APPENDIX L: MITIGATION MONITORING AND REPORTING PROGRAM

THIS PAGE INTENTIONALLY LEFT BLANK

MITIGATION MONITORING AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program has been prepared for use in implementing mitigation for the:

Upper Santa Ana River Wash Land Management and Habitat Conservation Plan

The program has been prepared in compliance with State law and the Environmental Impact Report (EIR) (State Clearinghouse No. 2004051023) prepared for the project by the San Bernardino Valley Water Conservation District.

The California Environmental Quality Act (CEQA) requires adoption of a reporting or monitoring program for those measures placed on a project to mitigate or avoid adverse effects on the environment (Public Resource Code Section 21081.6). The law states that the reporting or monitoring program shall be designed to ensure compliance during project implementation.

The monitoring program contains the following elements:

- 1) The mitigation measures are recorded with the action and procedure necessary to ensure compliance. In some instances, one action may be used to verify implementation of several mitigation measures.
- 2) A procedure for compliance and verification has been outlined for each action necessary. This procedure designates who will take action, what action will be taken and when, and to whom and when compliance will be reported.
- 3) The program has been designed to be flexible. As monitoring progresses, changes to compliance procedures may be necessary based upon recommendations by those responsible for the program. As changes are made, new monitoring compliance procedures and records will be developed and incorporated into the program.

MITIGATION MONITORING AND REPORTING PROGRAM CHECKLIST

Project File Upper Santa Ana River Wash Land Project San Bernardino Valley Water Conservation

Name: Management And Habitat Conservation Plan Proponent: District

Prepared by: LSA Associates, Inc. Date: November 2008

Mitiga	ation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
AES-1	Prior to initiating grading for the Silt Pond Quarry, where sufficient space is available, a berm shall be created and maintained by the mining operator on the northern and eastern boundaries of the quarry that parallel 5 th Street and Orange Street-Boulder Avenue, respectively. This berm shall be planted by the mining operators with plant species common to the Riversidean Alluvial Fan Sage Scrub Community as approved by the District and the appropriate jurisdiction. Berm and landscaping plans shall be submitted to the District and the City of Highland for review and approval.	City of Highland Planning Director	Prior to Grading for the Silt Pond Quarry	Review and approval of Berm & Landscaping Plans	Plan Check	Withhold Grading Permit
AES-2	Within 6 months of the issuance of mining permits, trees at least 15 gallons in size and common to the Planning Area plant community shall be planted by the mining operator along the western perimeter of West Quarry, where sufficient space is available, at spacing of 15 feet on center to allow unrestricted growth and to be sufficient to shield the quarry from view of passing motorists on SR-30. Tree planting plans shall be submitted to the District, the City of Highland, the City of Redlands and/or Caltrans for review and as necessary.	District General Manager City of Redlands Planning Director City of Highland Planning Director	6-months after issuance of mining permits And Prior to Grading	Review and approval of Landscaping Plan	On-site inspection	Withhold Grading Permit

Mitiga	ation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
	The trees shall be planted prior to the expansion of the quarry and shall be watered by the mining operators until established. The trees shall be maintained for the life of the quarry and replaced as necessary by the mining operator.					
AES-3	Trees of a species common to the Planning Area shall be planted by the mining operator along the eastern boundary of Alabama Street Quarry, where sufficient space is available, that parallels SR-30. The spacing of the trees shall be 15' on center to allow unrestricted growth and to be sufficient to mask the quarry from view of travelers on SR-30. Tree planting plans shall be submitted to the City of Redlands for review and approval.	City of Redlands Planning Director	Prior to Grading	Review and approval of Landscaping Plan	On-site inspection	Withhold Grading Permit
AES-4	As mining activities are completed, the slopes of the quarries shall be reclaimed and revegetated by the mining operators per the approved Reclamation Plans with plant species common to the Riversidean Alluvial Fan Sage Scrub Community. Reclamation and revegetation plans shall be submitted to the District and the City of Highland and the City of Redlands for review and approval.	City of Redlands Planning Director City of Highland Planning Director	Prior to reclamation as mining is completed	Review and approval of Reclamation and Revegetation Plans	On-site inspection	Withhold Acceptance of Reclamation and Invoke Reclamation Bond
AIR 1	The mining operators, Cemex and Robertson's, shall comply with Article 4.8 In-Use Off-Road Diesel-Fueled Fleets, Section 2449 Emission Standards for In-Use Off-Road Diesel-Fueled Fleets (CARB; July 27, 2007) and any other applicable, subsequent	City of Redlands Planning Director City of Highland Planning Director	Annually	Ongoing during mining and reclamation.	Submit evidence from certified mechanic or testing facility	Stop Work / Revoke CUP

Mitiga	ation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
	rules, regulations, and requirements to the extent that is technologically feasible.					
AIR-2	The emissions of diesel particulate are expected to result in carcinogenic health risks that exceed the AQMD thresholds at nearby sensitive receptors. Applicable mitigation measures may include the following:	Mining City of Redlands Planning Director City of Highland Planning Director		On-site inspections	Mining operators shall incorporate the measure in their operating procedures. Evidence that the measure has been incorporated in	Revoke CUP
•	Heavy-duty diesel equipment shall have exhaust particulate traps as certified and/or verified by EPA or California installed, if available.				the mining operating procedures shall be submitted to the Cities that have jurisdiction over the mining activities.	
•	Heavy-duty diesel equipment shall be fitted with the most modern emission control devices and be kept in proper tune to minimize construction vehicle emissions, where feasible. This measure shall be monitored by the construction manager.	Road Construction City of Redlands City Engineer City of Highland City Engineer	Prior to issuance of grading permit	Prior to issuance of grading permit	Construction company shall incorporate the measure in their construction documents.	Withhold grading permits
		Water Conservation Maintenance Activities District General Manager	Prior to issuance of permit to construct	Prior to issuance of permit to construct	Construction company shall incorporate the measure in their construction documents.	Withhold construction permits
		Trails City of Redlands Planning Director City of Highland	Prior to issuance of grading permit	Prior to issuance of grading permit	Construction company shall incorporate the measure in their	Withhold grading permits

Mitiga	ation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
		Planning Director			construction documents.	
AIR-3	The two operators, Cemex and Robertson's, shall schedule transportation of material such that both operators are not transporting material on the same day from the south half of the southeast quarter of Section 11, which is the area farthest from both processing plants.	City of Redlands Planning Director City of Highland Planning Director	Once, at start up	Prior to issuance of Mining Permits	An MOU shall be entered into by the mining operators to implement the mitigation. A copy of the MOU shall be filed with both Cities prior to issuance of Mining Permits.	Withhold Mining Permits
BIO-1	The District shall prepare and implement a Habitat Enhancement Plan within the proposed Habitat Conservation, Flood Control, and Water Conservation areas within the Planning Area. The goals of the Habitat Enhancement Plan are to maintain adequate habitat for the slender-horned spineflower, Santa Ana River woollystar, coastal California gnatcatcher, San Bernardino kangaroo rat, and Los Angeles pocket mouse; to prevent colonization of exotic plant or animal species within the Planning Area; and to avoid degradation of water quality within the Santa Ana River, Plunge Creek, and Mill Creek.	District General Manager	Ongoing for life of incidental take permit based on requirements of HCP & Section 10a Permit	TBD by HCP	District shall secure an incidental take permit from USFWS.	Revoke Incidental Take Permit
BIO-2	The Habitat Enhancement Plan shall include surveys for, and eradication of, exotic aquatic species in the recharge basins; surveys for, and eradication of, non-native plant species; and trash removal. The Habitat Enhancement Plan will establish preliminary measures to be included in the Upper Santa Ana River HCP to be approved by USFWS. At a minimum, the specific measures set forth in the Habitat Enhancement Plan shall be included in the Conditional Use Permits for the	District General Manager	TBD by HCP / Section 10a Permit	Prior to issuance of Section 10a Permit	District shall prepare an HCP that includes a Habitat Enhancement Plan that incorporates the mitigation measure and secure an incidental take permit from USFWS.	TBD by HCP / Section 10a Permit

Mitiga	ation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
	proposed quarries, as appropriate in the operating plans of the District, and in accordance with the modifications to the specific measures as ultimately contained in the approved HCP.					
BIO-3	The Habitat Enhancement Plan shall maintain approximately 1,662 acres of Riversidean alluvial fan sage scrub (including pioneer, intermediate, mature and combinations with nonnative grassland) in the Habitat Conservation area along the Santa Ana River, Plunge Creek, and Mill Creek with a minimum decline of 10 percent (166 acres) from existing conditions or a minimum of 1,496 acres of Riversidean alluvial fan sage scrub at any given time.	District General Manager	TBD by HCP / Section 10a Permit	Prior to issuance of Section 10a Permit	District shall prepare an HCP that includes a Habitat Enhancement Plan that incorporates the mitigation measure and secure an incidental take permit from USFWS.	TBD by HCP / Section 10a Permit
BIO-4	The Habitat Enhancement Plan shall maintain approximately 374 acres of Riversidean alluvial fan sage scrub (including pioneer, intermediate, mature, and combinations with nonnative grassland) in the Planning Area along the Santa Ana River, with a minimum decline of 10 percent (37 acres) from existing conditions or a minimum of 337 acres of Riversidean alluvial fan sage scrub.	District General Manager	TBD by HCP / Section 10a Permit	Prior to issuance of Section 10a Permit	District shall prepare an HCP that includes a Habitat Enhancement Plan that incorporates the mitigation measure and secure an incidental take permit from USFWS.	TBD by HCP / Section 10a Permit
BIO-5	The Habitat Enhancement Plan shall maintain intermediate and intermediate/mature Riversidean alluvial fan sage scrub at minimum in a similar portion to the existing baseline of the three primary stages of alluvial fan sage scrub conserved within the Planning Area with an allowed 15 percent decline of intermediate and intermediate/mature Riversidean	District General Manager	TBD by HCP / Section 10a Permit	Prior to issuance of Section 10a Permit	District shall prepare an HCP that includes a Habitat Enhancement Plan and secure that incorporates the mitigation measure an incidental take permit from USFWS.	TBD by HCP / Section 10a Permit

Mitig	ation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
	alluvial fan sage scrub combined from existing conditions to account for natural successional processes. Intermediate and intermediate/mature alluvial fan sage scrub currently account for 1,372 acres (67%) of the baseline total within the Habitat Conservation and Water Conservation areas. The minimum allowable amount of intermediate and intermediate/mature Riversidean alluvial fan sage scrub would be 1,059 acres (52%).					
BIO-6	The Habitat Enhancement Plan shall maintain approximately 121 acres of chamise chaparral (including chamise chaparral within combinations of chamise chaparral/ non-native grassland vegetation types) in the Habitat Conservation area along the Santa Ana River, Plunge Creek, and Mill Creek, with a minimum decline of 10 percent (12 acres) from existing conditions or a minimum of 109 acres of chamise chaparral (including chamise chaparral within combinations of chamise chaparral/non-native grassland vegetation types).	District General Manager	TBD by HCP / Section 10a Permit	Prior to issuance of Section 10a Permit	District shall prepare an HCP that includes a Habitat Enhancement Plan that incorporates the mitigation measure and secure an incidental take permit from USFWS.	TBD by HCP / Section 10a Permit
BIO-7	The Habitat Enhancement Plan shall maintain approximately 50 acres of chamise chaparral (including chamise chaparral within combinations of chamise chaparral/ non-native grassland vegetation types) in the Planning Area along the Santa Ana River, with a minimum decline of 10 percent (5 acres) from existing conditions or a minimum of 45 acres of chamise chaparral (including chamise chaparral within combinations of	District General Manager	TBD by HCP / Section 10a Permit	Prior to issuance of Section 10a Permit	District shall prepare an HCP that includes a Habitat Enhancement Plan that incorporates the mitigation measure and secure an incidental take permit from USFWS.	TBD by HCP / Section 10a Permit

Mitiga	ation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
	chamise chaparral/ non-native grassland vegetation types).					
BIO-8	The Habitat Enhancement Plan shall maintain at least 64 wetted acres of recharge basins within the Planning Area.	District General Manager	TBD by HCP / Section 10a Permit	Prior to issuance of Section 10a Permit	District shall prepare an HCP that includes a Habitat Enhancement Plan that incorporates the mitigation measure and secure an incidental take permit from USFWS.	TBD by HCP / Section 10a Permit
BIO-9	The Habitat Enhancement Plan shall, under the direction of the District, include a survey conducted in the summer of each year to determine the extent and type of non-native vegetation present in the Habitat Conservation, Water Conservation, and Flood Control areas in the Planning Area. Non-native species currently present in the Planning Area include tree tobacco (Nicotiana glauca), tocalote (Centaurea melitensis), Russian thistle (Salsola tragus), Spanish broom (Spartium junceum), and castor-bean (Ricinus communis) (Lilburn 1997). During the surveys, the approximate area containing the non-native species and their density will be estimated. The frequency of these surveys shall be reduced to every other year if no patches of non-native species are found for four consecutive years. Surveys for non-native aquatic species (e.g., bullfrogs, crayfish, mosquitofish, and snapping turtles) known to be detrimental to western spadefoot shall be conducted annually in the spring or summer.	District General Manager	TBD by HCP / Section 10a Permit	Prior to issuance of Section 10a Permit	District shall prepare an HCP that includes a Habitat Enhancement Plan that incorporates the mitigation measure and secure an incidental take permit from USFWS.	TBD by HCP / Section 10a Permit
BIO-10	The Habitat Enhancement Plan shall,	District General	TBD by HCP /	Prior to issuance of	District shall prepare an	TBD by HCP /

Mitiga	ation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
	under the direction of the District, include the removal of non-native, invasive plant species found during the annual surveys using methods that will not harm individual members of the Santa Ana River woollystar, coastal California gnatcatcher, San Bernardino kangaroo rat, and Los Angeles pocket mouse or their habitat, or cause pollutants to enter the Santa Ana River, Mill Creek, City Creek, or Plunge Creek. Eradication shall be accomplished using hand tools or pulling individual plants by hand. For many annual species, this will likely involve cutting the plants (one or more times) before they set seed.	Manager	Section 10a Permit	Section 10a Permit	HCP that includes a Habitat Enhancement Plan that incorporates the mitigation measure and secure an incidental take permit from USFWS.	Section 10a Permit
BIO-11	The Habitat Enhancement Plan shall, under the direction of the District, include removal of non-native aquatic species (e.g., bullfrogs and crayfish) found during the surveys utilizing methods currently approved by the USFWS that minimize the potential for impacts to the western spadefoot. Potential methods include traps, seine, dip net, hand, and spear/gig. Removal shall be by biologists who can distinguish the non-native species (including egg and tadpole stages) from the native species to be protected. Eradication shall not be conducted when western spadefoot eggs are present.	District General Manager	TBD by HCP / Section 10a Permit	Prior to issuance of Section 10a Permit	District shall prepare an HCP that includes a Habitat Enhancement Plan that incorporates the mitigation measure and secure an incidental take permit from USFWS.	TBD by HCP / Section 10a Permit
BIO-12	The Habitat Enhancement Plan shall, under the direction of the District, include a program to control Argentine ants within the Habitat Conservation, Water Conservation, and Flood Control	District General Manager	TBD by HCP / Section 10a Permit	Prior to issuance of Section 10a Permit	District shall prepare an HCP that includes a Habitat Enhancement Plan that incorporates the mitigation measure and	TBD by HCP / Section 10a Permit

Mitiga	ation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
	areas and within 300 feet of these areas within the Planning Area. The Argentine ants shall be controlled through elimination of water sources where feasible and treatment of nests. Queens and larvae in the nest will be controlled primarily through the use of granular toxic bait (e.g., Talstar). The integrated pest management program shall include annual inspection to determine presence of colonies, treatment of identified colonies, and site re-inspection after one month to determine efficacy of the treatment. Specific pest control recommendations shall be made by a State-licensed Category A Pest Control Advisor. The specified areas shall be monitored annually in the summer or fall. The frequency of these surveys shall be reduced to every other year if no Argentine ants are found for four consecutive years. A report detailing the program shall be prepared annually.				secure an incidental take permit from USFWS.	
BIO-13	The Habitat Enhancement Plan shall, under the direction of the District, employ fencing (three-strand wire fencing) around entry points and post signage to control unauthorized trail use by off-road vehicles and garbage and trash dumping.	District General Manager	TBD by HCP / Section 10a Permit	Prior to issuance of Section 10a Permit	District shall prepare an HCP that includes a Habitat Enhancement Plan that incorporates the mitigation measure and secure an incidental take permit from USFWS.	TBD by HCP / Section 10a Permit
BIO-14	The Habitat Enhancement Plan shall, under the direction of the SBCFCD and the District, restrict vehicular traffic associated with routine operation and maintenance activities within the Habitat Conservation area to daylight hours to avoid roadkill of San	District General Manager	TBD by HCP / Section 10a Permit	Prior to issuance of Section 10a Permit	District shall prepare an HCP that includes a Habitat Enhancement Plan that incorporates the mitigation measure and secure an incidental take permit from USFWS.	TBD by HCP / Section 10a Permit

Mitiga	ntion Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
	Bernardino kangaroo rats and Los Angeles pocket mice.					
BIO-15	The Habitat Enhancement Plan shall, under the direction of the District, ensure that Best Management Practices (BMPs) are employed during maintenance operations at the recharge basins to avoid impacts to water quality.	District General Manager	TBD by HCP / Section 10a Permit	Prior to issuance of Section 10a Permit	District shall prepare an HCP that includes a Habitat Enhancement Plan that incorporates the mitigation measure and secure an incidental take permit from USFWS.	TBD by HCP / Section 10a Permit
BIO-16	The Habitat Enhancement Plan shall, under the direction of the District, ensure that trails, and 100-foot wide buffers on each side of the trails or roads where these buffers fall within the Planning Area, shall be monitored on a quarterly basis for the presence of trash, which could be washed into the Santa Ana River, Mill Creek, or Plunge Creek during storm events. All trash shall be removed by hand during the quarterly surveys.	District General Manager	Quarterly	Onsite inspections	Annual Report to USFWS & CDFG	Revoke Section 10a Permit
BIO-17	The mine operators shall implement reclamation and revegetation concurrent with ongoing mining per the Mine and Reclamation Plans approved by the Cities of Highland and Redlands.	City of Redlands Planning Director City of Highland Planning Director	Prior to issuance of Mining Permits	Review of Mining and Reclamation Plans	On site inspections	Withhold Mining Permits
BIO-18	Cemex shall be prohibited from mining the area encompassed by the Slender-horned Spineflower Enhancement and Relocation Plan (SLERP) until such time that the SLERP has effectively transplanted or relocated all members (or a sufficient number as determined by USFWS) of the slender-horned spineflower from the SLERP area, or the USFWS determines the SLERP ineffective and abandons the program.	District General Manager City of Redlands Planning Director City of Highland Planning Director	Annually	Annual Mine Inspection	Submittal of evidence that slender-horned spineflower from the SLERP area has been effectively transplanted.	Stop Work

Mitiga	ation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
BIO-19	Prior to construction of relocated Observation Well No. 4 and construction of future water conservation facilities within the District's Phase 1, 2, and 3 areas, jurisdictional delineation surveys shall be prepared by the District for those areas demonstrating riparian habitat and historic river flows. The jurisdictional delineation surveys shall comply with California Fish and Game Code Sections 1600–1616 and Section 404 requirements from the U.S. Army Corps of Engineers for any discharge of dredged or fill material in jurisdictional waters of the U.S. A Section 401 Certification from the Regional Water Quality Control Board could also be required.	District General Manager	Prior to grading for new facilities	Prior to grading new facilities	Submittal of evidence that jurisdictional delineation surveys have been conducted.	Withhold grading permit
BIO-20	Prior to construction of the 5 th Street Access Road and mining within the Plunge Creek Quarry, jurisdictional delineation surveys shall be prepared by Robertson's. The jurisdictional delineation surveys shall comply with California Fish and Game Code Sections 1600–1616 and Section 404 requirements from the U.S. Army Corps of Engineers for any discharge of dredged or fill material in jurisdictional waters of the U.S. A Section 401 Certification from the Regional Water Quality Control Board	5 th Street Access Rd. City of Highland Planning Director Mining within Plunge Creek Quarry City of Highland Planning Director	Prior to issuance of grading permits Prior to mining in the Plunge Creek Quarry	Prior to issuance of grading permits Prior to mining in the Plunge Creek Quarry	Robertson's shall submit evidence to the City of Highland that the jurisdictional delineation surveys have been completed. Robertson's shall submit evidence to the City of Highland that the jurisdictional delineation surveys have been	Withhold grading permit; initiate violation of USACOE procedures
BIO-21	could also be required. Prior to construction of the Greenspot Road, Alabama Street, and Orange Street-Boulder Avenue Roadway improvement projects, jurisdictional delineation surveys shall be prepared	Greenspot Rd. City of Highland City Engineer	Prior to issuance of grading permits	Prior to issuance of grading permits	Submittal of a jurisdictional delineation survey to the City for review and approval.	Withhold grading permit.

Mitiga	ation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
	by the City of Highland and/or Redlands. The jurisdictional delineation surveys shall comply with California Fish and Game Code Sections 1600–1616 and Section 404 requirements from the U.S. Army Corps of Engineers for any discharge of dredged or fill material in jurisdictional waters of the U.S. A Section 401 Certification from the Regional Water Quality Control Board could also be required.	Alabama St. City of Highland City Engineer City of Redlands City Engineer Orange St. – Boulder Ave.	Prior to issuance of grading permits Prior to issuance of	Prior to issuance of grading permits Prior to issuance of	Submittal of a jurisdictional delineation survey to the City for review and approval.	Withhold grading permit.
	could also be required.	City of Highland City Engineer City of Redlands City Engineer	grading permits	grading permits	Submittal of a jurisdictional delineation survey to the City for review and approval.	permit.
BIO-22	As part of the construction of relocated Observation Well No. 4 and construction of future water conservation facilities, trees and other	District General Manager	Prior to grading for Well 4.	Prior to grading for Well 4.	Submittal of Evidence that pre-grading surveys were conducted.	Withhold Grading Permit
	significant vegetation that may provide nesting habitat for migratory birds shall be removed from the construction areas by the District between September 1 and March 1, outside of the nesting season. If trees or other significant vegetation must be removed during the nesting season, a nesting bird survey shall be conducted by a qualified biologist no more than 14 days prior to any grading or vegetation clearing. If nesting birds are found within the areas to be impacted by the project, the nest and a 100-foot buffer area (200 feet for raptors) around the nest shall be protected and maintained until the biologist determines that young have fledged and/or the nests are no longer active. The buffer area	District General Manager	Prior to grading for future water conservation facilities.	Prior to grading for future water conservation facilities.	Submittal of Evidence that pre-grading surveys were conducted.	Withhold Grading Permit

Mitigation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
shall be delineated with orange construction fencing.					
BIO-23 Prior to construction of relocated Observation Well No. 4 and construction of future water conservation facilities, the District shall conduct a habitat assessment for	District General Manager	Prior to grading for Well 4.	Prior to grading for Well 4.	Submittal of Evidence that pre-grading surveys were conducted.	Withhold Grading Permit
burrowing owl. If habitat is observed, a focused burrowing owl survey shall be conducted during breeding season (March 1 – August 31) per approved survey protocol. If occupied burrows are found, appropriate mitigation measures shall be implemented which may include one or more of the following in consultation with CDFG:	District General Manager	Prior to Grading for future water conservation facilities.	Prior to Grading for future water conservation facilities.	Submittal of Evidence that pre-grading surveys were conducted.	Withhold Grading Permit
 Avoid disturbance within 160 feet of occupied burrows during non-breeding season and within 250 feet during breeding season; and/or If owls must be moved, passive relocation during the non-breeding season per CDFG recommendations shall be implemented. A burrowing owl pre-construction survey shall be conducted by a qualified biologist no more than 14 days prior to any grading or vegetation clearing in areas with 					
potential borrowing owl habitat not previously mitigated. If nesting owls or occupied burrows are found within the areas to be impacted, the above mitigation measure shall be implemented.					
BIO-24 As part of their mining expansion, trees and other significant vegetation that	City of Redlands Planning Director	March 1 – Sept 1	Prior to vegetation removal in mining	Submittal of Evidence that pre-grading surveys	Stop Work / Revoke CUP

Mitiga	ation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
	may provide nesting habitat for migratory birds shall be removed by CEMEX and Robertson's from the mining areas between September 1 and March 1, outside of the nesting season. If trees or other significant vegetation must be removed during the nesting season, a nesting bird survey shall be conducted by a qualified biologist no more than 14 days prior to any grading or vegetation clearing. If nesting birds are found within the areas to be impacted by the project, the nest and a 100-foot buffer area (200 feet for raptors) around the nest shall be protected and maintained until the biologist determines that young have fledged and/or the nests are no longer active. The buffer area shall be delineated with orange construction fencing.	City of Highland Planning Director		areas.	were conducted, if required.	
BIO-25	Prior to mining within all mining expansion areas, CEMEX and Robertson's shall conduct a habitat assessment for burrowing owl. If habitat is observed, a focused burrowing owl survey shall be conducted during breeding season (March 1 – August 31) per approved survey protocol. If occupied burrows are found, appropriate mitigation measures shall be implemented which may include one or more of the following in consultation with CDFG: Avoid disturbance within 160 feet of occupied burrows during non-breeding season and within 250 feet during breeding season; and/or	City of Redlands Planning Director City of Highland Planning Director	Prior to mining in any mining expansion area.	Prior to mining in any mining expansion area.	Submittal of Evidence that pre-grading surveys were conducted, if required.	Stop Work / Revoke CUP

Mitiga	ntion Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
•	If owls must be moved, passive relocation during the non-breeding season per CDFG recommendations shall be implemented.					
•	A burrowing owl pre-construction survey shall be conducted by a qualified biologist no more than 14 days prior to any grading or vegetation clearing in areas with potential borrowing owl habitat not previously mitigated. If nesting owls or occupied burrows are found within the areas to be impacted, the above mitigation measure shall be implemented.					
BIO-26	As part of the Greenspot Road, Alabama Street, and Orange Street- Boulder Avenue roadway improvements, trees and other significant vegetation that may provide nesting habitat for migratory birds shall	Greenspot Rd. City of Highland City Engineer	Prior to vegetation removal.	Prior to vegetation removal.	Submittal of Evidence that pre-grading surveys were conducted, if required.	Withhold Grading Permits.
	be removed by Highland and Redlands from the construction areas between September 1 and March 1, outside of the nesting season. If trees or other significant vegetation must be removed during the nesting season, a nesting bird survey shall be conducted by a qualified biologist no more than 14 days prior to any grading or vegetation	Alabama St. City of Highland City Engineer City of Redlands City Engineer Orange St. –	Prior to vegetation removal.	Prior to vegetation removal.	Submittal of Evidence that pre-grading surveys were conducted, if required.	Withhold Grading Permits.
	clearing. If nesting birds are found within the areas to be impacted by the project, the nest and a 100-foot buffer area (200 feet for raptors) around the nest shall be protected and maintained until the biologist determines that young have fledged and/or the nests are no longer active. The buffer area shall be delineated with orange construction fencing.	Boulder Ave. City of Highland City Engineer City of Redlands City Engineer	Prior to vegetation removal.	Prior to vegetation removal.	Submittal of Evidence that pre-grading surveys were conducted, if required.	Withhold Grading Permits.

Mitigation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
BIO-27 As part of the Greenspot Road, Alabama Street, and Orange Street- Boulder Avenue roadway improvements, Highland and Redlands shall conduct a habitat assessment for burrowing owl. If habitat is observed, a	Greenspot Rd. City of Highland City Engineer	Prior to vegetation removal.	Prior to vegetation removal.	Submittal of Evidence that pre-grading surveys were conducted, if required.	Withhold Grading Permits.
focused burrowing owl survey shall be conducted during breeding season (March 1 – August 31) per approved survey protocol. If occupied burrows are found, appropriate mitigation measures shall be implemented which may include one or more of the following in consultation with CDFG:	Alabama St. City of Highland City Engineer City of Redlands City Engineer	Prior to vegetation removal.	Prior to vegetation removal.	Submittal of Evidence that pre-grading surveys were conducted, if required.	Withhold Grading Permits.
Avoid disturbance within 160 feet of occupied burrows during non-breeding season and within 250 feet during breeding season; and/or If out a must be moved passive.	Orange St. – Boulder Ave. City of Highland City Engineer City of Redlands	Prior to vegetation removal.	Prior to vegetation removal.	Submittal of Evidence that pre-grading surveys were conducted, if required.	Withhold Grading Permits.
 If owls must be moved, passive relocation during the non-breeding season per CDFG recommendations shall be implemented. 	City Engineer			- Toquilous	
CUL-1 A qualified archaeological monitor shall be present during initial ground-disturbing activities in the proposed Planning Area. The monitor shall be empowered to temporarily halt or redirect construction/mining activities in the vicinity of the find until the find can be evaluated by a certified	Mining City of Redlands Planning Director City of Highland Planning Director	During initial mining, ground-disturbing activities.	During initial mining, ground-disturbing activities.	On-site inspections	Stop work
archaeologist.	Road Construction City of Redlands City Engineer City of Highland City Engineer	During grading	During grading	On-site inspections	Stop work

Mitigation Measures / Implementin	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
	Water Conservation Maintenance Activities District General Manager Trails City of Redlands Planning Director City of Highland Planning Director	During ground-disturbing activities. During ground-disturbing activities.	During ground-disturbing activities. During ground-disturbing activities.	On-site inspections On-site inspections	Stop work Stop work
CUL-2 In the event of a new find, salva excavation and reporting shall required. The Secretary of Interior's Guidelines for archaeolog documentation shall be followed by qualified archeologist.	be City of Redlands the Planning Director	During initial mining, ground- disturbing activities.	During initial mining, ground-disturbing activities.	On-site inspections	Stop work
	Road Construction City of Redlands City Engineer City of Highland City Engineer	During grading	During grading	On-site inspections	Stop work
	Water Conservation Maintenance				

Mitigation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
	Activities District General Manager	During ground- disturbing activities.	During ground- disturbing activities.	On-site inspections	Stop work
	Trails City of Redlands Planning Director City of Highland Planning Director	During ground- disturbing activities.	During ground- disturbing activities.	On-site inspections	Stop work
CUL-3 If the archaeological sites CA-SBR-6075H, CA-SBR-6076H, and/or CA-SBR-6087H cannot be avoided during implementation of the proposed project, further study as detailed below shall be necessary for mitigation.	City of Redlands Planning Director City of Highland Planning Director	Annual	During ground- disturbing activities	Annual Mine Inspections or Notice to Cities by Mine Operators	Stop Work
Subsurface Testing: This would consist of a limited subsurface data collection program to help determine the depth and distribution of the resource.					
 Archival Research: Archival research could yield specific data regarding the origin and age of found resources/artifacts and place them in a historical context. 					
Data Recovery: If the resource/artifacts are determined eligible for the California Register of Historic Resources, additional archaeological data recovery excavations would be					

Mitiga	ation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
	necessary. Data Recovery: If the resource/artifacts are determined eligible for the California Register of Historic Resources, additional archaeological data recovery excavations would be necessary. Data Recovery shall consist of a research design, hand and/or block architectural excavation, laboratory analysis, research, data recovery report, and curation of collected artifacts.					
HAZ-1	The Department of Toxic Substances Control (DTSC) shall be immediately notified in the event malodorous or discolored soils, liquids, containers, or other materials known or suspected to contain hazardous materials and/or contaminants are encountered during activities associated with the proposed project. Earthmoving activities in the vicinity of said material shall be halted	Mining City of Redlands Planning Director City of Highland Planning Director Road Construction	Ongoing	During mining activities	Mining operator shall provide written proof DTS was notified and the situation is remediated.	Stop work
	until the extent and nature of the suspect material is determined by qualified personnel (as determined by the DTSC). The removal and/or disposal of any such contaminants shall be in accordance with all applicable local, State, and Federal standards.	City of Redlands Planning Director City of Highland Planning Director Water Conservation Maintenance Activities	Ongoing	During construction activities	Contractor shall provide written proof DTS was notified and the situation is remediated.	Stop work
		District General Manager	Ongoing	During construction activities	Contractor shall provide written proof DTS was notified and the situation is	Stop Work

Mitigation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
	Trails City of Redlands Planning Director City of Highland Planning Director	Ongoing	During construction activities	remediated. Contractor shall provide written proof DTS was notified and the situation is remediated.	Stop Work
HAZ-2 The Department of Conservation, Division of Oil, Gas, & Geothermal Resources shall be immediately notified in the event that a previously unrecorded well is discovered during the course of activities associated with the proposed project. Earthmoving activities in the vicinity of said material shall be halted until the extent and nature of the suspect material is determined by qualified personnel (as determined by the Department of Conservation, Division of Oil, Gas, & Geothermal Resources) and any necessary remedial action is completed. The removal and/or disposal of any such contaminants shall be in accordance with all applicable local, State, and Federal standards.	District General Manager City of Redlands Planning Director City of Highland Planning Director	Ongoing	During mining activities	Mining operator shall provide the District and Cities written proof the Department of Conservation, Division of Oil, Gas, & Geothermal Resources has been notified and the situation has been remediated.	Stop Work
HAZ-3 Prior to the issuance of any permit required for project-related ground-disturbing activities a site-specific Phase I Environmental Site Assessment in accordance with DTSC standards shall be completed and submitted to the appropriate jurisdiction for review. In the event that hazardous materials are discovered, the project applicant shall provide evidence to the appropriate agency	Mining City of Redlands Planning Director City of Highland Planning Director Road Construction City of Redlands	Prior to issuance of mining permit Prior to issuance of	Prior to issuance of mining permit Prior to construction	Mining operator shall have a Phase I prepared and submitted to the Cities for review and approval. Contractor shall have a	Withhold Mining Permit Withhold Grading
(agencies) that remediation and/or	Planning Director	grading permits	activities	Phase I prepared and	Permits

Mitigation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
mitigation of said site has been completed to the satisfaction of the appropriate local, regional, State, and/or Federal entity, prior to any ground-disturbing activities within 100 feet of any hazardous material site identified during a project-specific Phase I.	City of Highland Planning Director Water Conservation Maintenance Activities District General Manager Trails City of Redlands Planning Director City of Highland	Prior to Grading Prior to Grading	Prior to construction activities Prior to construction activities	Submitted to the Cities for review and approval. Contractor shall have a Phase I prepared and submitted to the District for review and approval. Contractor shall have a Phase I prepared and submitted to the Cities for review and approval.	DTSC enforcement procedures Withhold Grading Permits
HAZ-4 In the event of any identification of or spill of hazardous materials and/or contaminants in the Planning Area, the party whose activity resulted in the spill or release shall notify the District of the location, extent, and nature of the spill or release. The District shall thereupon assess the depth to groundwater in the area of the release, and if it appears that groundwater tables are high enough to create a potential for exposure of the groundwater table to the spill or release, will modify its recharge operations as much as feasible to prevent groundwater table intersection with the identified spill or release.	Planning Director District General Manager	Ongoing	Ongoing	Notice to Cities	Stop groundwater recharge activities
HAZ-5 All loads in open street legal trucks shall be no higher than 6.0 inches below the top of the truck wall or	City of Redlands Planning Director	Ongoing	Ongoing at time of incident	On-site inspection	Revoke CUP???

Mitigation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
covered and shall be subject to spot inspection pursuant to the Community Development Directors of the Cities of Highland and Redlands.	City of Highland Planning Director				
HYD-01 Prior to ground disturbance activities, a Storm Water Pollution Prevention Program (SWPPP) shall be developed or revised by mining proponents for routine mining activities associated with new excavation areas. The SWPPP shall emphasize structural and nonstructural BMPs to control sediment.	City of Redlands Planning Director City of Highland Planning Director	Prior to mining	Prior to mining	Mining operators shall prepare and submit for review and approval a SWPPP to the Cities that have jurisdiction over the mining permit.	Revoke CUP
HYD-02 Prior to ground disturbance activities, a spill prevention control and countermeasures plan (SPCCP) shall be developed or revised by mining proponents for new mining area activities and shall outline the methods and locations that would be used for disposal of debris handled or produced on site during excavation. The plan shall also include handling and clean up procedures for any accidental releases from the excavation site. Disposal of maintenance/excavation waste is subject to compliance with all applicable waste disposal regulations and requirements.	City of Redlands Planning Director City of Highland Planning Director	Prior to mining	Prior to mining	Mining operators shall prepare and submit for review and approval a SPCCP to the Cities that have jurisdiction over the mining permit.	Revoke CUP
HYD-03 During the operational phase of each respective quarry, the District shall review monthly groundwater level data from nearby wells and observe pit floor conditions to determine the depth of the existing groundwater level. If it is determined that groundwater is present at least 20 feet or less from the bottom of the active quarry, active mining shall cease on that portion of	District General Manager	Monthly	During operational phase of each quarry.	Review of monthly groundwater level data	Stop mining activities if in violation of mitigation measure.

Mitigation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
the pit.					
REC-01 Prior to implementation of a trail program, a Trails Master Plan shall be developed and implemented for the Planning Area by the City of Highland and City of Redlands, which shall identify the following components:	City of Redlands Planning Director City of Highland Planning Director	Prior to grading for any trail.	Prior to grading of any trail	Review and approval of a Trails Master Plan that incorporates the mitigation measure by the Cities.	Withhold grading permit
 Quantity, style, and location of signs and barricades associated with each trail. (This may include the requirement to place signs in areas previously disturbed versus undisturbed area, the use of educational signs informing people to "carry in/carry out" trash, and signs depicting fines for littering.) 					
 Maintenance schedule for replacement/repair of signs, barricades, and trail improvements. 					
 Maintenance schedule for collection of trash (e.g., weekly, monthly). 					
 Maintenance schedule for removal of invasive species for each trail. 					
 Identification of agency responsible for the upkeep and maintenance of these trails. 					
REC-02 Prior to implementation of a trail program, an outreach program shall be developed by the City of Highland and City of Redlands for the Planning Area, which shall incorporate and use education and outreach tools, developed and contained in the California Water Boards Erase the Waste Campaign. The education outreach program shall focus on litter	City of Redlands Planning Director City of Highland Planning Director County of San Bernardino Regional Parks	Prior to implementation of a Trails Plan.	Prior to approval of a Trails Plan.	Review and approval of a Trails Plan by the Cities and County.	Withhold approval of a Trails Plan.

Mitigation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
and pet waste and include (but shall not be limited to) the following elements: Advertising, Community Outreach, Strategic Partnerships, Media, Youth Education, and Business and Stakeholder Outreach.					
REC-03 Prior to implementation of a trail program, the City of Highland, City of Redlands, and County of San Bernardino shall identify public access hours and seasonal limitations to minimize unauthorized access and use of the trails within the Planning Area as part of the Trails Master Plan.	City of Redlands Planning Director City of Highland Planning Director County of San Bernardino Regional Parks	Prior to implementation of a Trails Plan.	Prior to approval of a Trails Plan.	Review and approval of a Trails Plan by the Cities and County.	Withhold approval of a Trails Plan.
TRAF-1 Robertson's aggregate processing plant shall control the distribution of commercial haul trucks on local streets to ensure that no new peak hour vehicle trips are generated. Peak hours are 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.	City of Highland City Engineer	Annually	Annual Mine Inspections	Mining operators shall provide proof to the Cities that the mitigation is incorporated in the mining operations documents.	Stop Work / Revoke CUP
TRAF-2 Within one year of the issuance of a Conditional Use Permit (CUP) for the new mining areas or as otherwise specified in the CUP, the following improvements shall be constructed by the permit proponent:	City of Highland City Engineer	Within one year of the issuance of CUP or as otherwise specified in CUP	Mining operator shall submit roadway improvement plans to City Engineer for review and approval.	On-site inspection	Stop Work / Revoke CUP
Third Street: Widen and extend 3 rd Street from Palm Avenue to connect to 5 th Street at the intersection of Church Avenue/5 th Street. Convert 3 rd Street to a one-way street traveling east consistent with the City of Highland's planned roadway network and conceptual drawings of 5 th Street provided by the City.					

Mitigation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
Church Avenue/5 th Street: Add a northbound free right-turn lane corresponding to the 3 rd Street connection. Restripe the east leg of the intersection to a six-lane roadway. The restriping to six lanes can be accommodated within the existing right-of-way and is consistent both with the City of Highland's General Plan roadway network and conceptual drawings of 5 th Street provided by the City. Add a southbound leg to the intersection corresponding to the 3rd Street connection.					
Truck Traffic and 5th Street Access Road: Truck traffic shall conform to Access Alternative D as described in the EIR and the traffic impact analysis for the proposed project. This truck traffic pattern shall be maintained in order to ensure the safe operation of traffic on 5th Street and enforced by the City of Highland.					
TRAF-3 Within one year of the issuance of a Conditional Use Permit (CUP) or as otherwise specified in the CUP, the permit proponent shall pay City impact fees and as delineated in the respective City's Development Impact Fee program and CMP` fair-share fees based on current construction costs estimated at time of payment. Fair-share fees shall include acceleration lanes for the SR-30 northbound and southbound on-ramps.	City of Redlands Planning Director City of Highland Planning Director	Within one year of the issuance of CUP or as otherwise specified in CUP	Within one year of the issuance of CUP or as otherwise specified in CUP	Submittal of evidence that Development Impact Fees and CMP fair-share fees have been paid.	Stop Work / Revoke CUP
TRAF-4 Within one year of the issuance of a Conditional Use Permit (CUP) for the new mining areas or as specified in the	City of Redlands Planning Director	Within one year of the issuance of CUP or as	Within one year of the issuance of CUP or as otherwise	Submittal of evidence that Development Impact Fees and CMP fair-share	Stop Work / Revoke CUP

Mitigation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
CUP, the permit applicant shall pay all applicable City development impact fees for regional and local circulation and CMP fair-share fees based on current construction costs estimated at time of payment. Based on the year 2030 analysis prepared for this EIR, year 2030 intersection impacts can be mitigated with implementation of the following specific improvement measures, which shall be in place by year 2030:	City of Highland Planning Director	otherwise specified in CUP	specified in CUP	fees have been paid.	
Palm Avenue/5 th Street: Add a westbound left-turn lane.					
Palm Avenue/3 rd Street: Add a northbound right-turn lane. Restripe the rightmost northbound through lane as a shared through/right-turn lane. Widen the east leg of the intersection to accommodate two departure lanes.					
Boulder Avenue/Greenspot Road: Restripe the southbound right-turn lane as a shared through/right-turn lane. Add a northbound left-turn lane.					
Orange Street-Boulder Avenue/ Cemex Access: Add a northbound through lane and a southbound though lane.					
Alabama Street-Robertson's Access-Cemex Access: Install a traffic signal and add a northbound through lane and a southbound through lane.					
TRAF-5 Within one year of the issuance of a Conditional Use Permit (CUP) for the new mining areas or as specified in the	City of Highland Planning Director	Within one year of the issuance of CUP or as	Within one year of the issuance of CUP or as otherwise	Submittal of evidence that Development Impact Fees and CMP fair-share	Stop Work / Revoke CUP

Mitigation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
CUP, the permit applicant shall pay all applicable City development impact fees for regional and local circulation and CMP fair-share fees based on current construction costs estimated at time of payment. Based on the year 2030 analysis prepared for this EIR, year 2030 impacts can be mitigated with implementation of the following specific improvement measures, which shall be in place by year 2030:		otherwise specified in CUP	specified in CUP	fees have been paid.	
SR-30 Southbound Ramps/5 th Street. Widen 5 th Street to two eastbound through lanes, an eastbound shared through/right-turn lane, a dedicated eastbound right-turn lane, three westbound through lanes, and two westbound left-turn lanes. Provide storage length for turn lanes per the traffic study. This improvement is consistent both with the City of Highland's General Plan roadway network and conceptual drawings of 5 th Street provided by the City. This improvement would require widening of Greenspot Road under the SR-30 bridge from 80 feet to 110 feet or more.					
SR-30 Northbound Ramps/5 th Street. Widen 5 th Street to three eastbound through lanes, an eastbound left-turn lane, two westbound through lanes, and a westbound shared through-right-turn lane (wide enough for <i>de facto</i> right-turn lane). Add a northbound left-turn lane to the off-ramp. Widening of 5 th Street to six lanes is consistent both with the City of Highland's General Plan roadway network and conceptual					

Mitigation Measures / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Sanctions for Non- Compliance
drawings of 5 th Street provided by the City. Provide storage length for turn lanes per the traffic study. These improvements will require widening of Greenspot Road under the SR-30 bridge from 80 feet to 110 feet or more. Approximately 12 feet of additional right-of-way will also be required on the south leg of the intersection unless Caltrans approval to re-stripe the off-ramp is obtained.					
UTIL-01 Prior to mining excavations occurring in East Quarry North within 100 feet of the San Bernardino Valley Water Conservation District Well No. 4, the mining operator of East Quarry North shall assure an agreement has been documented between the operator, the District, BLM, and USFWS for the relocation of Well No. 4 to assure the well site is outside of any ACOE Section 404 or DFG Sections 1600 et seq. permitting jurisdiction, or if this is not feasible, secure all such required permits prior to beginning construction.	City of Highland	Once	Prior to mining excavations occurring in East Quarry North within 100 feet of the San Bernardino Valley Water Conservation District Well No. 4.	Mining operator shall provide written evidence that an agreement has been secured.	Stop Work

This Page Intentionally Left Blank