |              |
|        | ▲ Increase use of electric and renewable fuel powered construction equipment and<br>require renewable diesel fuel where commercially available   |                |        |              |
|        | <ul> <li>Require diesel equipment fleets to be lower emitting than any current emission<br/>standard</li> </ul>  |                |        |              |
|        | Operation  |                |        |              |
|        | Comply with lead agency's standards for mitigating transportation impacts under<br>SB 743  |                |        |              |
|        | Require on-site EV charging capabilities for parking spaces serving the project to<br>meet jurisdiction-wide EV proliferation goals  |                |        |              |
|        | ▲ Allow for new construction to install fewer on-site parking spaces than required by<br>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<br>in multi-family residential projects and in non-residential projects   |                |        |              |
|        | Provide on- and off-site safety improvements for bike, pedestrian, and transit<br>connections, and/or implement relevant improvements identified in the City of Elk<br>Grove Bicycle, Pedestrian, and Trails Master Plan |                |        |              |
|        | Require on-site renewable energy generation  |                |        |              |
|        | Prohibit wood-burning fireplaces in new development, and require replacement of<br>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  |                |        |              |
|        | <ul> <li>Where ZNE is deemed infeasible, building energy may also be reduced in the following ways:</li> </ul>   |                |        |              |
|        | ▲ Reduce building energy-related GHG emissions through the use of on-site  |                |        |              |

| Impact | Mitigation Measure   | Implementation<br>Responsibility | Timing | Verification |
|--------|--|----------------------------------|--------|--------------|
|        | renewable energy (e.g., solar photovoltaic panels) where technologically feasible<br>and at a minimum of 15 percent of the project's total energy demand. Building<br>design, landscape plans, and solar installation shall take into account solar<br>orientation, and building roof size to maximize solar exposure. |                                  |        |              |
|        | ▲ Provide incentives to future residents to purchase Energy Star <sup>™</sup> 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.   |                                  |        |              |
|        | Provide electrical outlets on the exterior of project buildings to allow sufficient<br>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<br>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)  |                                  |        |              |
|        | <ul> <li>Reduce turf area and use water-efficient irrigation systems (i.e., smart sprinkler<br/>meters) and landscaping techniques/design.</li> </ul>  |                                  |        |              |
|        | Require new construction, including municipal building construction, to achieve<br>third-party green building certifications, such as the GreenPoint Rated program or<br>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,<br>vanpooling, commuter bus, electric vehicles, and rail service use  |                                  |        |              |
|        | <ul> <li>Require a transportation management plan for specific plans which establishes a<br/>numeric target for non-SOV travel and overall VMT</li> </ul>  |                                  |        |              |
|        | ▲ Develop a rideshare program targeting commuters to major employment centers  |                                  |        |              |
|        | <ul> <li>Require the design of bus stops/shelters/express lanes in new developments to<br/>promote the usage of mass-transit</li> </ul>  |                                  |        |              |
|        | ▲ Require gas outlets in residential backyards for use with outdoor cooking appliances such as gas barbeques if natural gas service is available   |                                  |        |              |
|        | ▲ Require the installation of electrical outlets on the exterior walls of both the front   |                                  |        |              |

| Impact | Mitigation Measure   | Implementation<br>Responsibility | Timing | Verification |
|--------|--|----------------------------------|--------|--------------|
|        | 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<br>non-residential developments   |                                  |        |              |
|        | Provide electric outlets to promote the use of electric landscape maintenance<br>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-<br>less water heaters and whole-house fans  |                                  |        |              |
|        | <ul> <li>Require each residential and commercial building equip buildings with energy<br/>efficient AC units and heating systems with programmable thermostats/timers</li> </ul>   |                                  |        |              |
|        | ▲ Require large-scale residential developments and commercial buildings to report<br>energy use, and set specific targets for per-capita energy use  |                                  |        |              |
|        | Require each residential and commercial building to utilize low flow water fixtures<br>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<br>should generate carbon credits equivalent to the anticipated GHG emission<br>reductions. This would be implemented via an approved protocol for carbon credits<br>from CAPCOA, CARB, or other similar entities determined acceptable by the local air<br>district |                                  |        |              |
|        | ▲ Require the project to purchase carbon credits from the CAPCOA GHG Reduction<br>Exchange Program, American Carbon Registry, Climate Action Reserve or other<br>similar carbon credit registry determined to be acceptable by the local air district  |                                  |        |              |
|        | ▲ Encourage the applicant to consider generating or purchasing local and California-<br>only carbon credits as the preferred mechanism to implement its off-site mitigation<br>measure for GHG emissions and that will facilitate the State's efforts in achieving<br>the GHG emission reduction goal  |                                  |        |              |
|        | Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.  |                                  |        |              |

| Impact | Mitigation Measure  | Implementation<br>Responsibility | Timing | Verification |
|--------|---|----------------------------------|--------|--------------|
|        | Mitigation Measure 3.7-1b: Purchase carbon offsets.<br>In addition to Mitigation Measure 3.7-1a, at the time of any application to annex territory<br>within the Bilby Ridge SOIA area, the City of Elk Grove shall require that the applicants offset<br>GHG emissions to zero by funding activities that directly reduce or sequester GHG<br>emissions or, if necessary, obtaining carbon credits. Evidence of compliance with this<br>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 voluntary participation in an approved registry, GHG emissions may be reduced at the project level. GHG reductions must meet the following criteria:   |                                  |        |              |
|        | <ul> <li>Real-represent reductions actually achieved (not based on maximum permit levels),</li> <li>Additional/Surplus-not already planned or required by regulation or policy (i.e., not double counted),</li> </ul>   |                                  |        |              |
|        | <ul> <li>Quantifiable—readily accounted for through process information and other reliable data,</li> <li>Enforceable—acquired through legally-binding commitments/agreements,</li> <li>Validated—verified through accurate means by a reliable third party, and</li> <li>Permanent—will remain as GHG reductions in perpetuity.</li> </ul>   |                                  |        |              |

| Impact | Mitigation Measure  | Implementation<br>Responsibility | Timing | Verification |
|--------|---|----------------------------------|--------|--------------|
|        | 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 equivalent GHG reduction benefit annually, as opposed to a one-time reduction. |                                  |        |              |
|        | Before issuing building permits for development within the SOIA area, the City of Elk Grove shall confirm that the project applicant or its designee has 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 associated with such building permits by relying upon one of the following compliance options, or a combination thereof:  |                                  |        |              |
|        | demonstrate that the project applicant has directly undertaken or funded activities<br>that reduce or sequester GHG emissions that are estimated to result in GHG<br>reduction credits (if such programs are available), and retire such GHG reduction<br>credits in a quantity equal to the remaining operational GHG emissions;   |                                  |        |              |
|        | provide a guarantee that it shall retire carbon credits issued in connection with<br>direct investments (if such programs exist at the time of building permit issuance)<br>in a quantity equal to the remaining operational GHG emissions;   |                                  |        |              |
|        | undertake or fund direct investments (if such programs exist at the time of building<br>permit issuance) and retire the associated carbon credits in a quantity equal to the<br>remaining operational GHG emissions; or   |                                  |        |              |
|        | ▲ if it is impracticable to fully offset operational emissions through direct investments<br>or quantifiable and verifiable programs do not exist, the project applicant or its<br>designee may purchase and retire carbon credits that have been issued by a<br>recognized and reputable, accredited carbon registry in a quantity equal to the<br>remaining operational GHG Emissions.  |                                  |        |              |

|  | Impact  | Mitigation Measure   | Implementation<br>Responsibility | Timing  | Verification |
|--|---|--|----------------------------------|---|--------------|
| 3.8 Hy   | ydrology and Water Quality  |  |                                  |   |              |
| related and o<br>degradation.<br>Impact 3.8-3:<br>pattern or inc<br>surface runof<br>result in subs<br>Impact 3.8-4:<br>housing within<br>result in loss,<br>flooding. | Short-term construction-<br>perational water quality<br>Alteration of drainage<br>rease in rate or amount of<br>ff in a manner that would<br>stantial erosion or siltation.<br>Place structures or<br>n a flood hazard area or<br>injury, or death due to | <ul> <li>Mitigation Measure 3.8-1: Development of a drainage master plan for the SOIA area.</li> <li>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:</li> <li>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;</li> <li>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;</li> <li>identification of any drainage facility connections or coordination with the planned Southeast Area Plan drainage channel east of the SOIA area;</li> <li>identification of design features that avoid site development from occurring in the 200-year floodplain;</li> <li>implementation of appropriate BMPs to address construction and operational stormwater quality consistent with City requirements;</li> <li>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;</li> <li>a description of the proposed maintenance program for the on-site drainage systems. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.</li> </ul> | City of Elk Grove                | Implementation of this<br>mitigation measure will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA<br>area.   |              |
| 3.10 No  | oise  |  | Ι                                |   |              |
| Impact 3.10-1<br>noise   | 1: Construction-generated   | <b>Mitigation Measure 3.10-1a: Implement construction-noise reduction measures.</b><br>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.   | City of Elk Grove                | Implementation of these<br>mitigation measures will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA<br>area. |              |

| Impact | Mitigation Measure  | Implementation<br>Responsibility | Timing | Verification |
|--------|---|----------------------------------|--------|--------------|
|        | 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<br>equipment and equipment staging areas shall be located as far as feasible from<br>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<br>(e.g., using welding instead of riveting, mixing concrete off-site instead of on-site)<br>where feasible and consistent with building codes and other applicable laws and<br>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  |                                  |        |              |
|        | <b>noise sensitive time periods.</b><br>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:  |                                  |        |              |
|        | ✓ 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.                                     |                                  |        |              |

| Impact  | Mitigation Measure   | Implementation<br>Responsibility | Timing  | Verification |
|---|--|----------------------------------|---|--------------|
|   | <ul> <li>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.</li> <li>Noise-reducing enclosures and techniques shall be used around stationary noise-generating equipment (e.g., concrete mixers, generators, compressors).</li> <li>Operate heavy-duty construction equipment at the lowest operating power possible.</li> </ul>  |                                  |   |              |
| Impact 3.10-3: Long-term operational<br>non-transportation noise levels | Mitigation Measure 3.10-3: Reduce noise exposure to existing sensitive receptors from proposed stationary noise sources.<br>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.<br>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 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, Po | City of Elk Grove                | Implementation of this<br>mitigation measure will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA<br>area. |              |

| Impact  | Mitigation Measure   | Implementation<br>Responsibility | Timing  | Verification |
|---|--|----------------------------------|---|--------------|
| Impact 3.10-4: Compatibility of project with on-site noise levels | Mitigation Measure 3.10-4a: Reduce transportation noise exposure to new on-site noise-<br>sensitive receptors<br>At the time of any application to annex territory within the Bilby Ridge SOIA area, the City of<br>Elk Grove shall require that the applicants to comply with the following noise requirements<br>in the design of the development. Evidence of compliance with this mitigation measure<br>shall be provided in the annexation application to LAFCo.  | City of Elk Grove                | Implementation of these<br>mitigation measures will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA<br>area. |              |
|   | For new noise-sensitive receptors developed on the SOIA site and located within 77 feet<br>of the centerline of Bruceville Road, within 211 feet of the centerline of Bilby Road<br>between Willard Parkway and Coop Drive, within 524 feet of the centerline of Bilby Road<br>between Coop Drive and Bruceville Road, within 182 feet of the centerline of Willard<br>Parkway, or within 433 feet of the centerline of Kammerer Road between Willard<br>Parkway and Bruceville Road (i.e., the distance from the centerline that is estimated,<br>based on the noise modelling, to result in exceedance of the City of Elk Grove exterior<br>noise compatibility standard of 60 Ldn for low density residential), the following design<br>criteria shall be adhered to: |                                  |   |              |
|   | ▲ Where feasible, locate new sensitive receptors such that the primary outdoor<br>activity area (e.g., backyard, balcony, or porch) is on the opposite side of the<br>structure from major roadways such that the structure itself would provide a barrier<br>between transportation noise and the primary outdoor activity area.  |                                  |   |              |
|   | ▲ Locate new sensitive receptors such that buildings/structures are located between<br>the sensitive land use and nearby major roadways.   |                                  |   |              |
|   | ▲ Setback sensitive receptors from major roadways sufficient distance to ensure they<br>will not be exposed to noise levels that exceed the City of Elk Grove's exterior noise<br>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.<br>At the time of any application to annex territory within the Bilby Ridge SOIA area, the City of   |                                  |   |              |
|   | 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  |                                  |   |              |

| Table 4-1   Mitigation Model  | nitoring and Reporting Program - Bilby Ridge Sphere of Influence Amend   | iment                            |   |              |
|---|--|----------------------------------|---|--------------|
| Impact  | Mitigation Measure   | Implementation<br>Responsibility | Timing  | Verification |
|   | 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. 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 |                                  |   |              |
| 3.12 Public Services and Recreati   | use restrictions shall be dictated by findings in the noise analysis and approved by City staff.   | <u> </u>                         |   |              |
| Impact 3.12-1: Increased demand for<br>fire protection and emergency medical<br>services. | Initigation 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 provide documentation demonstrating CCSD's determination that 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 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  | City of Elk Grove                | Implementation of this<br>mitigation measure will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA<br>area. |              |

| Impact  | Mitigation Measure   | Implementation<br>Responsibility | Timing  | Verification |
|---|--|----------------------------------|---|--------------|
|   | 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<br>law enforcement services.  | 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.   | City of Elk Grove                | Implementation of this<br>mitigation measure will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA<br>area. |              |
| 3.13 Traffic, Transportation, and C   | Dirculation  | 1                                | -   |              |
| Impact 3.13-1: Impacts to Roadway<br>Operation.<br>Impact 3.13-2: Impacts to Freeway<br>Facilities.<br>Impact 3.13-3: Impacts to Transit.<br>Impact 3.13-4: Impacts to Bicycle and<br>Pedestrian Facilities | <ul> <li>Mitigation Measure 3.13-1: Participation in transportation system improvements.</li> <li>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.</li> <li>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.</li> <li>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</li> </ul> | City of Elk Grove                | Implementation of this<br>mitigation measure will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA<br>area. |              |

| Impact  | Mitigation Measure   | Implementation<br>Responsibility | Timing  | Verification |
|---|--|----------------------------------|---|--------------|
|   | 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.   |                                  |   |              |
| 3.15 Hazards and Hazardous Mate   | rials  |                                  |   |              |
| Impact 3.15-2: Create potential human<br>hazards from exposure to existing on-<br>site hazardous materials. | 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 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 discloration, 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 ha | City of Elk Grove                | Implementation of these<br>mitigation measures will be<br>incorporated into any<br>application to annex territory<br>within the Bilby Ridge SOIA<br>area. |              |

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