Initial Study/Mitigated Negative Declaration County of San Bernardino Department of Public Works

Essex Overhead Quarry

Essex, California

Lead Agency:



County of San Bernardino Land Use Services 385 N. Arrowhead Ave., San Bernardino, CA 92415

Technical assistance provided by:



Lilburn Corporation 1905 Business Center Drive San Bernardino, CA 92408

May 2025

TABLE OF CONTENTS

PROJECT LABEL	2
PROJECT CONTACT INFORMATION:	2
SECTION 1 - PROJECT SUMMARY	6
SECTION 2 - REGULATORY FRAMEWORK	8
SECTION 3 - DETAILED PROJECT DESCRIPTION	11
SECTION 4 - EVALUATION FORMAT	18
I. AESTHETICS	20
II. AGRICULTURE AND FORESTRY RESOURCES	23
III. AIR QUALITY	26
IV. BIOLOGICAL RESOURCES	31
V. CULTURAL RESOURCES	39
VI. ENERGY	44
VII. GEOLOGY AND SOILS	47
VIII. GREENHOUSE GAS EMISSIONS	52
IX. HAZARDS AND HAZARDOUS MATERIALS	56
X. HYDROLOGY AND WATER QUALITY	59
XI. LAND USE AND PLANNING	62
XII. MINERAL RESOURCES	63
XIII. NOISE	65
XIV.POPULATION AND HOUSING	67
XV. PUBLIC SERVICES	68
XVI.RECREATION	70
XVII. TRANSPORTATION	71
XVIII. TRIBAL CULTURAL RESOURCES	
XIX.UTILITIES AND SERVICE SYSTEMS	
XX. WILDFIRE	80
SECTION 5 - MANDATORY FINDINGS OF SIGNIFICANCE	82
SECTION 6 - SUMMARY OF MITIGATION MEASURES	84
SECTION 7 – REFERENCES	

SAN BERNARDINO COUNTY INITIAL STUDY/MITIGATED NEGATIVE DECLARATION ENVIRONMENTAL CHECKLIST FORM

This form and the descriptive information in the application package constitute the contents of Initial Study pursuant to County Guidelines under Ordinance 3040 and Section 15063 of the State CEQA Guidelines.

PROJECT LABEL

APNs:	0655-151-01, 0655-162-01	USGS Quad:	Essex/Fenner
Applicant:	San Bernardino County Department of Public Works	T, R, Section:	T08N, R17E, Sec. 29
Location	Thirty-five miles west of Needles, CA. S Railroad at Goffs Road	South of I-40 betw	een National Trails Hwy, and the BNSF
Project No:	PROJ-2024-00100	Community	Essex
Rep	Noel Castillo	LUC: Zone:	Resource Land Management (RLM) Resource Conservation (RC)
Proposal:	To develop and utilize a long-term materials source and storage site to provide construction aggregate materials for repair, maintenance, and fill for the local and regional roads	Overlays:	Mineral Resources, Biotic

PROJECT CONTACT INFORMATION:

Lead agency: County of San Bernardino

Land Use Services Department 385 N. Arrowhead Avenue, 1st Floor San Bernardino, CA 92415-0182

Contact person: Derek Newland

E-mail: derek.newland@lus.sbcounty.gov

INTRODUCTION

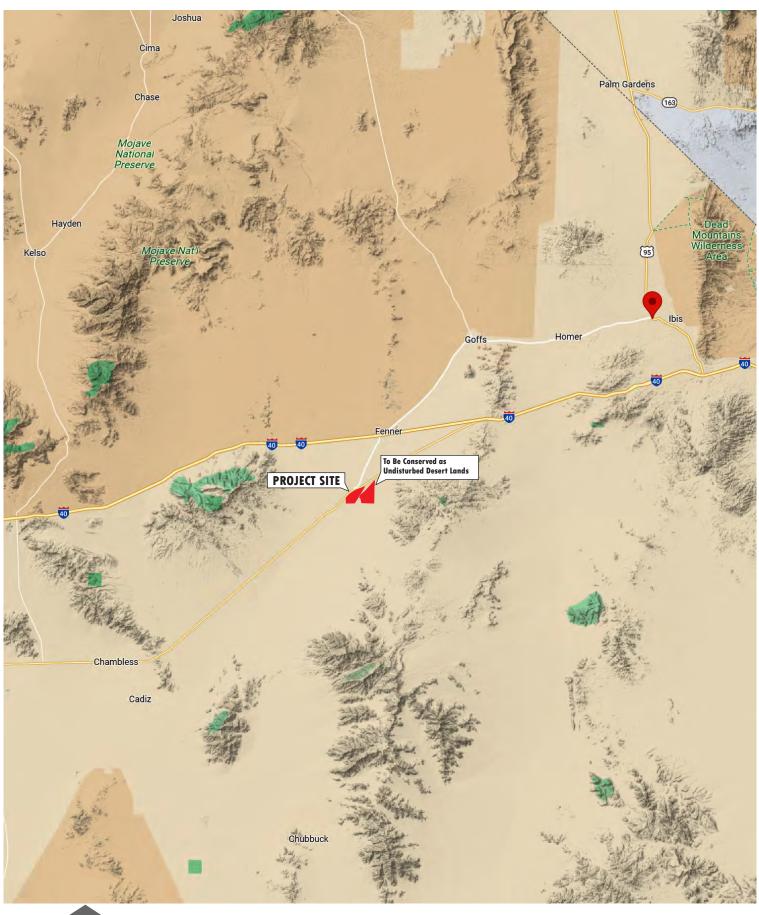
San Bernardino County, Department of Public Works (DPW) is submitting an application for a Conditional Use Permit (CUP)-PROJ-2024-00100-and a Mining Reclamation Plan (Plan) for the Essex Overhead Quarry Borrow Pit. This application is to annually provide up to 10,000 cubic yards (cy) of material for various roads, culverts, and other DPW sites for annual maintenance and/or emergency repair due to storm events.

The proposed Project site is located south of the Mojave National Preserve in Fenner Valley near the unincorporated community of Essex in San Bernardino County, California (Figure 1). Specifically, it is located approximately 1.7 miles northeast of Essex and just south of the intersection of National Trails Highway (NTH) and Goffs Road (Figure 2). The site is bordered by the NTH to the west and the Burlington Northern and Santa Fe (BNSF) railroad to the east. Interstate 40, the primary east/west travel route in the region, is located approximately 4.5 miles to the north, and the remnants of the old Fenner Air Strip are approximately one mile to the north. The Project is on the northwest boundary of the Essex and Fenner U.S. Geological Survey (USGS) 7.5-minute series quadrangle maps (just east of the intersection

with the Blind Hills and Danby USGS quadrangles) in Township 8 North, Range 17 East, Section 29, APNs 0655- 151-01 and 0655-162-01.

Project Purpose and Need:

The purpose of this application is to permit the Essex Overhead Quarry on approximately 47 acres for a 100-year period to provide general fill material for various DPW sites for annual maintenance and/or emergencies. DPW desires to utilize the site as a long-term materials source and storage site to provide construction aggregate materials for repair, maintenance, and fill in the local and regional area for roads, shoulders and wash crossings; to facilitate stockpiling and recycling of removed materials; and to support a soils management area for reclamation of damaged areas. The reclaimed end use of the North Pit will be revegetated open space (22 acres), and the South Pit (25 acres) will be used for a long-term DPW material maintenance and storage yard. The Mine Plan, including the Revegetation Plan, is summarized herein and included as Appendix A.



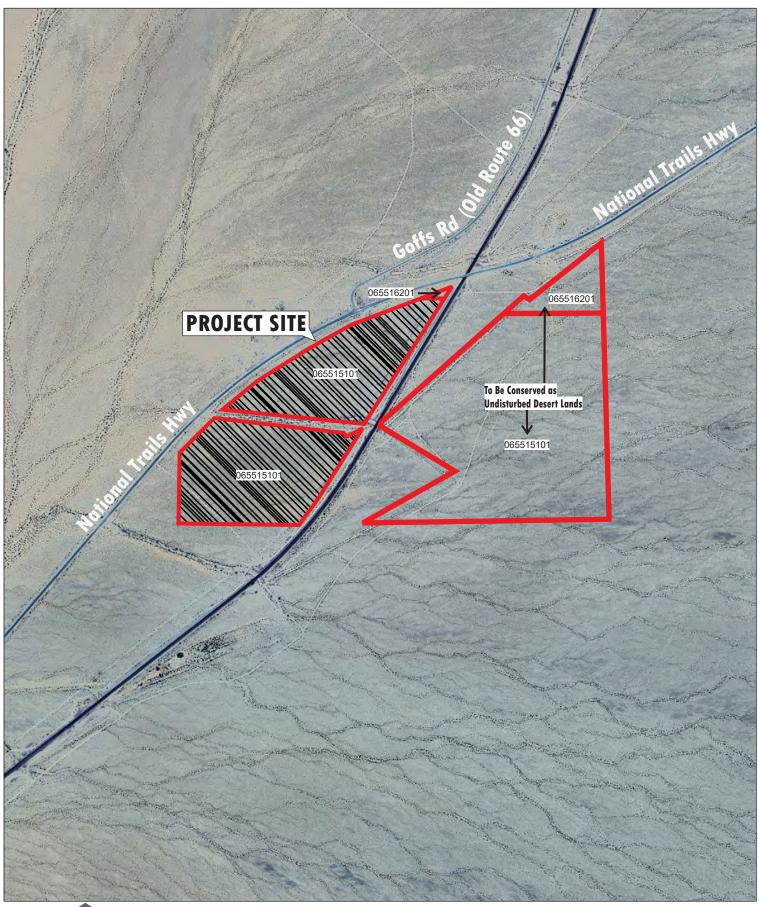


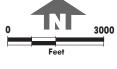




LOCATION MAP

Essex Overhead Pit Mine Reclamation Plan County of San Bernardino, California









PROPERTY BOUNDARY



PROJECT SITE

LEGEND



VICINITY MAP

Essex Overhead Pit Mine Reclamation Plan County of San Bernardino, California

SECTION 1 - PROJECT SUMMARY

Summary

San Bernardino County Department of Public Works (Applicant) is proposing to construct and operate a sand and gravel quarry referred to as the Essex Overhead Pit (Project). The DPW desires to develop and utilize a long-term materials source and storage site to provide construction aggregate materials for repair, maintenance, and fill for the local and regional roads (particularly for NTH), shoulders and wash crossings, to facilitate stockpiling and recycling of removed materials, and to support a soils management area. Two pits (North Pit and South Pit) will make up approximately 47 acres of approximately 90 acres west of the BNSF railroad tracks. The remaining property (approximately 197 acres) east of the RR tracks will remain as undisturbed desert lands. A portion of the northwesterly property (identified as the North Pit) was developed as a quarry in 1930/1931 and is located on an approximate 47-acre portion of the site. The quarry was developed for the construction of NTH in the 1930s.

Project Understanding

The entire proposed mine site is within portions of Assessor's Parcel Numbers (APNs) 0655-151-01 (230.9 acres) and 0655-162-01 (14.16 acres) and consists of three components: two on the west side of the BNSF railroad tracks, and one on the east side. Phase I (North Pit) and Phase II (South Pit) lie within one parcel (APN 0655-151-01) west of the tracks. The component on the east side of the rail line will remain undisturbed and this reclamation plan will not apply. The site is located on unincorporated land in San Bernardino County, California, approximately 1.7 miles northeast of the unincorporated community of Essex, south of the intersection of NTH and Goffs Road. Material from the quarry is to annually provide up to 10,000 cubic yards (cy) or 15,000 tons of material for local and regional roads (particularly for NTH).

Summary of Mining Operations

Mining will take place in two pit areas; initially in Phase I or the North Pit on approximately 22 acres and when this area is mined out, mining will move to Phase II or the South Pit on approximately 25 acres. Mining of the North Pit will be conducted from approximately 1,795 feet above mean sea level (amsl) on the southwest rim to 1,820 feet amsl on the northeast rim with an average depth of 60 feet or an average floor elevation of 1,748 feet amsl. Mining will be conducted with a 3H:1V overall slope. The aggregate volume for the North Pit is estimated at 1.255 million cy or about 1.9 million tons based on 1.5 tons/cy. Waste is roughly estimated at 10% of the volume. Refer to Appendix A.

Surrounding Land Uses and Setting

The site is located on County-owned lands to the southwest of the intersection of NTH and/or NTH and the Essex Overpass BNSF railroad tracks, approx. 1.7 miles northeast of Essex in the eastern Mojave Desert. The NTH borders the site on the west and north while the BNSF railroad lines extend along the east side of the planned mining pits. Adjacent properties to the north, east, and south are vacant, undisturbed desert lands managed by the Bureau of Land Management. Most of the areas to the west are vacant desert lands except for several rural buildings located on private lands.

EX	EXISTING LAND USE AND ZONING DESIGNATIONS OF SURROUNDING PROPERTIES					
Location	Existing Land Use	Zoning Designation				
Project	Vacant	Resource Land Management (RLM)	Resource Conservation (RC)			
North	Vacant	Resource Land Management (RLM)	Resource Conservation (RC)			
South	Vacant	Resource Land Management (RLM)	Resource Conservation (RC)			
East	Vacant	Resource Land Management (RLM)	Resource Conservation (RC)			
West	National Trails Hwy	Resource Land Management (RLM)	Resource Conservation (RC)			

ADDITIONAL APPROVAL REQUIRED BY OTHER AGENCIES

Federal: N/A

State of California: Mojave Desert Air Quality Management District

County of San Bernardino: Land Use Services Department, Department of Public Works, and Public

Health-Environmental Health Services.

Regional: None known Local: None known

CONSULTATION WITH CALIFORNIA NATIVE AMERICAN TRIBES

Have California Native American tribes traditionally and culturally affiliated with the Project Area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

On December 20, 2024, the County of San Bernardino mailed notification pursuant to AB52 to the following tribe: Twenty-Nine Palms Band of Mission Indians. Requests for consultations were due to the County by. The table below shows a summary of comments and responses.

AB-52 Consultation

Tribe	Comment Letter Received	Summary of Response	Conclusion
Twenty-Nine Palms Band of Mission Indians	No Response	-	-

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

SECTION 2 - REGULATORY FRAMEWORK

Surface mining operations are subject to the requirements of the Surface Mining and Reclamation Act (Public Resources Code 2710 et seq., California Code of Regulations, title 14, section 3500 et seq.) and applicable administrative regulations as well as lead agency (LA) ordinance requirements. When a new mine site operator is going to assume legal and operational responsibility for an existing mining operation in California, it is required to file a Statement of Responsibility (SOR). (Reference PRC section 2772(c)(10)). This statement formally notifies the LA and the State Department of Conservation (Department) that a new individual and/or company is assuming all permitted responsibility for operating the mining site in compliance with the LA-approved Surface Mining Permit and Reclamation Plan, local ordinances, the Surface Mining and Reclamation Act of 1975 (SMARA), associated regulations, and guidelines. If the mining operation is assumed by someone other than the legal landowner of the property, written authorization from the property owner(s) of record is also required. The County of San Bernardino Department of Public Works has identified that the Essex Overhead Quarry Project meets the California Environmental Quality Act (CEQA) Guidelines Section 15378 definition of a Project. CEQA Guidelines Section 15378 defines a Project as the following:

"Project" means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.²

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Sections 21000-21177), this Initial Study has been prepared to determine potentially significant impacts upon the environment resulting from the construction, operation and maintenance of the Essex Overhead Quarry Project (hereinafter referred to as the "Project" or "proposed Project"). In accordance with Section 15063 of the State *CEQA Guidelines*, this Initial Study is a preliminary analysis prepared by the County of San Bernardino Department of Public Works as Lead Agency to inform the Lead Agency decision makers, other affected agencies, and the public of potential environmental impacts associated with the implementation of the proposed Project.

The Federal Endangered Species Act

The Federal Endangered Species Act (FESA) protects plants and animals that are listed as endangered or threatened by the United States Fish and Wildlife Service (USFWS). Section 9 of the FESA prohibits the "take" of endangered wildlife, which is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 Code of Federal Regulations [CFR] 17.3). In this definition, "harm" includes "any act which actually kills or injures fish or wildlife and emphasizes that such acts may include significant habitat modification or degradation that significantly impairs the essential behavioral patterns of fish and wildlife." For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 U.S. Code 1538). Under Section 7 of FESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of FESA provides for issuance of incidental take permits where no other federal actions are necessary provided a habitat conservation plan (HCP) is developed.³

¹ SMARA Statutes and Regulations (ca.gov)

² CEQA Guidelines - Office of Planning and Research (ca.gov)

³ Endangered Species Act | U.S. Fish & Wildlife Service (fws.gov)

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the U.S. and other nations devised to protect migratory birds and any of their parts, eggs, and nests from activities including hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR Part 13 General Permit Procedures and 50 CFR Part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the California Fish and Game Code (see Section 2.2.2).⁴

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (BGEPA) prohibits the "take" of any bald or golden eagle, alive or dead, including any part, nest, or egg. "Take" is defined as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb" a bald or golden eagle. "Disturb" means to agitate or bother an eagle to a degree that causes or is likely to cause (1) injury to an eagle; (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior; or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior. The administering agency is FWS.⁵

Clean Water Act

Section 404 of the Clean Water Act (CWA) regulates the discharge of dredged or fill material into waters of the United States, including wetlands, without a permit from the U.S. Army oof Engineers (USACE). The definition of waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3 7b). The U.S. Environmental Protection Agency acts as a cooperating agency to set policy, guidance and criteria for use in evaluation permit applications and also reviews USACE permit applications.

Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the State Water Quality Control Board, administered by each of nine California Regional Water Quality Control Boards (RWQCB).

California Endangered Species Act

The California Endangered Species Act (CESA) generally parallels the main provisions of FESA but, unlike its federal counterpart, CESA applies the take prohibitions to species proposed for listing (called "candidates" by the state). Section 2080 of the California Fish and Game Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species,

⁴ Migratory Bird Treaty Act of 1918 | U.S. Fish & Wildlife Service (fws.gov)

⁵ Bald and Golden Eagle Protection Act | U.S. Fish & Wildlife Service (fws.gov)

⁶ Summary of the Clean Water Act | US EPA

⁷ Home Page | California State Water Resources Control Board

unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Under Section 2081, CESA allows for take incidental to otherwise lawful projects if it will not jeopardize the continued existence of the species. State lead agencies are required to consult with California Department of Fish and Wildlife (CDFW) to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat.⁸

⁸ CESA to the Federal Endangered Species Act (ca.gov)

SECTION 3 - DETAILED PROJECT DESCRIPTION

Mining Operations

As described in Appendix A, mining operations are intended to be undertaken over a period of up to 100 years beginning in 2024 and extending until 2124. An estimated 10,000 cy or 15,000 tons annually would be excavated on an intermittent basis over the course of the life of mine. The annual amounts may vary from zero to up to 50,000 tons or more depending on scheduled road maintenance and repair and emergency repairs. The operational areas will be fenced as determined in the field with a combination of desert tortoise fencing and 4-strand wire according to the protocols in Chapter 8 of the Desert Tortoise Field Manual.⁹

Phase I (North Pit)

Mining will take place in two phases, Phase I will be approx. 22 acres and will be referred to as the North Pit; and Phase II, referred to as the South Pit (approx. 25 acres) will be utilized when Phase I is mined out. Mining of the North Pit will be conducted from approximately 1,795 feet amsI on the southwest rim to 1,820 feet amsI on the northeast rim with an average depth of 60 feet or an average floor elevation of 1,748 feet amsI. Mining will be conducted with a 3H:1V or 18° overall slope. The aggregate volume for the North Pit is estimated at 1.255 million cy or about 1.9 million tons based on 1.5 tons/cy. Material not suitable for fill or other construction needs is roughly estimated at 10% of the volume.

Setbacks of a minimum of 50 feet will be established along the north side of the pit adjacent to the NTH ROW; adjacent to the powerline and power poles along the west side of the pit; and along the south side of pit adjacent to the drainage easement; and a 200-foot setback will be established on the east side of the pit to avoid potential impacts to cultural resources and the railroad ROW.

Within the setbacks above, a combined desert tortoise exclusion fence with 4-strand wire fencing and 18 to 24 inches of above ground and 12 inches below ground of galvanized wire fence material (1-inch horizontal by 2-inch vertical) as approved by the U.S. Fish and Wildlife Service. Warning signs shall be placed on the outside boundary of the pits to warn the public of mining operations. Access into the mining area will be from the NTH with 36-foot-wide compacted gravel roads (24-foot-wide road surface and 6-foot shoulders on both sides) extending to the pits. The access road entrances will be protected by security gates. Once off the Project Site, the street-legal transport trucks will utilize NTH to access construction and maintenance sites.

Mining of the site is achieved with one loader, one excavator, and a dozer to break, move, and load material directly into single truck trailer or double truck trailers with capacity of up to approximately 10 to 25 cy (typical). A complete list of the typical equipment to be used on-site and for transport to various construction sites in the vicinity is included in Table 1. There will be no permanent crushing, screening, or conveying conducted on-site nor permanent buildings or a scale on-site. On occasion as needed, a portable crusher/screen plant will be utilized on-site to crush/screen excavated material and to recycle road materials removed from damaged road and drainage crossings (bridges, culverts). Excavated material (raw or processed) road demolition material, recycled material, and soils may be stockpiled on-site for use as needed for maintenance and repair.

⁹ Desert Tortoise Field Manual | FWS.gov

Phase II (South Pit)

Mining of the South Pit will be conducted from approximately 1,780 feet amsl on the southwest rim to 1,800 feet amsl on the northeast rim with an average depth of 60 feet or an average floor elevation of 1,730 feet amsl. Mining will be conducted with a 3H:1V or 18° overall slope. The aggregate volume for the South Pit is estimated at 1.64 million cy or about 2.47 million tons based on 1.5 tons/cy. Waste is roughly estimated at 10% of the volume.

Setbacks of a minimum of 50 feet will be established along the north side of the pit adjacent to the drainage easement and adjacent to the powerline and power poles along the west side of the pit; and a 200-foot setback established on the east side of the pit to avoid potential impacts to cultural resources and the railroad ROW.

These setbacks will include desert tortoise and 4-strand wire exclusion fencing with warning signs on the outside edge of the property and secured gates at the access roads. Access into the mining area will be from the NTH with 36-foot-wide compacted gravel roads with 6-foot-wide shoulders on both sides extending to the pits. Once off the Project Site, the street-legal transport trucks will utilize NTH to construction and maintenance sites. Mining will be conducted as described above under the North Pit.

Truck traffic will be entirely based on the need for DPW to maintain and repair the NTH, which may vary from zero to an average of 15,000 tons/year. Based on street-legal 25-ton trucks, approximately 2 to 5 trucks may access the site per average day when operational or 4 to 10 truck trips with smaller 15-ton dump trucks. To minimize dust generation, a water truck will be retained for use during excavations and loading of haul trucks. The mine operator shall spray water working mine areas and access roads on-site on a regular basis and more frequently as needed during windy conditions. Water used for dust control will be obtained from the Caltrans Essex Maintenance Station located approximately 1.5 miles southwest via a water truck. Un-surfaced haul road and access road will also have dust controlled with and/or covered with road base material as needed.

Table 1
Mobile Mine and Transport Equipment (Typical)

Equipment Type	Typical	Hours/day	Purpose
	Number		
Dozer	1	4 - 8	Excavate and loosen material. Access
			construction and maintenance
2 to 5 Axle Dump / Material Haul Trucks	2	4 – 8	Transportation of material
Excavator	1	4 - 8	Excavate and load material into trucks.
Loader	1	4 - 8	Excavate and load material into trucks.
Water Truck	1	4	Water for dust control on mining areas, haul roads, and stockpiles.

Source: DPW 2024

Note: Equipment listed is typical; makes and models will vary.

Site operations will be conducted as needed intermittently primarily from 5:30 am till 8:00 pm (daylight hours only), up to 6 days per week: Monday through Saturday. Occasionally operations may be conducted on Sundays depending on possible emergency road repair, construction and maintenance needs. All refuse shall be disposed into approved trash bins and removed by the operator or a commercial

vendor. Portable toilets will be used on-site when in operation and serviced by the operator or by a commercial vendor. Bottled water will be provided to employees.

Mine Waste

Although portions of the site have been disturbed in the past, those areas with topsoil will have the top 6 to 12 inches of surface material pushed into the storage stockpiles or perimeter berms shown on the mine plan no higher than six feet in height. Minimal amounts of overburden or waste material are expected (less than 10%) and these volumes will be used to backfill slopes or spread over areas where mining has been completed.

There will be no imported waste materials or chemicals brought to the Project Site or stored on-site besides fuel and equipment maintenance fluids during active mining periods. Broken road materials may be transported to the site for recycling. Maintenance and fueling will be conducted by a mobile maintenance truck if needed and Best Management Practices (BMPs) will be implemented. All used fluids will be removed from the equipment and from the site following standard regulations. No fuel or used fluids will be stored long-term on-site.

Ore Processing

The mined material will typically be loaded directly into trucks for transport to DPW construction sites. No permanent crushing or screening plant facilities are planned on-site. On occasion as needed, a portable crusher/screen plant will be utilized on-site to crush/screen excavated material and to recycle road materials removed from damaged road and drainage crossings. Excavated material (raw or processed), road demolition material, recycled material, and soils may be stockpiled onsite for use as needed for road maintenance and repair. When a plant is used onsite, these plants will be powered by portable generators. All process plants and generators will be permitted through the Mojave Desert Air Quality Management District (MDAQMD) as required.

Production Water

Water use on-site will be utilized to minimize fugitive dust generation. A water truck will be used for wetting-down material and roads during mining activities and for wetting-down haul trucks prior to site departure. Approximately 4,000 gallons of water a day may be used for dust suppression activities. The 4,000-gallon water truck (typical) will fill at the Caltrans Essex Maintenance Station about 1.5 miles southwest. It is not anticipated that there will be any excess water from the dust control procedures; therefore, no recycling is required or planned.

Erosion and Sedimentation Control

DPW is required to comply with Statewide National Pollutant Discharge Elimination System (NPDES) and will prepare and implement a Storm Water Pollution Protection Plan (SWPPP) including applicable BMPs. The control of drainage, erosion, and sedimentation of the mine site will be contained in the enclosed pits and by implementing the following primary BMPs as applicable:

- Limiting surface disturbance to the minimum area required for active operations.
- Monitoring erosion on slopes and implementation of one or more soil stabilization practices as applicable for the site such as: earthen berms or dikes; silt fence; fiber rolls; straw bales; gravel bags; sediment basin(s); and straw mulch.

- Stabilizing disturbed areas through grading slopes to 3H:1V; and
- After project completion final revegetation of slopes will be by seeding with native species.

The final slopes will gently slope at 3H:1V into the closed pit floor. There are no major drainage or runoff channels that will be affected by the mining. The 100-foot-wide drainage easement bisecting the two pits will be avoided with setbacks of 50 feet established and greater. Only direct precipitation will affect the pits and will be collected within the pits and allowed to evaporate or percolate. Any rainfall occurring at higher elevations to the east of the rail line is collected in a dike system directing water to a culvert under the rail line, through the Project Site from an east to west direction. The slopes are designed at very gentle 3H:1V that would reduce possible slope erosion and runoff channeling down the slopes. There will be no run-off away from the pits.

During the course of mining and the final design of the 3H:1V slope contouring, some erosion may occur during heavy rainfall on the slopes. Erosion sediment caused by rainfall will be retained at the bottom of the pit and rills or channels in the slopes backfilled. Any water retained within the pits will not impact adjacent properties or local roads due to its containment.

After each major storm event or annually, any final slopes will be visually inspected to determine if any substantial erosion is evident such as sheet, rill or gully erosion. A major storm event is defined as precipitation totals of 0.5 inches per 24-hour period. Any rills or gullies in excess of 8 square inches in cross sectional area and are more than 10 linear feet located on final slopes shall be arrested using methods listed above.

Revegetation will be used for the long-term control of erosion on the slopes. Access points and mined surfaces will be water sprayed as necessary to reduce wind erosion during operations.

Blasting

There will be no blasting on this Project Site, therefore, no explosives will be used or stored on-site.

Reclamation Plan

The intent of the California Surface Mining and Reclamation Act (SMARA) of 1975, as amended, is to "maintain an effective and comprehensive surface mining and reclamation policy with regulation of surface mining operations so as to assure that: (a) adverse environmental effects are prevented or minimized and that mined lands are reclaimed to a usable condition which is readily adaptable for alternative uses; (b) the production and conservation of minerals are encouraged, while giving consideration to values relating to recreation, watershed, wildlife, range and forage, and aesthetic enjoyment; and (c) residual hazards to the public health and safety are eliminated" (Section 2712).

Article 9, Section 3700 of SMARA states the following: "Reclamation of mined lands shall be implemented in conformance with standards in this Article (Reclamation Standards)". 10 The standards shall apply to each surface mining operation to the extent that:

- (1) they are consistent with required mitigation identified in conformance with CEQA; and
- (2) they are consistent with the planned or actual subsequent use or uses of the mining site."

May 2025 Page 14

-

¹⁰ SMARA Statutes and Regulations (ca.gov)

The objectives of the Reclamation Plan are to:

- Eliminate or reduce environmental impacts from mining operations.
- Reclaim in a usable condition for post-mining end uses which will be San Bernardino County Department of Public Works (DPW) material maintenance and storage yard.
- Reshape mining features and revegetate disturbed areas to minimize aesthetic and biological impacts; and
- Reclaim the site as necessary to eliminate hazards to public health and safety.

Reclamation of Phase I (North Pit) will be initiated at the completion of mining operations in this area. Any over-steepened slopes will be partially backfilled or recontoured to 3H:1V. Fill material for slopes will be excess material pushed up onto slopes to create 3H:1V. The fill will be compacted by tracking the dozer over the slope to achieve necessary compaction consistent with final end use of open space. Any rock or gravel on the roads to be reclaimed within the North Pit will be removed and used as fill in the pit area. Final graded slopes and the pit floor will be revegetated and reclaimed as open space.

After completion of mining Phase II, the South Pit will be reclaimed and used as a DPW material maintenance and storage yard. Fencing and locked gates will remain around the South Pit for public safety reasons and equipment protection. The completed slopes of the South Pit will be sloped to 3H:1V and seeded with the recommended seed mix in this Reclamation Plan. Refer to Figure 3 for the Reclamation Plan.

Monitoring and Maintenance

The County as lead agency to implement SMARA requires annual reporting of Mining and Reclamation activities. The reports are filed with the State Division of Mine Reclamation and the County. Revegetated areas will be monitored over a five-year period or until success criteria are achieved following initial planting. Data on plant species diversity, cover, survival and vigor will be collected on revegetated sites and compared to baseline data from undisturbed sites to evaluate project success.

Ongoing operations and reclamation activities require monitoring and maintenance as applicable. The DPW will provide onsite review of the following among others:

- a. Storm Water Pollution Prevention per the NPDES plan and SWPPP required by State and Federal rules. Erosion control will be reviewed and addressed within the SWPPP.
- b. Implementation and effectiveness of dust control measures.
- c. Maintenance and managing idling for trucking operations.
- d. Inspection of fencing, gates and signs.
- e. Monitoring and controlling erosion; and
- f. Monitoring revegetation and implementing remedial actions as needed.

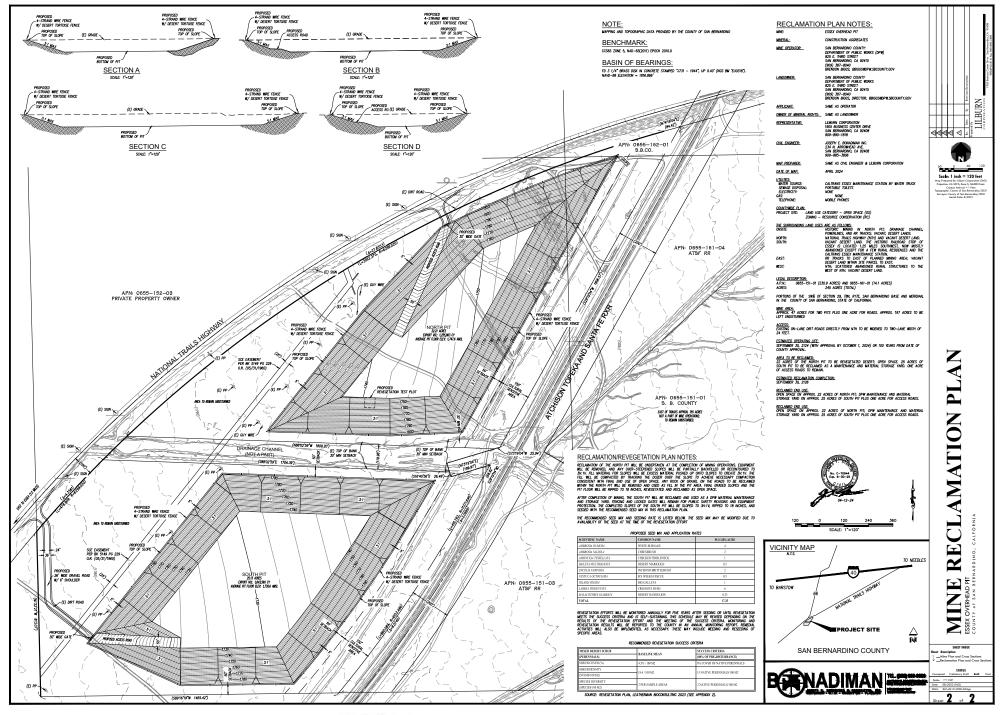
Public Safety

Public access to the site will be restricted by the site perimeter 4-strand wire fence and locked access gates during operations and reclamation. Warning signs with contrasting background lettering that read "No Trespassing - Keep Out; Surface Mining Operation" or similar will be installed every 500 feet along

the approved surface mine boundary during mining. Signs will be approximately 1 foot high and 2 feet wide. Upon completion of reclamation and revegetation in the North Pit, fencing will be removed.

The reclaimed 3H:1V slopes will be of sufficient low gradient as not to cause a hazard to public safety if the public illegally trespasses onto the site. The long-term storage yard will maintain fencing and gates.

No portals, shafts, tunnels or openings have been found on the Project Site. If any remain on the reclamation site after mining and reclamation, they will be either closed or gated and protected from public entry but preserved for bat and other wildlife if appropriate with County consultation.







MINE RECLAMATION PLAN

Essex Overhead Pit County of San Bernardino, California

SECTION 4 - EVALUATION FORMAT

This Initial Study is prepared in compliance with the California Environmental Quality Act (CEQA) pursuant to Public Resources Code Section 21000, et seq. and the State CEQA Guidelines (California Code of Regulations Section 15000, et seq.). Specifically, the preparation of an Initial Study is guided by Section 15063 of the State CEQA Guidelines. This format of the study is presented as follows. The project is evaluated based on its effect on 20 major categories of environmental factors. Each factor is reviewed by responding to a series of questions regarding the impact of the project on each element of the overall factor. The Initial Study checklist provides a formatted analysis that provides a determination of the effect of the project on the factor and its elements. The effect of the project is categorized into one of the following four categories of possible determinations:

Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant	No Impact	
-----------------------------------	--	--------------------------	--------------	--

Substantiation is then provided to justify each determination. One of the four following conclusions is then provided as a summary of the analysis for each of the major environmental factors.

No Impact: No impacts are identified or anticipated, and no mitigation measures are required.

Less than Significant Impact: No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

Less than Significant Impact with Mitigation Incorporated: Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant. The required mitigation measures are: (List of mitigation measures)

Potentially Significant Impact: Significant adverse impacts have been identified or anticipated. An Environmental Impact Report (EIR) is required to evaluate these impacts, which are (List of the impacts requiring analysis within the EIR).

At the end of the analysis the required mitigation measures are restated and categorized in the required Mitigation Monitoring and Reporting Program.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact requiring mitigation to be reduced to a level that is less than significant as indicated in the checklist on the following pages.

		Aesthetics		Agricultural / Forest Resources		Air Quality
[\boxtimes	Biological Resources	\boxtimes	Cultural Resources		Energy
	\boxtimes	Geology / Soils		Greenhouse Gas Emissions		Hazards / Hazardous Materials
[Hydrology / Water Quality		Land Use / Planning		Mineral Resources
[Noise		Population / Housing		Public Services
[Recreation		Transportation	\boxtimes	Tribal Cultural Resources
[Utilities / Service Systems		Wildfire		Mandatory Findings of Significance

LEAD AGENCY DETERMINATION

On the basis of this initial evaluation, the following finding is made:

	The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.					
X	Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.					
	The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.					
	The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.					
	Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.					

Signature: Derek Newland (Planner)

Signature: Liang (Supervising Planner)

Signature: Dan Walsh (Chief Engineering Geologist)

I. AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?			\boxtimes	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c) Substantially degrade an existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

(Check if project is located within a view-shed of any Scenic Route listed in the General Plan):

Substantiation

San Bernardino County Countywide Plan 2020; Natural Resources Policy Map NR-3 Scenic Routes & Highways

Environmental Setting

The Project site is located 1.7 miles northeast of the community of Essex, in the Mojave Desert approximately 35 miles west of Needles. The community of Essex, with a population of approximately 10 people, is dependent on the City of Needles for any services for its residents as it is the closest population center. The Project site is bordered on the north, south, and east by vacant land. Adjacent to the west is a residence and associated structures that appear unoccupied.

The proposed mine site is located adjacent to and east of the NTH and west of the Burlington Northern and Santa Fe (BNSF) railroad tracks. Access to the site will be from the NTH. The mine site had been partially disturbed by historical mining in the 1930s for the development of the NTH. Mining will be conducted in two shallow pits.

Impact Analysis

a) Have a substantial adverse effect on a scenic vista?

Less than Significant Impact. The Project Site is located within a designated County Scenic Route (Historic NTH) as recognized by the *Countywide Plan 2020 Natural Resources Element.* ¹¹ However,

¹¹ San Bernardino County Countywide Plan 2020; Natural Resources Policy Map NR-3 Scenic Routes & Highways

there are no sensitive receptors present in the vicinity of the Project Site. Mining will be conducted in two shallow pits. As the pits are developed with depth, operations on-site will be partially hidden from view from passing motorists. No permanent process plants will be located on-site. The reclaimed end use of the North Pit will be revegetated open space (22.21 acres) and the South Pit (25.13 acres) will be used for a long-term DPW material maintenance and storage yard. Therefore, the proposed Project would not have a substantial adverse effect on a scenic vista. No impacts are identified or are anticipated, and no mitigation measures are required.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less than Significant Impact. Although the Project Site is located within a designated County Scenic Route as recognized by the Countywide Plan 2020 Natural Resources Element, the Project is not within the vicinity of a designated State Scenic Highway, nor does the site include trees, rock outcroppings, and historic buildings that would be impacted by the implementation of the Project. The nearest officially designated State Scenic Highway is approximately 90 miles southwest near the city of Desert Hot Springs along portions of State Route 62. ¹² Impacts would be less than significant, and no mitigation measures are required.

c) Substantially degrade an existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than Significant Impact. Impacts to visual resources are based on changes to the existing character of the landscape, viewer sensitivity, and the number of viewers that may view the project activities. The level of change associated with the proposed Project is considered to be low as the proposed Project is a conditionally acceptable use within the RC zone as demonstrated by Table 82-4, Allowed Land Uses and Permit Requirements for Agricultural and Resource Management Land Use Zoning Districts, of the San Bernardino County Development Code. Furthermore, following the completion of mining, reclamation shall take place in order to reshape mining features and revegetate disturbed areas to minimize aesthetic impacts. The reclaimed end use of the North Pit will be revegetated open space (22.21 acres) and the South Pit (25.13 acres) will be used for a long-term DPW material maintenance and storage yard. With implementation of the proposed Reclamation Plan and adherence to San Bernardino County Development Code, impacts are considered temporary and less than significant. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than Significant Impact. The proposed Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area as no permanent new light sources are proposed. No lighting is proposed, however, in the event temporary lighting is

¹² CalTrans. California State Scenic Highway System Map. Accessed December 23, 2024.

¹³ San Bernardino County Code of Ordinances Title 8 Development Code, Division 2: Land use Zoning Districts and Allowed Land Uses, American legal Publishing, <u>TITLE 8: DEVELOPMENT CODE</u> (amlegal.com)

needed, the operator shall comply with the requirements outlined by County Development Code Section 83.07.040, Glare and Outdoor Lighting – Desert Regions. This includes fully shielding lights as required to preclude light pollution or light trespass on adjacent property, other property (directly or reflected), and members of the public on adjacent roads. With adherence to existing regulations, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

II. AGRICULTURE AND FORESTRY RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				\boxtimes
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?				\boxtimes
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				
d) Result in the loss of forest land or conversion of forest land to non-forest use?				\boxtimes
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				\boxtimes

(Check if project is located in the Important Farmlands Overlay):

Substantiation

San Bernardino County Countywide Plan 2020; California Department of Conservation, California Important Farmland Finder

Environmental Setting

The Project Site is located 1.7 miles northeast of the unincorporated community of Essex within the Resource Land Management (RLM) land use category and Resource Conservation (RC) zoning district.

Agricultural, Resource, and Open Space uses are permitted within the RLM land use category. ¹⁴ The Project Site is relatively undisturbed, comprised of native shrubs with a low-lying understory of native and non-native herbaceous species.

Impact Analysis

a) Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance is identified on-site or on adjacent parcels as demonstrated by the Department of Conservation's California Important Farmland Finder. ¹⁵ Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

No Impact. The proposed Project is a conditionally acceptable use within the RC zone as demonstrated by Table 82-4, Allowed Land Uses and Permit Requirements for Agricultural and Resource Management Land Use Zoning Districts, of the San Bernardino County Development Code. The Project parcels are not involved in a Williamson Act Contract through the California Department of Conservation's Division of Land Resource Protection. As such, the proposed Project does not conflict with existing zoning for agricultural use or a Williamson Act contract. No impacts are identified or are anticipated, and no mitigation measures are required.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The Project Site and surrounding area do not occur within forest land, timberland, or timberland zoned production; it is located in Desert Region of the County. ¹⁸ Impacts to these resource lands would not result with implementation of the proposed Project. No impacts are identified or are anticipated, and no mitigation measures are required.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The Project Site does not support forest land and implementation of the proposed Project would not convert forest land to non-forest use. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

¹⁴ San Bernardino County Code of Ordinances Title 8 Development Code, Division 2: Land use Zoning Districts and Allowed Land Uses, American legal Publishing, TITLE 8: DEVELOPMENT CODE (amlegal.com)

¹⁵ DLRP Important Farmland Finder (ca.gov)

¹⁶ San Bernardino County Code of Ordinances Title 8 Development Code, Division 2: Land use Zoning Districts and Allowed Land Uses, American legal Publishing, <u>TITLE 8: DEVELOPMENT CODE (amlegal.com)</u>

¹⁷ San Bernardino County Assessor. Parcels Under Open Space Contract Report – 12/03/2024.

¹⁸ San Bernardino County Countywide Plan/Policy Plan, Land Use Element

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. Agricultural uses are permitted within the RC zone as stated within Table 82-4 of the San Bernardino County Development Code. The proposed Project is also a conditionally acceptable use within the RC zone with the approval of a Conditional Use Permit (CUP). The proposal will be in compliance with the San Bernardino Countywide Plan and Development Code and not involved in the conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

¹⁹ San Bernardino County Code of Ordinances Title 8 Development Code, Division 2: Land use Zoning Districts and Allowed Land Uses, American legal Publishing, <u>TITLE 8: DEVELOPMENT CODE</u> (amlegal.com)

III. AIR QUALITY

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:					
a)	Conflict with or obstruct implementation of the applicable air quality plan?				
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			\boxtimes	
c)	Expose sensitive receptors to substantial pollutant concentrations?				
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				

(Discuss conformity with the South Coast Air Quality Management Plan, if applicable):

Substantiation

San Bernardino County Countywide Plan 2020; SCAQMD Off-road Model-Mobile Source Emissions Factors 2025 Calculations

Environmental Setting

The Project Site is located in the Mojave Desert Air Basin (MDAB), 1.7 miles northeast of the community of Essex. The MDAB encompasses the desert potion of San Bernardino County. The MDAQMD has jurisdiction over air quality issues and regulations within the County area that includes the Project Site.²⁰ To assist local agencies in determining if a project's emissions could pose a significant threat to air quality, the MDAQMD has prepared the California Environmental Quality Act (CEQA) and Federal Conformity Guideline (February 2020).²¹ The air and dust emissions from the construction and operational use of the proposed Project were evaluated and compared to the MDAQMD air quality thresholds to determine significance.²²

Air emissions from the proposed Project are subject to federal, State and local rules and regulations implemented through provisions of the federal Clean Air Act, California Clean Air Act, and the rules and regulations of the California Air Resources Board (CARB) and MDAQMD. The federal Clean Air Act and California Clean Air Act were established in an effort to assure that acceptable levels of air quality are maintained. These levels are based upon health-related exposure limits and are referred to as National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS). The ambient air quality standards establish maximum allowable concentrations of specific pollutants in the atmosphere and characterize the amount of exposure deemed safe for the public. Areas that meet the

²⁰ Mojave Desert Air Quality Management District | Home (ca.gov)

²¹ Rules & Regulations | Mojave Desert Air Quality Management District (ca.gov)

²² https://www.arb.ca.gov/cc/inventory/data/data.htm

standards are designated attainment and if found to be in violation of primary standards are designated as nonattainment areas.²³

The United States Environmental Protection Agency (EPA) and the CARB have designated portions of the District as nonattainment for a variety of pollutants, and some of those designations have an associated classification. Table 2 lists these designations and classifications. The MDAQMD has adopted attainment plans for a variety of nonattainment pollutants.²⁴

Table 2
State and Federal Air Quality
Designations and Classifications

Ambient Air Quality Standard	Status			
Eight-hour Ozone	Expected non-attainment; to be determined.			
(Federal 70 ppb (2015))				
Ozone (State)	Non-attainment; classified Moderate			
	Non-attainment: classified Moderate (portion of			
PM ₁₀ (24-hour Federal)	MDAB in Riverside County is			
	unclassifiable/attainment)			
PM _{2.5} (Annual Federal)	Unclassified/attainment			
PM _{2.5} (24-hour Federal)	Unclassified/attainment			
	Non-attainment (portion of MDAB outside of			
PM _{2.5} (State)	Western Mojave Desert Ozone Non-attainment			
	Area is unclassified/attainment)			
PM ₁₀ (State)	Non-attainment			
Carbon Monoxide (State and Federal)	Unclassifiable/Attainment			
Nitrogen Dioxide (State and Federal)	Unclassifiable/Attainment			
Sulfur Dioxide (State and Federal)	Attainment/unclassified			
Lead (State and Federal)	Unclassifiable/Attainment			
Particulate Sulfate (State)	Attainment			
Hydrogon Culfido (Ctoto)	Unclassified (Searles Valley Planning Area is non-			
Hydrogen Sulfide (State)	attainment)			
Visibility Reducing Particles (State)	Unclassified			

Source: MDAQMD CEQA and Federal Conformity Guidelines, June 2024

Impact Analysis

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant. The proposed Project is a conditionally acceptable use within the RC zone as demonstrated by Table 82-4, Allowed Land Uses and Permit Requirements for Agricultural and Resource Management Land Use Zoning Districts, of the San Bernardino County Development Code. The Project Site is within the MDAB and under the jurisdiction of the MDAQMD. The MDAQMD is responsible for updating the Air Quality Management Plan (AQMP) and incorporating land use plans. The AQMP was developed for the primary purpose of controlling emissions to maintain all federal and state ambient air standards for the district.

²³ Ibid

²⁴ Rules & Regulations | Mojave Desert Air Quality Management District (ca.gov)

Consistency with the AQMP for general development projects is determined by demonstrating compliance with local land use plans and/or employment projections. A project is non-conforming if it conflicts with or delays implementation of any applicable attainment or maintenance plan. A project is conforming if it complies with all applicable SCAQMD rules and regulations, complies with all proposed control measures that are not yet adopted from the applicable plan(s), and is consistent with the growth forecasts in the applicable plan(s) (or is directly included in the applicable plan).

The proposed Project does not include an amendment to land use or zoning designations and therefore has been accounted for in the AQMP. The proposed Project would not significantly increase local air pollutant emissions and therefore would not conflict with or obstruct implementation of the AQMP. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less than Significant. Mining of the site is achieved with one loader, one excavator, and a dozer to break, move, and load material directly into single trailer or double truck trailers with capacity of up to approximately 10 to 25 cy (typical). Additionally, a water truck will be utilized for wetting-down material and roads during mining activities and for wetting-down haul trucks prior to site departure. Exhaust or criteria pollutants will be produced from the mobile equipment. Dust will be produced from mining and revegetation, and travel on gravel/dirt access roads. Operations will be required to comply with the existing MDAQMD regulations for mobile equipment and fugitive dust control.

Operational emissions for the mobile equipment were estimated utilizing South Coast AQMD Off-Road Source Emission Factors for the 2025 operational year. The MDAQMD has established significant daily emissions thresholds for determining whether the impacts from a proposed project would be considered significant under CEQA. Table 3 provides the estimated emissions for the planned operations in comparison to the MDAQMD thresholds.²⁵

Table 3
Operational Emissions Summary
(Pounds Per Day)

(
Source/Phase	ROG	NO _x	CO	PM ₁₀	PM _{2.5}					
Loader	0.22	1.13	1.72	0.05	0.04					
Water Truck	0.18	0.81	1.39	0.03	0.03					
Excavator	0.22	0.91	2.03	0.03	0.03					
Dozer	0.67	4.33	2.65	0.17	0.15					
2-Dump/Haul Trucks	0.35	1.62	2.78	0.06	0.06					
Totals	1.65	8.80	10.58	0.33	0.33					
MDAQMD Threshold	137	137	548	82	65					
Significant	No	No	No	No	No					

Emission Sources: Off-Road Mobile Source Emission Factors (Scenario Year 2025)

As shown above, the anticipated operational emissions are less than the MDAQMD thresholds and therefore would be considered less than significant. Compliance with MDAQMD rules and CARB Off-

²⁵ South Coast Air Quality Management District. http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/off-road-mobile-source-emission-factors.

Road Diesel Vehicle regulations are listed below and are included in the estimated emissions in Table 3.

Upon completion of mining within each of the two phases, all disturbed slopes will be reclaimed and revegetated within one year. Reclamation activities would require minor earthmoving, and other activities typically associated with final grading and revegetation. Reclamation emissions would be substantially less than the mining operations and would not exceed MDAQMD thresholds.

Compliance with MDAQMD Rules 402 and 403

Although the proposed Project does not exceed MDAQMD thresholds, the Applicant is required to comply with applicable MDAQMD Rules 402 for nuisance and 403 for fugitive dust control. This would include, but not be limited to the following:

- 1. The Project Proponent shall ensure that any portion of the site to be graded shall be prewatered prior to the onset of grading activities.
- 2. The Project Proponent shall ensure that watering of the site or other soil stabilization method shall be employed on an on-going basis after the initiation of any grading and drilling activity on the site. Portions of the site that are actively being used shall be watered to ensure that a crust is formed on the ground surface and shall be watered at the end of each workday.
- 3. The Project Proponent shall ensure that disturbed areas are treated to prevent erosion.
- 4. The Project Proponent shall ensure that mining and revegetation activities are suspended when winds exceed 25 miles per hour.

Although the proposed Project would not exceed MDAQMD thresholds for exhaust emissions during operations, the Applicant would be required to implement the following conditions as required by MDAQMD:

- 5. All equipment used for mining and revegetation must be tuned and maintained to the manufacturer's specification to maximize efficient burning of vehicle fuel.
- 6. The operator shall comply with all existing and future CARB and MDAQMD Off-Road Diesel Vehicle Regulations related to diesel-fueled trucks, which may include among others: (1) meeting more stringent emission standards; (2) retrofitting existing engines with particulate traps; (3) use of low sulfur fuel; and (4) use of alternative fuels or equipment.

MDAQMD rules for diesel emissions from equipment and trucks are embedded in the compliance for all diesel fueled engines, trucks, and equipment with the statewide CARB Off-Road Diesel Vehicle regulations. These measures will be implemented by CARB in phases with new rules imposed on existing and new diesel-fueled engines.

The Project Area is within the Mojave Desert PM₁₀ Planning Area and the Western Desert Ozone non-attainment area. The State Implementation Plan (SIP) identifies sources of PM₁₀ emissions and control measures to reduce emissions. The EPA requires the application of reasonable available control technology (RACT) to stationary emission sources and reasonable available control measures (RACM) to mobile sources. These will be incorporated through compliance with rules and regulations described above. As such, with compliance with existing rules and regulations, the proposed Project would not violate any air quality standards or contribute to an existing or projected air quality

violation.²⁶ No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant. The MDAQMD, CEQA and Federal Conformity Guidelines (February 2020) describe sensitive receptors as being residences, schools, daycare centers, playgrounds and medical facilities. The following project types proposed for sites within the specified distance to an existing or planned (zoned) sensitive receptor land use must be evaluated using MDAQMD significance thresholds:²⁷

- Any industrial project within 1000 feet.
- A distribution center (40 or more trucks per day) within 1000 feet.
- A major transportation project (50,000) or more vehicles per day) within 1000 feet.
- A dry cleaner using perchloroethylene within 500 feet.
- · A gasoline dispensing facility within 300 feet.

The nearest sensitive receptor appears to be a single-family residence located approximately 300 feet across NTH west of the Project Site. However, it has not been confirmed whether or not this residence is occupied or abandoned. With that said, based on the limited Operational use and negligible onsite emissions (Refer to Table 3), potential impacts are anticipated to be less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant. The Essex Overhead borrow pit would provide general fill material for various DPW sites for annual maintenance and/or emergencies. DPW is proposing to remove up to 10,000 cubic yards (cy) of fill material a year. No changes from existing conditions are proposed. Furthermore, the modeling results (as shown in Table 3) indicate that development of the proposed Project is not anticipated to exceed MDAQMD emissions thresholds. Temporary generation of objectionable oil and diesel fuel odors associated with the use of heavy equipment may occur during mining and reclamation activities. However, impacts are anticipated to be negligible as demonstrated. Therefore, no significant impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

²⁶ Rules & Regulations | Mojave Desert Air Quality Management District (ca.gov)

²⁷ Ibid

IV. BIOLOGICAL RESOURCES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
h s p	lave a substantial adverse effect, either directly or through abitat modifications, on any species identified as a candidate, ensitive, or special status species in local or regional plans, olicies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		\boxtimes		
o p	lave a substantial adverse effect on any riparian habitat or ther sensitive natural community identified in local or regional lans, policies, regulations or by the California Department of ish and Wildlife or U.S. Fish and Wildlife Service?		\boxtimes		
, p	dave a substantial adverse effect on state or federally rotected wetlands (including, but not limited to, marsh, vernal ool, coastal, etc.) through direct removal, filling, hydrological nterruption, or other means?				
o re	nterfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native esident or migratory wildlife corridors, or impede the use of ative wildlife nursery sites?			\boxtimes	
b	Conflict with any local policies or ordinances protecting iological resources, such as a tree preservation policy or rdinance?				
P	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other pproved local, regional, or state habitat conservation plan?				

Check if project is located in the Biological Resources Overlay or Contains habitat for any species listed in the California Natural Diversity Database

Substantiation

San Bernardino County Countywide Plan 2020; *Biological Resources Assessment for the Essex Overhead Quarry San Bernardino County, California* May 15, 2023, Leatherman BioConsulting, Inc.; *Jurisdictional Delineation Essex Overhead Mine*, May 2024, Natural Resources Assessment, Inc.; *Essex Overhead Quarry Revegetation Plan San Bernardino County, California*, July 2023, Leatherman BioConsulting, Inc.

Environmental Setting

The Project Site lies in a broad gently sloping valley on the desert floor between the Clipper Mountains (to the west) and the Piute Mountains (to the east), at an elevation that ranges from approximately 1,780 to 1,830 feet above mean sea level (msl). Large natural drainages and major landforms and topographic features are largely absent. During storm events the site drains to the west southwest via several small, incised channels and many smaller well-defined and ill-defined channels. A desert wash occurs between the two proposed quarry sites (Phases and 1 and 2), and is outside the Project impact area, as depicted in the Mine Plan. The margins of the wash appears

to be for conducting water through the parcel from the railroad tracks (on the east) to the highway (to the west). Levees on the east side of the railroad tracks (presumably built to protect the railroad tracks) appear to direct water under the railroad bridge and into the wash.

The Project Site is currently undeveloped desert land and supports a variety of native and nonnative vegetation and wildlife. Directly adjacent to the Project Site is the NTH and the frequently used BNSF railroad. A previous quarry in the Phase I quarry site is no longer active. It was originally utilized in 1930/1931 for construction of the State NTH in the general area and used subsequently to provide material for the construction of the west side of the Essex Overhead Bridge over the railroad. Evidence of the former quarry and intensive disturbance associated with the past land use are still obvious, although some vegetation within the area continues to recover. Parcels surrounding the site are undeveloped, and no residences aside from those associated with Essex occur in the vicinity.

Impact Analysis

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less than Significant Impact with Mitigation Incorporated. Focused surveys for special status species were conducted by Leatherman BioConsulting, Inc. (LBC) in the winter of 2022 and spring of 2023, and a general biological resource assessment report was completed. The report is summarized herein and included as Appendix B. This report satisfies the County of San Bernardino Report Protocol for Biological Assessment Reports.

No special-status plant species were detected on the Project Site. Although they maintain no federal or state sensitivity designations, a number of plant species are protected by the California Desert Native Plants Act (CDNPA), and by the San Bernardino County Development Code. Protected species identified on the Project Site include pencil cholla (*Cylindropuntia ramosissima*), cottontop cactus (*Echinocactus polycephalus*), and beaver tail cactus (*Opuntia basilaris*); however, many of these plants appeared to be dead from the prolonged drought in the region.

No live tortoises or recent sign to indicate that tortoises are present on the Project Site were observed during the surveys. Several burrows attributable to desert tortoise were observed but none appeared to be active or to be used recently, and no other sign (scat, carcasses, mating rings, tracks, etc.) were observed. However, desert tortoises are known to occur within the valley within which the Project lies, and adjacent parcels contain suitable habitat.

No other special-status species were observed. However, the loggerhead shrike (*Lanius ludovicianus*) was observed in habitat nearby and has a high probability of occurring. Potential habitat for burrowing owl (*Athene cunicularia*) is present but no sign was observed. Inactive desert kit fox dens (*Vulpes macrotis*) were also observed on the Project Site and could be occupied in the future. While the desert kit fox is not designated by federal, state, or local agencies as a special status species, California Department of Fish and Wildlife (CDFW) regulations at 14 CCR 460 prohibit the take of this species.²⁸

May 2025 Page 32

_

²⁸ Leatherman BioConsulting, Inc., *Biological Resources Assessment for the Essex Overhead Quarry San Bernardino County, California* May 15, 2023

Although no State- and/or federally listed threatened or endangered species or otherwise sensitive species were observed on-site during the field surveys, habitat on-site is potentially suitable for their presence. As such, Mitigation Measures **BIO-1** through **BIO-5**, defined below, shall be implemented to ensure that less than significant impacts occur.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less than Significant Impact with Mitigation Incorporated. A Jurisdictional Delineation report dated May 20, 2024, and prepared by Natural Resources Assessment, Inc. is summarized herein and included as Appendix C.²⁹ The Corps has the authority to permit the discharge of dredged or fill material in Waters of the U.S. (WOUS) under Section 404 CWA. While the Regional Water Quality Board has authority over the discharge of dredged or fill material in Waters of the State under Section 401 CWA as well as the Porter-Cologne Water Quality Control Act, the CDFW asserts jurisdiction over any drainage feature that contains a definable bed and bank or associated riparian vegetation.

The field team for biological resources determination surveyed for the presence of federally jurisdictional wetlands, federally jurisdictional non-wetland waters of the United States, CDFW jurisdictional streambeds including ephemeral and intermittent streambeds, riparian vegetation, RWQCB jurisdictional waters, and other water bodies, riparian habitats, potential wetlands, and connectivity.

Approximately 0.75 miles west of the Project Site lies Watson Wash which flows from northeast to southwest. Watson Wash flows into Cadiz Lake. Cadiz Lake also does not meet the test for jurisdictional waters. It is not interstate, does not provide recreational opportunities and does not support fish or shellfish for interstate commerce. Because Watson Wash also meets these criteria and in addition flows into a non-jurisdictional water (Cadiz Lake), Watson Wash is also a non-jurisdictional water. Because there is no downstream connection to jurisdictional waters, the project drainages are also not considered to be jurisdictional (Appendix B).³⁰ The project was designed to limit potential impacts and no impacts were identified. However, the applicant would be required to implement Best Management Practices (BMP) to reduce any potential impacts. Refer to **BIO-6** for additional information.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. The results of the Jurisdictional Delineation prepared for the Project and the research data from the National Wetlands Inventory did not identify any wetlands within the project limits. Information provided by the Environmental Protection Agency (EPA) Water Program "My Waters" shows that Project Area drainages all flow into Watson Wash.

No impacts are identified or are anticipated, and no mitigation measures are required.

²⁹ Natural Resources Assessment, Inc. *Jurisdictional Delineation Essex Overhead Mine*, May 20, 2024.

³⁰ Leatherman BioConsulting, Inc., *Biological Resources Assessment for the Essex Overhead Quarry San Bernardino County, California* May 15, 2023

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant Impact. The federal Migratory Bird Treaty Act (MBTA) of 1918 provides protection for nesting birds that are both residents and migrants whether or not they are considered sensitive by resource agencies. The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations. The direct injury or death of a migratory bird, due to construction activities or other construction-related disturbance that causes nest abandonment, nestling abandonment, or forced fledging would be considered take under federal law. The USFWS, in coordination with the CDFW administers the MBTA. CDFW's authoritative nexus to MBTA is provided in FGC Sections 3503.5 which protects all birds of prey and their nests and FGC Section 3800 which protects all non-game birds that occur naturally in the State. Additional protection is provided to all bald and golden eagles under the Bald and Golden Eagle Protection Act of 1940, as amended.³¹ The Project has the potential to impact active bird nests if vegetation is removed during the nesting season. Several common bird species are likely to nest in the vegetation or on the ground within the impact area. Mitigation Measure BIO-1 would address these potential impacts to nesting birds.

The Project Site occurs in a broad valley in a largely undeveloped region of the Mojave Desert where wildlife movement is largely unrestrained. Although true barriers to wildlife movement are lacking, the existence of interstates, highways, railroads and paved and unpaved roads may influence the movement of wildlife from one area to another to varying degrees. The Project Site is in a strip of vacant land between NTH and the Burlington Northern and Santa Fe (BNSF) railroad, both of which can be crossed at grade by most wildlife. A small wash between the quarry pits that conducts water under the railroad bridge (on the east) and through the highway bridge (on the west) also provides movement for smaller wildlife that may avoid the barriers. The wash would be avoided during construction and operation of the quarry and therefore, impacts would be less than significant, and no mitigation is required.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than Significant Impact. The Project Site does not contain trees and consists primarily of native shrubs with a low-lying understory of native and nonnative herbaceous species. As such, implementation of the proposed Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. No impacts are identified or are anticipated, and no mitigation measures are required.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community
Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Less than Significant Impact. The Project Site is within the boundaries of the Desert Renewable Energy Conservation Plan (DRECP), a comprehensive plan intended to streamline renewable energy development while conserving valuable desert ecosystems and resources. The DRECP is a collaborative effort among the Bureau of Land Management, California Energy Commission, USFWS,

May 2025 Page 34

_

³¹ Leatherman BioConsulting, Inc., *Biological Resources Assessment for the Essex Overhead Quarry San Bernardino County, California* May 15, 2023

and CDFW, collectively forming the "Renewable Energy Action Team" responsible for implementing the plan. The DRECP provides an opportunity for landscape-level planning for solar, wind, and geothermal projects. Because the current project is not a renewable energy project, it will follow existing laws and regulations and need to be approved by applicable local, state, and federal agencies as in the past. Impacts would be less than significant.

Mitigation Measures:

There is the potential for Project-related impacts on nesting birds protected under the Migratory Bird Treaty Act (MBTA), three species protected by the CDNPA and San Bernardino County code, six annual plant species, desert tortoise, burrowing owl, desert kit fox, and jurisdictional waters. Mitigation measures to avoid and minimize potential Project impacts include avoiding the nesting season or conducting pre-construction surveys during the nesting season, avoiding or salvaging CDNPA plants, saving topsoil for annual plants, implementing a variety of measures to protect the desert tortoise, conducting pre-construction surveys for burrowing owl, monitoring potential kit fox burrows for activity prior to disturbance, and conducting a jurisdictional delineation to facilitate consultation with resource agencies for potential impacts to jurisdictional waters of the state.

BIO-1 Nesting Birds

To ensure compliance with the MBTA and the California Fish and Game Code, to the extent feasible, there shall be no vegetation cutting, removal, clearing, and/or grading allowed during the nesting season (February 15 – August 15). If work is to be conducted within the nesting season, then a nesting bird survey shall be conducted by a qualified biologist within three days prior to disturbance. If nesting birds are not detected, no further action is necessary. If an active nest is detected and the qualified biologist determines that work activities may impact nesting, an appropriate buffer zone will be established around the nest. The buffer shall be established using highly visible construction fencing or flagging, and construction personnel shall be instructed on the sensitivity of nest areas. The size of the buffer may vary depending on site features, the sensitivity of the species, and the type of construction activity, but will be designed to prevent disruption of nesting activity. The nests and associated buffer zones shall be avoided until the nesting cycle is complete or it is determined by the qualified biologist that the nest has failed.

BIO-2 Special Status Plants

No specials status plants were observed during focused surveys; however, annual plants with potential to occur may not have germinated or otherwise been detected. After project completion final revegetation of slopes will be by seeding or hydro-seeding with available native species. To mitigate potential impacts, the County shall separate native topsoil, which contains native seed bank, so it can be saved and set aside during the initial clearing stages and redistributed over areas to be revegetated at the end of operation. Details regarding topsoil salvage shall be outlined in a Revegetation Plan to be prepared by the County to meet Surface Mining and Reclamation Act (SMARA) performance guidelines for re-vegetation.

Living cacti and other species protected under the CDNPA could be impacted during quarry development and operation if they occur within the quarry development footprint. If individuals cannot be avoided, removal will comply with the CDNPA and the San Bernardino County Code.

BIO-3 Desert Tortoise

The following mitigation measures are recommended to avoid potential impacts to desert tortoise. If at any time during the process desert tortoises are observed on the Project Site, the County shall not initiate construction and shall instead contact the USFWS and CDFW to develop an avoidance strategy and/or seek authorization for incidental take of desert tortoise.

Worker Environmental Awareness Program

Prior to any construction activities or site development at the quarry, the County will implement a Worker Environmental Awareness Program (WEAP) to educate on-site workers about sensitive environmental issues associated with the Project. The program will be administered to all on-site personnel, including the County's personnel, contractors, and all subcontractors, on the first day of work prior to commencing work on the site. The WEAP will emphasis the protected species that have potential to occur on or near the Project Site, including the Mojave desert tortoise, burrowing owl, nesting birds, and desert kit fox, among other plant and wildlife species. The program will include the following elements:

- A presentation, developed by or in consultation with a qualified biologist, discussing the sensitive biological resources with potential to occur on-site, and explaining the reasons for protecting these resources and penalties for non-compliance.
- Contact information for the project biological monitor, and instructions to contact the monitor with any questions regarding the WEAP information.
- An acknowledgement form, to be signed by each worker indicating that they received WEAP training and will abide by the site rules protecting biological resources.

Mojave Desert Tortoise Exclusion Fencing and Monitoring

Prior to initiation of construction activities in each project Phase, a desert tortoise exclusion fence shall be installed around the perimeter of the active quarry pit and staging area to exclude desert tortoise from entering the facility throughout the operation of the Phase. If at any time during the process desert tortoises are observed on the Project Site, the County shall not initiate construction and shall instead contact the USFWS and CDFW to develop an avoidance strategy and/or seek authorization for incidental take of desert tortoise under the federal and state Endangered Species Acts.

After the location of the desert tortoise exclusion fence is staked, a qualified biologist shall conduct a survey in all disturbance areas and along the fence line for desert tortoise. Immediately following the survey (assuming no tortoises are detected), a desert tortoise exclusion fence shall be installed around the quarry areas. The exclusion fence shall be installed in accordance with the specifications set forth in Chapter 8 of the USFWS' Desert Tortoise Field Manual (USFWS 2009), and installation of the fence shall be monitored by a biologist familiar with the installation of tortoise exclusion fencing. Following the installation of the exclusion fencing and prior to construction-related ground clearing and/or grading, the County shall retain a qualified biologist to conduct clearance surveys for the Mojave desert tortoise within the fenced area. Surveys shall follow the current guidelines for conducting clearance surveys used by the USFWS. The surveys shall consist of conducting two consecutive surveys by walking five-meter-wide parallel belt transects in a north-south and then east-west direction to obtain 100 percent coverage of the survey area. Again, if any sign indicating the presence of Mojave desert tortoise is detected, the County shall not proceed with ground clearing

and/or grading activities in the area of the find and shall instead contact the USFWS and CDFW to develop an avoidance strategy and/or seek authorization for incidental take of Mojave desert tortoise.³²

Mining activities are expected to occur sporadically on an annual basis to obtain material for emergency road maintenance and repair. Therefore, prior to use of the quarry each year, the perimeter of the fence shall be inspected for any signs of damage or wear that could potentially compromise the integrity of the exclusion perimeter. If damage or excessive wear is observed, the exclusion fence shall be repaired prior to mining activities. Results of any necessary fence inspections will be maintained to document compliance with this provision.

The results of the pre-construction surveys, including graphics showing the locations of any tortoise sign detected, and documentation of any avoidance measures taken, shall be submitted to the USFWS, CDFW, and the County to document compliance with applicable federal and state laws pertaining to the protection of Mojave desert tortoise.

BIO-4 Burrowing Owl

Because no burrowing owls or their sign were present within the survey area and suitable habitat is present in the region, the loss of habitat due to the Project is not considered an adverse impact. However, burrowing owls could move onto the site prior to Project development, so take avoidance pre-construction surveys for burrowing owl should be completed according to CDFG guidelines with one survey being conducted within 14 days of planned construction and a second survey conducted within 24 hours of grading. Depending on the results of those surveys, a Burrowing Owl Management Plan may be prepared in consultation with CDFW that will outline protection and avoidance and minimization measures that will be implemented for the project, including methods for avoidance, exclusion and burrow excavation, and passive relocation.³³

BIO-5 Desert Kit Fox

To avoid impacts to desert kit fox that could move onto the Project Site prior to quarry construction, the County shall retain a qualified biologist to conduct preconstruction surveys within 14 days of ground disturbance. The survey shall be focused on detecting any desert kit fox individuals or dens within the disturbance footprint, including all the dens reported in this document. Each den shall be classified as inactive, potentially active, or definitely active based on field observations.

Active and potentially active dens in areas that would be impacted by construction activities shall be monitored by a qualified biologist for three consecutive nights using a tracking medium (such as diatomaceous earth or fire clay) and/or motion camera stations at the entrance. If no tracks are observed in the tracking medium or no photos of the target species are captured after three nights, the den shall be excavated and backfilled by hand to prevent reuse. If tracks are observed, the den shall be classified as active, and a management plan will be developed in consultation with CDFW to identify measures for avoidance, exclusion, and/or passive relocation.

³² U.S. Fish and Wildlife Service (fws.gov)

³³ California Department of Fish and Wildlife California Department of Fish and Wildlife Home Page

BIO-6 Jurisdictional Waters

Based on Jurisdictional Delineation assessment, impact to potential jurisdictional waters is minimal. However, the following BMP measures are recommended to address any potential impacts:

- Drainage from the development areas includes runoff of water, soil, as well as inorganic and organic matter. NRAI recommends standard water quality measures required for all projects be implemented for this Project. Project design shall incorporate measures, including measures required through the National Pollutant Discharge Elimination System (NPDES) requirements, to ensure that all measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes in adjacent areas.
- Operation of motor vehicles near adjacent undeveloped lands may introduce undesirable
 petroleum products and solvents into the natural environment. All activity involving hazardous
 substances should be conducted in accordance with applicable local, State, and Federal
 safety standards.

Possible significant adverse impacts have been identified or anticipated and therefore Mitigation Measures BIO-1 through BIO-6 are required to reduce these impacts to a level below significant.

V. CULTURAL RESOURCES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Wo	ould the project:				
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?				
b)	Cause a substantial adverse change I the significance of an archaeological resource pursuant to §15064.5?		\boxtimes		
c)	Disturb any human remains, including those interred outside of formal cemeteries?		\boxtimes		

(Check if project is located in the Cultural overlays or cite results of cultural resource review)

Substantiation

San Bernardino County Countywide Plan 2020; Cultural Resources Investigation, Essex Overhead Quarry, April 2018, ECORP Consulting, Inc. (Appendix D); Cultural Inventory Survey of the Di Leva Property, An Update to the Essex Overhead Quarry Project, November 2020, Jesse Yorck, M.A., RPA-Principal Investigator (Appendix D-1); Phase I Paleontological Resources Inventory for Proposed Essex Overhead Quarry San Bernardino County, California July 2023, L&L Environmental, Inc. (Appendix E); Paleontological Resource Impact Mitigation Plan (PRIMP) for Proposed Essex Overhead Quarry San Bernardino County, California, July 2023, L&L Environmental, Inc.

Environmental Setting

The Project Area is in the southeastern portion of Fenner Valley within the community of Essex, in the Mojave Desert approximately 35 miles west of Needles. The Project Site is bordered to the north, south, and east by vacant land and a few rural structures on the adjacent parcel to the west. The Project Site is generally located northeast of the intersection of Essex Road and NTH and immediately south of the intersection of NTH and National Trails Highway.

The Project Site is currently undeveloped desert land and supports a variety of native and nonnative vegetation and wildlife. The Project Area is moderately level, and multiple seasonal drainages traverse the property from east to west. It is evident that the Project Area experiences numerous seasonal floods, as well as recreational off-highway vehicle traffic. The site is bordered by the NTH to the west and the Burlington Northern and Santa Fe (BNSF) railroad to the east. A previous quarry in the Phase I quarry site is no longer active. It was originally utilized in 1930/1931 for construction of the State NTH in the general area and used subsequently to provide material for the construction of the west side of the Essex Overhead Bridge over the railroad. Evidence of the former quarry and intensive disturbance associated with the past land use are still obvious, although some vegetation within the area continues to recover.

The margins of Watson Wash appear to be artificial, and the purpose of the wash appears to be for conducting water through the parcel from the railroad tracks (on the east) to the highway (to the west). Levees on the east side of the railroad tracks (presumably built to protect the railroad tracks) appear to direct water under the railroad bridge and into the wash.

Impact Analysis

In January 2018, ECORP prepared a Cultural Resources Investigation which is summarized herein and included as Appendix D. A records search was conducted at the South-Central Coastal Information Center (SCCIC) at the California State University, Fullerton to identify the locations and extent of previous surveys conducted within one mile of the Project Area and to determine if there are any known cultural resources (i.e., prehistoric or historic archaeological sites or historic-period features) located within or near the Project Area.

The records search results indicated that no cultural resources have been previously recorded within the Project Area and three resources have been recorded within one mile of the Project Area. Resources recorded outside of Project boundaries, but within one mile of the Project Area, consist of three historic-period sites. The three historic-period sites consist of the BNSF railroad, a tree ring and fire pit with associated refuse deposit, and a military training camp. No historic-period isolated finds or prehistoric sites or isolated finds have been previously recorded within one mile of the Project Area.

Between September and November 2020, at the request of the San Bernardino County Transportation Operations Division (Transportation Operations), the County of San Bernardino Department of Public Works (DPW), Environmental Management Division (EMD) performed a Cultural Resources Inventory of approximately 14.53 acres of adjacent land known as the Di Leva property to the north of the Project Site (APN: 0655-162-01) to be included into the original 232+/- acres of the Essex Overhead Quarry previously surveyed (see Appendix D-1). The subject cultural resources study of the Di Leva property serves as an update to the Cultural Resource Investigations Report for the Essex Overhead Quarry prepared by ECORP in 2018; both reports are summarized herein.

The 2020 update for the adjacent property concluded that a single "historical resource," as defined by CEQA, was identified within the Project Area. This "historical resource" shall be avoided during project implementation. Accordingly, it is recommended that implementation of the proposed Project shall cause no significant change or have a significant impact to any "historical resources" per CEQA. Should significant subsurface prehistoric or historic archaeological resources appear to be encountered during construction, the evaluation of any such resources should proceed in accordance with all appropriate State and County guidelines.

As defined by to PRC § 5020.1(j), a historical resource consists of, but is not limited to "any object, building, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California." In addition, CEQA guidelines define historical resources as: (1) resources listed in or eligible for listing in the California Register of Historical Resources (CRHR); (2) listed in a local register of cultural resources; or (3) determined to be significant by a Lead Agency (Title 14 California Code of Regulations [CCR] §15064.5[a][1]-[3]). A resource may be eligible for listing in the California Register of Historic Resources (CRHR) if it meets any one of the subsequent criteria:

- A. It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- B. It is associated with the lives of persons important in our past.

- C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- D. Has yielded, or may be likely to yield, information important in prehistory or history. (PRC§ 5024.1[c])

Resources that are eligible for the CRHR are "historical resources" as defined by CEQA (CCR Title 14, Section 15064.5(a)). All resources nominated for listing must have integrity, which is the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Resources, therefore, must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling and association. It must also be judged with reference to the particular criteria under which a resource is proposed for nomination.

a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Less than Significant with Mitigation Incorporated. The SCCIC records search indicated that no cultural resources have been previously recorded within the Project Area and three resources have been recorded within one mile of the Project Area. Resources recorded outside of Project boundaries, but within one mile of the Project Area, consist of three historic period sites. The three historic-period sites consist of the BNSF railroad, a tree ring and fire pit with associated refuse deposit, and a military training camp. No historic-period isolated finds or prehistoric sites or isolated finds have been previously recorded within one mile of the Project Area.³⁴ ³⁵ Implementation of mitigation measure **CUL-1** will reduce impacts to any inadvertently discovered cultural/historical resources to a less than significant level.

However, encountered during the cultural resources inventory survey was a small (60-foot) portion of NTH documented in the 2018 Cultural Resource Investigations Report for the Essex Overhead Quarry study, for which this study serves as an update. This historic-period resource consists of a road segment that is a component of National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) eligible site CA-SBR-2910H. Resource CA-SBR-2910H has been previously found to be eligible under NRHP eligibility criteria A & C, with contributing elements possibly eligible individually under Criteria B & D as well. This federal eligibility status means the road is also automatically eligible for the CRHR. This resource will be completely avoided during project implementation. Implementation of mitigation measure **CUL-2 and CUL-3** will ensure that potential impacts to the abandoned portion of NTH will be less than significant.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less than Significant Impact with Mitigation Incorporated. A cultural resources inventory was undertaken at the request of the San Bernardino County Department of Public Works in support of future improvements to National Trails Highway. The study was conducted in compliance with the cultural resources requirements of the California Environmental Quality Act (CEQA). The cultural resources investigation included a records search, field survey, and a search of the Sacred Lands File by the Native American Heritage Commission (NAHC). The records search results indicated that

³⁴ ECORP Consulting, Inc., Cultural Resources Investigation, Essex Overhead Quarry, April 2018

³⁵ L&L Environmental, Inc., A Phase I Paleontological Resources Inventory for Proposed Essex Overhead Quarry San Bernardino County, California July 2023

no cultural resources have been previously recorded within the Project Area and three resources have been recorded within one mile of the Project Area. Resources recorded outside of Project boundaries, but within one mile of the Project Area, consist of three historic-period sites. The three historic-period sites consist of the BNSF railroad, a tree ring and fire pit with associated refuse deposit, and a military training camp. No historic-period isolated finds or prehistoric sites or isolated finds have been previously recorded within one mile of the Project Area.

The archaeological sensitivity of the Project Area is believed to be low. However, the procedures described in mitigation measure **CUL-1** are recommended if unanticipated discoveries are encountered.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant Impact with Mitigation Incorporated. Mining activities could potentially disturb human remains interred outside of a formal cemetery. Thus, the potential exists that human remains may be unearthed during implementation of the proposed Project. Therefore, mitigation measure **CUL-4**, defined below, shall be implemented to ensure that less than significant impacts regarding inadvertent discoveries of human remains occur.

Mitigation Measures:

- CUL-1: If cultural/historical/archaeological resources are encountered during ground-disturbing activities, work in the immediate area shall cease and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service [NPS] 1983) shall be contacted immediately to evaluate the find(s). If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted and will be reported to the County. Should prehistoric or historic archaeological resources be encountered during construction, the evaluation of any such resource should proceed in accordance with all appropriate federal, state, and local guidelines. Specifically, all work must be halted in the immediate vicinity of the cultural resource found until a qualified archaeologist can assess the significance of the resource. In accordance with the requirements of CEQA, recordation and evaluation of the resource(s) would be required.
- **CUL-2:** No quarrying activity shall take place within 15 feet of the abandoned portion of NTH. Additionally, no vehicles shall drive directly on the NTH alignment as this could damage the original 1926 historic oil macadam pavement.
- **CUL-3:** Exclusionary fencing shall be installed along the portion of the abandoned portion of NTH within the western segment of APN 0655-162-01 prior to project implementation. This fencing should also be extended to exclude this portion of NTH from the larger Project Area (including in APN 0655-151-01) during fence installation, to ensure that the entire road segment and its remnant oil macadam surface, within the overall Project Area, is not impacted during the life of the Project's implementation.
- CUL-4: If human remains of any kind are found during construction, the requirements of CEQA Guidelines § 15064.5(e) and AB 2641 shall be followed. According to these requirements, all construction activities must cease immediately, and the San Bernardino County Coroner and a qualified archaeologist must be notified. The coroner will examine the remains and determine the next appropriate action based on his or her

findings. If the coroner determines the remains to be of Native American origin, he or she will notify the NAHC. The NAHC will then identify the most likely descendants (MLD) to be consulted regarding treatment and/or reburial of the remains. If an MLD cannot be identified, or the MLD fails to make a recommendation regarding the treatment of the remains within 48 hours after gaining access to the remains, the property owner shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.

All discovered human remains shall be treated with respect and dignity. California state law (California Health & Safety Code 7050.5) and federal law and regulations ([Archaeological Resources Protection Act (ARPA) 16 USC 470 & 43 CFR 7], [Native American Graves Protection & Repatriation Act (NAGPRA) 25 USC 3001 & 43 CFR 10] and [Public Lands, Interior 43 CFR 8365.1-7]) require a defined protocol if human remains are discovered in the State of California regardless of if the remains are modern or archaeological.

The San Bernardino County Coroner's Office must be contacted in accordance with state law within 24 hours of the discovery of human remains, and all work should be halted until a clearance is given by that office and any other involved agencies. The Coroner's Office may be contacted at the Coroner's Division, County of San Bernardino, 175 S. Lena Road, San Bernardino, CA. Tel: (909) 387-2978.

Possible significant adverse impacts have been identified or anticipated and therefore Mitigation Measures CUL-1 and CUL-4 are recommended to reduce Project related impacts to a less than significant level.

VI. ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				\boxtimes

Substantiation

San Bernardino County Countywide Plan 2020

Environmental Setting

California is one of the lowest per capita energy users in the United States, ranked 48th in the nation, due to its energy efficiency programs and mild climate (United States Energy Information Administration (EIA).³⁶ California consumed 292,039 gigawatt-hours (GWh) of electricity and 2,110,829 million cubic feet of natural gas in 2017 (California Energy Commission [CEC]³⁷ 2019; EIA 2018). In addition, Californians consume approximately 18.9 billion gallons of motor vehicle fuel per year (Federal Highway Administration 2019). The single largest end-use sector for energy consumption in California is transportation (39.8 percent), followed by industry (23.7 percent), commercial (18.9 percent), and residential (17.7 percent) (EIA 2018).³⁸

Most of California's electricity is generated in-state with approximately 30 percent imported from the Northwest and Southwest in 2017. In addition, approximately 30 percent of California's electricity supply comes from renewable energy sources such as wind, solar photovoltaic, geothermal, and biomass (CEC 2018). Adopted on September 10, 2018, SB 100 accelerates the State's Renewables Portfolio Standards Program by requiring electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

To reduce statewide vehicle emissions, California requires that all motorists use California Reformulated Gasoline, which is sourced almost exclusively from in-state refineries. Gasoline is the most used transportation fuel in California with 15.5 billion gallons sold in 2017 and is used by light-duty cars, pickup trucks, and sport utility vehicles (California Department of Tax and Fee Administration 2018). Diesel is the second most used fuel in California with 4.2 billion gallons sold in 2015 and is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles (CEC 2016). Both gasoline and diesel are primarily petroleum-based, and their consumption releases greenhouse gas (GHG) emissions, including CO₂ and NO_x. The transportation sector is the single largest source of GHG emissions in California, accounting for 41 percent of all inventoried emissions in 2016 (California Air Resources Board [CARB] 2018).

³⁶ Homepage - U.S. Energy Information Administration (EIA)

³⁷ Home Page-California Energy Commission

³⁸ Homepage - U.S. Energy Information Administration (EIA)

³⁹ Home Page-California Energy Commission

⁴⁰ Homepage | California Air Resources Board

Senate Bill 350

Senate Bill (SB) 350 (de Leon) was signed into law in October 2015 and established new clean energy, clean air, and greenhouse gas reduction goals for 2030. SB 350 establishes periodic increases to the California Renewables Portfolio Standard (RPS) Program with the target to increase the amount of electricity generated per year from eligible renewable energy resources to an amount that equals at least 33% of the total electricity sold annually to retail customers, by December 31, 2020. The SB 350 specifically calls for the quantities of eligible renewable energy resources to be procured for all other compliance periods reflecting reasonable progress in each of the intervening years to ensure that the procurement of electricity products from eligible renewable energy resources achieves 40 percent by December 31, 2024, 45 percent by December 31, 2027, and 50 percent by December 31, 2030.

Senate Bill 100

Senate Bill 100 (SB 100) was signed into law September 2018 and increased the goal of the California RPS Program to achieve at least 50 percent renewable resources by 2026, 60 percent renewable resources by 2030, and 100 percent renewable resources by 2045. SB 100 also includes a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Impact Analysis

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?

Less Than Significant Impact. Truck traffic hauling mined materials will be entirely based on the need for DPW to maintain and repair the NTH. It is estimated that material needs would range from zero to an average of 15,000 tons/year. Based on street-legal 25-ton trucks, approximately 2 to 5 trucks may access the site per an average workday, or 4 to 10 truck trips with smaller 12- to 15-tons dump trucks. Site operations will be conducted as needed intermittently primarily from 5:30 am till 8:00 pm (daylight hours only), up to 6 days per week: Monday through Saturday.

Occasionally operations may be conducted on Sundays depending on possible emergency road repair, construction and maintenance needs. Approximately five employees may work on-site. The proposed Project will provide construction material to various roads, culverts, and other DPW sites in the region, thereby reducing the energy and fuel consumption that would occur if material was transported from more distant material sources. The proposed Project is not anticipated to result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy sources during project operation. The project will reduce energy consumption by providing a more localized source for aggregate materials and reducing haul distances for materials. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. The proposed Project would not require implementation of new or expanded electric power or natural gas facilities and would not obstruct a state or local plan for renewable energy or energy efficiency. No impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required

VII. **GEOLOGY AND SOILS**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury death involving?				
 Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. 				
ii. Strong seismic ground shaking?			\boxtimes	
iii. Seismic-related ground failure, including liquefaction?				
iv. Landslides?				
b) Result in substantial soil erosion or the loss of topsoil?			\boxtimes	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?				
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				
(Check if project is located in the Geologic Hazards or Pal	eontological	Resources	Overlay Dis	strict ():

Substantiation

San Bernardino County Countywide Plan 2020; Phase I Paleontological Resources Inventory for Proposed Essex Overhead Quarry San Bernardino County, California July 2023, L&L Environmental, Inc.; Paleontological Resource Impact Mitigation Plan (PRIMP) for Proposed Essex Overhead Quarry San Bernardino County, California, July 2023, L&L Environmental, Inc.; San Bernardino Policy Plan; Hazards Element, Map HZ-1 Earthquake Fault Zones Map HZ-2 Liquefaction and Landslides

Environmental Setting

The Project Site is located 1.7 miles northeast of the community of Essex that has a population of approximately 10, in the central Mojave Desert approximately 35 miles west of Needles. The site is bordered on the north, east, and south by vacant lands, and to the west by a parcel classified as single-

family residence with various rural structures across National Trails Hwy. The Project Site lies in a broad gently sloping valley on the desert floor between the Clipper Mountains (to the west) and the Piute Mountains (to the east), at an elevation that ranges from approximately 1,780 to 1,830 feet above mean sea level (msl).

There are no mapped faults within 5 miles from the Project Site. The nearest fault to the Project Site is Lavic lake Fault Zone approximately 61.9 miles west of the Project Site. The Site also is not within or near an Alquist Priolo Zone. It also is not located in an area with mapped, existing landslides or liquefaction hazards. Geologic mapping of the Project Area indicates the majority of the Project Site is located atop Holocene to middle Pleistocene age eolian and alluvial fan deposits (Qyea and Qia). Qyea is comprised of mostly mixed sand with sparse gravel. Qyea beds are variously arranged as either interfingering, distinctly layered, or thoroughly intermixed, spread over broad and flat surfaces with little evidence of the alluvial channels. Exposed surfaces of Qia frequently appear flat and smooth, moderate to strong desert varnish is common, and soil is well developed – very little of Qia's original material and bedding structure remains. The top unit of soil is an A horizon that retains an appreciable amount of non-biogenic clay with some silt and fine sand. This A horizon is underlain by a series of clay and calcic B horizons. Below those, the unit is primarily composed of poorly sorted sandy gravel.

Results of the records searches provided by the San Bernardino County Museum and Los Angeles County Museum of Natural History indicate that there are no previously recorded paleontological resources within 10 miles of the Project Area.⁴¹

Impact Analysis

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
 - ii. Strong seismic ground shaking?
 - iii. Seismic related ground failure, including liquefaction?
 - iv. Landslides?
 - Priolo Earthquake Fault Zone. The Project Site is not located adjacent to or within an Alquist Priolo Earthquake Fault Zone. The nearest fault zone is the Lavic Lake Fault zone approximately 61.9 miles west of the Project Site. The maximum magnitude earthquake produced from the Lavic Lake Fault is unknown, however the 1999 Hector Mine Earthquake that resulted from a slip of the Lavic Lake Fault measured 7.1 on the Richter Scale. Further, the site does not contain habitable structures and no such structures are proposed. As such, implementation of mining activities is not anticipated to expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death following rupture of a known earthquake fault. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

⁴¹ L&L Environmental, Inc., A Phase I Paleontological Resources Inventory for Proposed Essex Overhead Quarry San Bernardino County, California July 2023

⁴² San Bernardino County Policy Plan, Hazards *Map HZ-1 – Earthquake Fault Zones*

- ii) Less Than Significant Impact. As is the case with all of Southern California, moderate seismic shaking of the site can be expected to occur during the lifetime of the proposed mining and reclamation. Seismic ground shaking is influenced by the proximity of the site to an earthquake fault, the intensity of the seismic event, and the underlying soil composition. The proposed Project does not include construction of habitable structures or permanent facilities with foundations that could fail as a result of strong seismic ground shaking. As such, less than significant adverse impacts are identified or anticipated, and no mitigation measures are required.
- iii) **No Impact**. Liquefaction is a process in which cohesion-less, saturated, fine-grained sand and silt soils lose shear strength due to ground shaking and behave as fluid. The Project Site is not located in an area susceptible to liquefaction.⁴³ Therefore, no impact is identified or anticipated, and no mitigation measures are required.
- iv) **No Impact**. Seismically induced landslides and other slope failures are common occurrences during or soon after earthquakes. The Project Site is neither located in an area with mapped existing landslides nor is it located in an area susceptible to landslides. Therefore, no impact is identified or anticipated, and no mitigation measures are required.
- b) Result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact. Overburden/topsoil removal involves use of a bulldozer to remove up to 1-foot of weathered rock and alluvium from the ground surface. This material is stockpiled on-site in common stockpile areas and will be utilized during reclamation efforts for backfill, slope reduction, and grading. The existence of topsoil is very minimal at the site. The topsoil or surface material that is encountered is cleared with a bulldozer and stockpiled for future use as a growth media. All identified topsoil, or at minimum the top 6 inches of surface soils and material, will be graded into stockpiles to preserve as much of the organic material and seeds as practicable.

The process of limiting the size of total disturbed areas helps to prevent erosion and sedimentation. Where practical, run-off will be diverted from undisturbed areas around the active mining area. All stockpiles on-site shall be contour graded to blend in with the surrounding topography to the extent possible to prevent water erosion. Keeping the stockpiles to a low profile, contour graded and wetted as necessary will minimize wind erosion of stockpile material. The control of drainage, erosion, and sedimentation of the mine site will primarily involve the following primary best management practices (BMPs) as applicable:

- Limiting surface disturbance to the minimum area required for active operations.
- Monitoring erosion on slopes and implementation of one or more soil stabilization practices as applicable for the site such as: earthen berms or dikes; silt fence; fiber rolls; straw bales; gravel bags; sediment basin(s); and straw mulch.
- Stabilizing disturbed areas through grading slopes to 3H:1V; and
- After project completion final revegetation by seeding or hydro-seeding with native species.

May 2025 Page 49

-

⁴³ San Bernardino County Policy Plan, Hazard Element Map HZ-2 Liquefaction and Landslides

Revegetation will be used for the long-term control of erosion. Access points and mined surfaces will be water sprayed as necessary to reduce wind erosion during operations. 44 With implementation of associated BMPs, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?

Less than Significant Impact. As discussed above, the potential for liquefaction at the Project Site is very low. Moderate seismic shaking of the site can be expected to occur during the lifetime of the proposed mining and reclamation. The Project Site is neither located in an area with mapped, existing landslides nor is it located in an area as noted above that is susceptible to landslides. Although the Project Site's susceptibility to lateral spreading and subsidence is unknown at this time, reclamation of the mine will be undertaken at the completion of mining operations. Furthermore, no structures are proposed at the mine area. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

No Impact. The proposed Project does not include construction of habitable structures or permanent facilities; therefore, implementation would not expose people or structures to substantial risks due to expansive soils. No impacts are identified or are anticipated, and no mitigation measures are required.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. Septic tanks and/or alternative wastewater supply systems do not exist at the mine site. Portable toilets would be supplied for use by employees at the mine operations area. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant Impact with Mitigation Incorporated. A Paleontological Resources Assessment Report which includes a Paleontological Resources Management and Monitoring Plan (PRIMP) dated July 23,2023 was prepared by L&L Environmental and is summarized herein and included as Appendix E, and records searches provided by the San Bernardino County Museum (SBCM) in Redlands (October 20, 2022), no paleontological localities were found within the proposed Project Site, nor within a 10-mile radius of any point from the project's perimeter. There are no records of SBCM having worked in the area around the Project Site, and thus the results of this report should be interpreted as absence of data rather than absence of fossils.

Geologic mapping of the Project Area indicates the majority of the Project Site is located atop Holocene to middle Pleistocene age eolian and alluvial fan deposits (Qyea and Qia). Qyea is

May 2025 Page 50

_

⁴⁴ Leatherman BioConsulting, Inc., Essex Overhead Quarry Revegetation Plan San Bernardino County, California, July 2023.

⁴⁵ L&L Environmental, Inc., A Phase I Paleontological Resources Inventory for Proposed Essex Overhead Quarry San Bernardino County, California July 2023

comprised of mostly mixed sand with sparse gravel. Qyea beds are variously arranged as either interfingering, distinctly layered, or thoroughly intermixed, spread over broad and flat surfaces with little evidence of the alluvial channels. Exposed surfaces of Qia frequently appear flat and smooth, moderate to strong desert varnish is common, and soil is well developed – very little of Qia's original material and bedding structure remains. The top unit of soil is an A horizon that retains an appreciable amount of non-biogenic clay with some silt and fine sand. This A horizon is underlain by a series of clay and calcic B horizons. Below those, the unit is primarily composed of poorly sorted sandy gravel. 46

On November 3, 2022 Hugh Wagner, Ph.D. and Joshua Ball, BA performed a walkover of the project and surrounding area. The encountered surface is consistent with the silt, sand, and gravel described by Bedford et al. (2010). No evidence of fossil resources was observed during the survey.

The parcels are underlain by alluvial fan and eolian sand deposits mapped as Qyea/Qui of Holocene to latest Pleistocene age. 47 Western parcels have a flat surface that has been disturbed over the past 50+ years. The surface has numerous tracks across it with historic trash and windblown debris on the surface. A small channelized intermittent stream crosses the surface through one (1) area. The ground surface is a light brown fine silty sand, with small undisturbed patches of desert pavement consisting of dark gray subangular clasts, quartzite, and surrounded clasts of light gray dolomite up to 2 inches in diameter. Rare black cobbles of vesicular basalt were observed on this surface. No fossils were observed and no recent or fossil bone fragments were observed on the ground surface. Undisturbed sedimentary deposits were not observed on these parcels. Impacts will be less than significant; however, mitigation measure **GEO-1** will ensure that any inadvertent paleontological discoveries are treated in such a way to reduce impacts to a less than significant level.

Mitigation Measure:

GEO-1:There is unknown potential for locating significant paleontological resources during work at depth within the Project Area. Because of this potential, any excavation beyond 15 feet in depth should be monitored by a qualified paleontologist, as outlined in the recommended Paleontological Resource Impact Mitigation Plan (PRIMP) for the project included in Appendix E.

Mitigation Measure GEO-1 will reduce impacts to Geology and Soils to a less than significant level.

May 2025 Page 51

_

⁴⁶ Bedford, D. R., D. M. Miller, and G. A. Phelps. 2010. Surficial Geologic Map of the Amboy 30' x 60' Quadrangle, San Bernardino County, California: U. S. Geological Survey Scientific Investigations Map 3109. https://ngmdb.usgs.gov/Prodesc/proddesc_93795.htm
⁴⁷ Ibid

VIII. GREENHOUSE GAS EMISSIONS

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Wo	ould the project:				
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			\boxtimes	

Substantiation

San Bernardino County Countywide Plan 2020; SCAQMD Off-road Model-Mobile Source Emissions Factors 2025

Background

According to CEQA Guidelines section 15064.4, when making a determination of the significance of greenhouse gas emissions, the "lead agency shall have discretion to determine, in the context of a particular project, whether to (1) quantity greenhouse gas emissions resulting from a project and/or (2) rely on a qualitative analysis or performance-based standards. Moreover, CEQA Guidelines section 15064.7(c) provides that "a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts" on the condition that "the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

San Bernardino County GHG Reduction Plan

In September 2011, the County adopted a Greenhouse Gas Emissions (GHG) Reduction Plan (September 2011) (GHG Plan). The GHG Plan presents a comprehensive set of actions to reduce the County's internal and external GHG emissions to 15% below current levels (2007 levels) by 2020, consistent with the AB 32 Scoping Plan. GHG emissions impacts are assessed through the GHG Development Review Process (DRP) by applying appropriate reduction requirements as part of the discretionary approval of new development projects. Through its development review process, the County will implement CEQA requiring new development projects to quantify project GHG emissions and adopt feasible mitigation to reduce project emissions below a level of significance. The GHG Reduction Plan was updated in June 2021 (GHGRP Update). A review standard of 3,000 metric tons of CO₂ equivalent (MTCO₂e) per year is used to identify projects that require the use of Screening Tables or a project-specific technical analysis to quantify and mitigate project emissions. Note that the MDAQMD has an annual threshold of 100,000 tons of Carbon Dioxide equivalent (CO₂e) per year.

⁴⁸ LSA Associates, Inc. San Bernardino County Greenhouse Gas Reduction Plan Update. Adopted September 21, 2021

⁴⁹ GHG Reduction Plan Update-Greenhouse Gas Reduction Plan Update - Adopted 9-21-2021.pdf (sbcounty.gov)

Impact Analysis

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. Per CEQA guidelines, new project emissions are treated as standard emissions, and air quality impacts are evaluated for significance on an air basin or even at a neighborhood level. Greenhouse gas emissions are treated differently, in that the perspective is global, not local. Therefore, emissions for certain types of projects might not necessarily be considered as new emissions if the project is primarily population driven. Many gases make up the group of pollutants that are believed to contribute to global climate change. However, three gases are currently evaluated carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). SCAQMD provides guidance methods and/or Emission Factors. MDAQMD allows the use of this methodology.⁵⁰

A threshold of 3,000 MTCO₂e per year has been adopted by the County as potentially significant to global warming. Utilizing the SCAQMD's Off-Road Mobile Source Emission Factors (2025), annual operation GHG emissions amount to approximately 377.1 MTCO₂e per year based on a worst case of 4 hours/day operation on up to 250 days per year (see Table 4).⁵¹

Table 4
Greenhouse Gas Emissions Metric
Lbs. per Day

Equipment	CO ₂	CH ₄	N ₂ 0		
Loader	436.00	0.02	0.00		
Water Truck	492.00	0.02	0.00		
Excavator	480.00	0.02	0.00		
Dozer	956.00	0.06	0.00		
Dump/Haul Trucks	984.00	0.03	0.00		
Total Lbs. Per Day		3,352.40			
MTCO₂e per Year		377.1			
MDAQMD Threshold		100,000			
Significant	t No				
County Threshold (MTCO ₂ e)	3,000				
Significant	No				

Emission Sources: SCAQMD Off-Road Mobile Source Emission Factors (Scenario Year 2025) Note: Assumes 250 working days/year.

As demonstrated, operations would not exceed the MDAQMD's nor the County's GHG thresholds. Therefore, the proposed Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. The project will reduce overall GHG emissions providing a more localized source for aggregate materials and reducing haul distances for materials.

May 2025 Page 53

_

⁵⁰ AQMD - Home

⁵¹ South Coast Air Quality Management District. *Off-Road Mobile Source Emission Factors* (2025). http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook

No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

Required Conditions

The project emissions are less than significant; however, the applicant will be required to implement GHG reduction performance standards. The GHG reducing performance standards were developed by the County to improve the energy efficiency, water conservation, vehicle trip reduction potential, and other GHG reducing impacts from all new development approved within the unincorporated portions of San Bernardino County. As such, the following Performance Standards establish the minimum level of compliance that development must meet to assist in meeting the 2020 GHG reduction target identified in the County GHG Emissions Reduction Plan. These Performance Standards apply to all Projects, including those that emit less than 3,000 MTCO₂e per year, and will be included as Conditions of Approval for development projects.

The following are the Performance Standards (Conditions of Approval) that are applicable to the Project:

- 1. Public Works shall submit for review and obtain approval from County Planning of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements to reduce GHG emissions and submitting documentation of compliance. The developer/construction contractors shall do the following:
 - i. Select construction equipment based on low GHG emissions factors and high-energy efficiency.
 - ii. All construction equipment engines shall be properly tuned and maintained in accordance with the manufacturer's specifications prior to arriving on site and throughout construction duration.
 - iii. All construction equipment (including electric generators) shall be shut off by work crews when not in use and shall not idle for more than 5 minutes.
- b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. According to the County of San Bernardino GHG Reduction Plan, all development projects, including those otherwise determined to be exempt from CEQA will be subject to applicable Development Code provisions, including the GHG performance standards, and state requirements, such as the California Building Code requirements for energy efficiency. With the application of the GHG performance standards, projects that are exempt from CEQA and small projects that do not exceed 3,000 MTCO₂e per year will be considered consistent with the Plan and determined to have a less than significant individual and cumulative impact for GHG emissions. The GHG Reduction Plan also states that "the 3,000 MTCO₂e per year value was chosen as the medial value and is used in defining small projects that must include the Performance Standards but do not need to use the Screening Tables or alternative GHG mitigation analysis.

The project's total net operational GHG emissions do not exceed the County's screening threshold of 3,000 MTCO₂e per year. Therefore, the Proposed Project does not need to accrue points using the screening tables and is consistent with the GHG Reduction Plan. The project will reduce overall GHG emissions providing a more localized source for aggregate materials and reducing haul

distances for materials. The Proposed Project will not result in substantial emissions of greenhouse gases and will not conflict with the GHG Plan. Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

Mitigation Measures:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

IX. HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environmenthrough the routine transport, use, or disposal of hazardous materials?				
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	t 🗆			
c) Emit hazardous emissions or handle hazardous or acutel hazardous materials, substances, or waste within one-quarte mile of an existing or proposed school?				
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	;			\boxtimes
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the Project Area?	;			
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
g) Expose people or structures, either directly or indirectly, to a significant risk loss, injury or death involving wildland fires?			\boxtimes	

Substantiation

San Bernardino County Countywide Plan 2020; San Bernardino County Policy Plan; Hazards Element, Maps HZ-5 Fire Hazard Severity Zones, HZ-6 Fire Responsibility Area and HZ-9 Airport Safety & Planning

Environmental Setting

The Project Site is located 1.7 miles northeast of the community of Essex, in the Mojave Desert approximately 35 miles west of Needles. The community of Essex, with a population of approximately 10 people, is dependent on the City of Needles for any services for its residents as it is the closest population center. The Project Site is bordered on the north, south, and east by vacant land with a few rural structures on the adjacent parcel to the west.

Impact Analysis

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact. There will be no imported waste materials or chemicals brought to the Project Site besides fuel and equipment maintenance fluids during active mining periods. Maintenance and fueling will be conducted by a mobile maintenance truck if needed and BMPs will be implemented. All used fluids will be removed from the equipment and from the site following standard regulations. No fuel or used fluids will be stored on-site.

Furthermore, mined material will be loaded directly into trucks for transport to DPW sites. No crushing or screening or any process plant facilities are utilized on-site. Therefore, there is no need for on-site diesel-powered electricity or commercial power. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact. As stated above, no fluids and no fuel tanks will be permanently placed on-site. Furthermore, the proposed Project does not include blasting and, therefore, no explosives will be used or stored on-site. As such, the proposed Project is not anticipated to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. The schools located nearest to the Project Site are those within the Needles Unified School District approximately 35 miles east of the Project Site. No schools are known to be proposed within one-quarter mile of the Project Site. Therefore, the proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. No impacts are identified or are anticipated, and no mitigation measures are required.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The Project Site was not found on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 by the California Department of Toxic Substances Control's EnviroStor data management system as reviewed on December 13, 2023.⁵² The operator would comply with all applicable federal and state safety rules and regulations regarding hazardous materials. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

May 2025 Page 57

-

⁵² EnviroStor (ca.gov)

- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the Project Area?
 - **Less than Significant Impact.** The Project Site is within Airport Safety Review Area and subject to military review. However, the Project is not within two miles of an active airport or private airstrip.⁵³ The proposed Project does not include construction of habitable structures or permanent facilities and, therefore, the proposed Project would not result in a safety hazard for people residing or working in the Project Area. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.
- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
 - **No Impact.** Activities associated with the proposed Project would not impede existing emergency response plans for the Project Site and/or other land uses in the Project vicinity. Vehicles and stationary equipment would be staged off public roads and would not block emergency access routes. Therefore, implementation of the proposed Project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. No impacts are identified or are anticipated, and no mitigation measures would occur.
- g) Expose people or structure, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?
 - **Less than Significant Impact.** The Project Site is not within a Fire Safety overlay, fire severity threat at the Project Site is considered moderate.⁵⁴ Additionally, the proposed Project does not include construction of habitable structures or permanent facilities and, therefore, implementation would not expose people or structures to a significant risk of loss, injury or death involving wildland fires. No significant impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measure:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

⁵³ San Bernardino County Policy Plan; Hazards Element, Maps HZ-9 Airport Safety & Planning

⁵⁴ San Bernardino County Hazard Overlay Map HZ-5 Fire Hazard Severity Zones

X. HYDROLOGY AND WATER QUALITY

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Wo	ould the project:				
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?			\boxtimes	
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would?				
	I. Result in substantial erosion or siltation on – or off-site;				
	 Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on – or off-site; 				
	III. Create or contribute runoff water which would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional resources of polluted runoff; or				
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				\square

Substantiation

San Bernardino County Countywide Plan 2020: San Bernardino County Policy Plan; Hazards Element, *Maps HZ-4 Flood Hazards*

Environmental Setting

The Project Site lies in a broad gently sloping valley on the desert floor between the Clipper Mountains (to the west) and the Piute Mountains (to the east), at an elevation that ranges from approximately 1,780 to 1,830 feet above mean sea level (msl). Large natural drainages and major landforms and topographic features are largely absent. During storm events the site drains to the west southwest via several small, incised channels and many smaller well-defined and ill-defined channels. A desert wash occurs between the two proposed quarry sites (Phases and 1 and 2), and is outside the Project impact area, as depicted in the Mine Plan. The margins of the wash appear to be artificial, and the purpose of the wash appears to be for conducting water through the parcel from the railroad tracks (on the east) to the highway (to the west). Levees on the east side of the railroad tracks (presumably built to protect the railroad tracks) appear to direct water under the railroad bridge and into the wash.

Impact Analysis

- a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?
 - **No Impact.** Groundwater is anticipated to flow northwest and west generally mimicking surface topography. According to State Water Board Groundwater Ambient Assessment Program (GAMA), groundwater in the area is recorded at a depth greater than 350 feet below ground surface (bgs). No wastewater will be generated as a result of operations. As such, the proposed Project will not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.
- b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
 - Less than Significant Impact. Water use on-site will be utilized to minimize dust generation. A water truck will be used for wetting-down material and roads during mining activities and for wetting-down haul trucks prior to site departure. Approximately 4,000 gallons of water a day (6 to 20 days a year) may be used for dust suppression activities. It is not anticipated that there will be any excess water from the wetting-down procedure; therefore, no recycling is required or planned. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.
- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would?
 - I. Result in substantial erosion or siltation on or off-site;
 - II. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site;
 - III. Create or contribute runoff water which would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional resources of polluted runoff; or
 - Less than Significant Impact. The final slopes will gently slope at 3H:1V upward 30 feet from the north to south. There are no drainage or run-off channels that will be affected by the mining. Only direct precipitation will affect the site from the hillside slopes. The pits are designed with a natural grade towards the northwest to collect any run-off from the slopes in that area that will act as a sediment or retention basin (percolation basin). The slopes are designed at very gentle 3H:1V that would reduce possible slope erosion and runoff channeling down the slopes.

During the course of mining and the final design of the 3H:1V slope contouring, some erosion may occur during heavy rainfall on the slopes. Erosion sediment caused by rainfall will be retained at the bottom of the pit or channels backfilled. Any water retained within the pit and/or detention basin will not impact adjacent properties or local roads due to its containment.

⁵⁵ The Groundwater Ambient Monitoring and Assessment (GAMA) Program | California State Water Resources Control Board

After each major storm event, any final slopes will be visually inspected to determine if any substantial erosion is evident such as sheet, rill or gully erosion. Erosion and sedimentation will be controlled by utilizing applicable BMPs which will be constructed and modified based on actual conditions as operations progress. In addition, a SWPPP would be implemented to control runoff and sedimentation from project disturbance. Furthermore, final revegetation will be used for the long-term control of erosion. Access points and mined surfaces will be water sprayed as necessary to reduce wind erosion during operations. Therefore, the proposed Project will not substantially alter the existing drainage pattern that would result in substantial erosion or siltation or runoff on- or off-site. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

- II. Less than Significant Impact. The proposed Project will not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site. There will be no off-site run-off. Only direct precipitation will affect the site from the hillside slopes. The pits are designed with a natural grade towards the northwest to collect any run-off from the slopes in that area that will act as a sediment or retention basin (percolation basin). The slopes are designed at very gentle 3H:1V that would reduce possible slope erosion and runoff channeling down the slopes. As such, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.
- III. Less than Significant Impact. There are no existing or planned off-site stormwater drainage systems in the vicinity of the proposed Project. As stated above, the slopes are designed at very gentle 3H:1V that would reduce possible slope erosion and runoff channeling down the slopes. There will be no runoff away from the site. The proposed Project is not anticipated to create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.
- d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact. The Project Site is not located within Flood Plain Safety (FP) Overlay District or within a dam inundation area.⁵⁶ Tsunamis are large waves generated in open bodies of water by fault displacement of major ground movement. Due to the inland location of the Project Site, tsunamis are not considered to be a risk. Seiches are standing waves generated in enclosed bodies of water in response to ground shaking. The Project Site is not located in the immediate vicinity of a known large body of water or water storage facility and therefore impacts from potential seiches are not anticipated. Therefore, the proposed Project is not anticipated to risk release of pollutants due to project inundation. No impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

⁵⁶ San Bernardino County Policy Plan; Hazards Element, *Maps HZ-4 Flood Hazards*

XI. LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?				\boxtimes
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				

Substantiation

San Bernardino County Countywide Plan 2020

Environmental Setting

The Project Site is located in the desert region of western San Bernardino County 1.7 miles northeast of the unincorporated community of Essex, 35 miles west of the City of Needles within the Resource Land Management (RLM) land use category and Resource Conservation (RC) zoning district. The Project Site is south of Interstate 40 along the NTH at Goffs Road and west of the Burlington Northern Santa Fe Railroad (BNSF).

Impact Analysis

a) Physically divide an established community?

No Impact. The proposed Project is a conditionally acceptable use within the Resource Conservation (RC) zone as demonstrated by Table 82-4, Allowed Land Uses and Permit Requirements for Resource Land Management (RLM) Land Use Zoning Districts, of the San Bernardino County Development Code. The general project vicinity consists of undeveloped open space. A portion of the Project Site was used historically as a quarry and other areas show signs of past disturbance left by humans. Therefore, the proposed Project would not physically divide an established community. No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. Essex Overhead Quarry is proposed to provide general fill material for various DPW sites for annual maintenance and/or emergencies. DPW is proposing to remove up to 10,000 cubic yards (cy) of fill material a year. No changes from existing conditions are proposed. The proposed Project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project as the project is consistent with all applicable land use policies and regulations. No impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

No impacts are identified or are anticipated, and no mitigation measures are required.

XII. MINERAL RESOURCES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Wo	ould the project:				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				
b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				

Substantiation

San Bernardino County Countywide Plan 2020; San Bernardino County Countywide Plan/Policy Plan; Natural Resources Element, Map NR-4 Mineral Resources Zones

Environmental Setting

The proposed Project is located within the Fenner Valley 1.7 miles northeast of the unincorporated community of Essex within the County of San Bernardino. The site occupies vacant land south of Interstate 40 between NTH and the Burlington National and Santa Fe (BNSF) railroad approximately 35 miles west of Needles. The Project Site is not within a Mineral Resources zone as described by Map NR-4 Mineral Resources from the Natural Resources Element of the San Bernardino County Policy Plan.

Impact Analysis

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Less than Significant Impact. The proposed Project is an application to provide general fill material for various San Bernardino County DPW sites for annual maintenance and/or emergency repair due to storm events. As stated, the proposed Project is a conditionally acceptable use within the Resource Conservation (RC) zone. Therefore, the proposed Project would result in adding to the availability of a known mineral resource that is of value to the region and residents. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Less than Significant Impact. The Project Site is not designated as a mineral resource recovery site as delineated on a local general plan, specific plan, or other land use plan. Additionally, as stated, the proposed Project is a conditionally acceptable use within the RC zone. The proposed Project is an application to provide general fill material for various San Bernardino County DPW sites for annual maintenance and/or emergency repair due to storm events and, therefore, implementation of the proposed Project would result in a beneficial effect regarding availability of mineral resources. As such, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

XIII. NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b) Generation of excessive groundborne vibration of groundborne noise levels?				
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the Project Area to excessive noise levels?			\boxtimes	

Substantiation

San Bernardino County Countywide Plan 2020; Countywide Plan/Policy Plan, Hazards Element, *Map HZ-9 Airport Safety & Planning Areas*

Environmental Setting

The Project Site is located 1.7 miles northeast of the community of Essex with a population of approximately 10, in the central Mojave Desert approximately 35 miles west of Needles. The site is bordered on the north, east, and south by vacant lands, and to the west by a parcel classified as single-family residence with various rural structures across National Trails Hwy. It has not been confirmed whether or not this residence is occupied or abandoned.

Impact Analysis

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant Impact. The Project Site is within a primarily undeveloped area consisting of open space. The nearest sensitive receptors are the single-family residence located approximately 300 feet across NTH west of the Project Site. However, it has not been confirmed whether or not this residence is occupied or abandoned. Noise will only be produced from the on-site equipment and will be minimal as operations will be on an as needed basis and not a daily occurrence. Operations would be required to conform to applicable noise control regulations as outlined in Section 83.01.080, Noise, of the San Bernardino County Development Code. Therefore, with adherence to the Development Code, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

b) Generation of excessive groundborne vibration of groundborne noise levels?

Less than Significant Impact. As stated, the Project Site is within a primarily undeveloped area consisting of open space. The nearest sensitive receptors would be the single-family residence located approximately 300 feet across NTH west of the Project Site. However, it has not been confirmed whether or not this residence is occupied or abandoned. Groundborne vibration will be produced from the on-site equipment, however, operations would be required to conform to applicable vibration control regulations as outlined in Section 83.01.090, Vibration, of the San Bernardino County Development Code. Therefore, with adherence to the Development Code, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the Project Area to excessive noise levels?

Less than Significant Impact. The Project Site is within the Airport Safety Review *AR-4 overlay* as is most of the County. The AR 4 overlay includes the low altitude/high speed corridors designated for military use. An Avigation Easement would be granted to the appropriate military agency and recorded before the issuance of a building permit for those uses established within an AR4. However, as no building permits would be required for the Proposed Project, no action would be required. The nearest airstrip to the Project Site approximately 1.2 miles northeast is the abandoned Camp Essex Army Airfield, of which remains are still visible. This uniquely configured airfield has two parallel runways and twelve "hardstands," where aircraft could be parked. The Project Site is located more than two miles from an active public airport or public use airport. Based on the proposed use and nature of the Project no significant adverse impacts to military operations are identified or are anticipated, and no mitigation measures are recommended.

Mitigation Measures:

No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

⁵⁷ San Bernardino County Countywide Plan 2020; Countywide Plan/Policy Plan, Hazards Element, *Map HZ-9 Airport Safety & Planning Areas*

XIV. POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Induce substantial unplanned population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
b) Displace substantial numbers of existing people or housing necessitating the construction of replacement housing elsewhere?				

Substantiation

San Bernardino County Countywide Plan 2020

Environmental Setting

The Project Site is located 1.7 miles northeast of the community of Essex with a population of approximately 10, in the central Mojave Desert approximately 35 miles west of Needles. The site is bordered on the north, east, and south by vacant lands, and to the west by a parcel classified as single-family residence with various rural structures across National Trails Hwy.

Impact Analysis

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact. Existing County DPW employees would utilize the mine site to obtain fill for maintenance and repair of local and regional roads, culverts, and bridges. The proposed Project would not result in any population growth. Furthermore, the proposed Project is a conditionally acceptable use within the RC zone and therefore implementation of the proposed Project would not induce substantial growth in the area. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The Project Site is presently vacant and therefore the proposed Project would not displace substantial numbers of existing people or housing units or require the construction of replacement housing. No impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

XV. PUBLIC SERVICES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
	i. Fire protection?			\boxtimes	
	ii. Police protection?			\boxtimes	
	iii. Schools?				
	iv. Recreation/Parks?				
	v. Other public facilities?			\boxtimes	

Substantiation

San Bernardino County Countywide Plan 2020; San Bernardino Policy Plan; Hazards Element, *Maps HZ-5 Fire Hazard Severity Zones and HZ-6 Fire Responsibility Area*

Environmental Setting

The Project Site is located 1.7 miles northeast of the community of Essex, in the Mojave Desert approximately 35 miles west of Needles. The community of Essex, with a population of approximately 10 people, is dependent on the City of Needles for any services for its residents as it is the closest population center. The Project Site is bordered on the north, south, and east by vacant land. One property with rural residential structures is located adjacent to the west.

Impact Analysis

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection, Police protection, Schools, Recreation/Parks, Other public facilities?

i. Fire Protection

Less than Significant Impact. The Project Site is not within a Fire Safety overlay, fire severity threat at the Project Site is considered moderate.⁵⁸ Fire protection services are provided by San Bernardino County Fire Protection District (SBCFPD). The closest SBCFPD Station to the Project

⁵⁸ San Bernardino County Countywide Plan 2020; San Bernardino Policy Plan; Hazards Element, *Maps HZ-5 Fire Hazard Severity Zones and HZ-6 Fire Responsibility Area*

Site is SB County Fire Station 32 located at 100 Safari Drive, Needles, approximately 35 miles east of the Project Site. No structures are proposed with the Project reducing the risk of a fire event. The proposed Project does not include any type of residential use or other land use that may generate a population that would increase the demand for fire services. As such, the proposed Project would receive adequate fire protection services and would not result in the need for new or physically altered fire protection facilities. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

ii. Police Protection

Less than Significant Impact. Police services will be provided to the Project Site through the San Bernardino County Sheriff's Department. The station located nearest to the Project Site is the San Bernardino County Sheriff Needles Substation located approximately 35 miles east of the site. The proposed Project does not include any type of residential use or other land use that may generate a population that would increase the need for police protection. The proposed Project is a conditionally acceptable use within the RC zone and therefore would result in the requirement of police protection that is already anticipated by the County. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

iii. Schools

No Impact. The proposed Project would not create a direct demand for public school services as the proposed Project does not include any type of residential use or other land use that may induce population growth. It is expected that the employment generated by the proposed Project would be filled from the Needles area and would not result in substantial growth that was not already anticipated by the County. As such, the development would not generate any new schoolaged children requiring public education. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

iv. Parks

No Impact. The proposed Project does not include any type of residential use or other land use that may generate a population that would increase the use of existing neighborhood and regional parks or other recreational facilities in the vicinity. Employees are anticipated to come from the local labor pool in the city of Needles and implementation of the proposed Project would not result in an increased use or substantial physical deterioration of an existing neighborhood or regional park. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

v. Other Public Facilities

Less than Significant Impact. The proposed Project is not expected to result in a demand for other public facilities/services, such as libraries, community recreation centers, and/or animal shelters. Implementation of the proposed Project would not adversely affect other public facilities or require the construction of new or modified facilities. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

XVI. RECREATION

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				

Substantiation

San Bernardino County Countywide Plan 2020

Environmental Setting

The Project Site is approximately 1.7 miles northeast of the unincorporated community of Essex, CA. south of Interstate 40 between NTH and the BNSF railroad, and 35 miles west of the city of Needles. Surrounding parcels are vacant. Regional parks or other recreational facilities in the vicinity include the BLM Piute Mountains Wilderness area approximately 0.5 miles east of the Project Site and the BLM Clipper Mountain Wilderness Area 4.5 miles west of the Project Site.

Impact Analysis

- a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
 - **No Impact.** No residential use or other land use that may generate a population that would increase the use of existing neighborhood and regional parks or other recreational facilities in the vicinity is proposed. Accordingly, implementation of the proposed Project would not result in the increased use or substantial physical deterioration of an existing neighborhood or regional park. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.
- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?
 - **No Impact.** The proposed Project does not include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

No impacts are identified or are anticipated, and no mitigation measures are required.

XVII. TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?				
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?				
d) Result in inadequate emergency access?				\boxtimes

Substantiation

San Bernardino County Countywide Plan 2020

Environmental Setting

The site is located on County owned lands to the southwest of the intersection of NTH and the Essex Overpass BNSF railroad tracks, approx. 1.7 miles northeast of Essex in the eastern Mojave Desert. The NTH borders the site on the west and north while the Burlington National and Santa Fe (BNSF) railroad lines extend along the east side of the planned mining pits. The site can be accessed via Interstate 40 Essex Road exit and travel southeast to National Trails Highway, or the Goffs Road exit also from Interstate 40 then southwest to National Trails Highway.

Impact Analysis

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than Significant Impact. The Essex Overhead Pit will provide general fill material for various DPW Sites for annual maintenance and/or emergencies. Truck traffic will be entirely based on the need for DPW to maintain and repair the NTH, which may vary from zero to an average of 15,000 tons/year. Based on street-legal 25-ton trucks, approximately 2 to 5 trucks may access the site per an average day when operational or 4 to 10 truck trips with smaller 12 to 15 tons dump trucks. Site operations will be conducted as needed intermittently primarily from 5:30 am till 8:00 pm (daylight hours only), up to 6 days per week: Monday through Saturday. Occasionally operations may be conducted on Sundays depending on possible emergency road repair, construction and maintenance needs. Approximately five existing DPW employees may be on-site at any one time.

The Proposed Project is forecast to generate fewer than 100 peak hour trips and is located more than 300 feet from the nearest intersection of two streets designated as Collector or higher on the County's

General Plan circulation system. The Proposed Project is not anticipated to create any new safety or operational concerns. Therefore, the Proposed Project does not warrant the preparation of a transportation impact study (TIS) with level of service (LOS) analysis based on the County-established screening criteria and LOS impacts may be presumed to be negligible.

No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less Than Significant Impact. As stated above, the proposed Project is anticipated to produce truck traffic that will be based entirely on the need for DPW to maintain and repair roads, culverts, and bridges in the area, which may vary from zero to an average of 15,000 tons/year. Based on street-legal 25-ton trucks, approximately 2 to 5 trucks may access the site per an average day when operational or 4 to 10 truck trips with smaller 12 to 15 tons dump trucks.

The County TIA Guidelines identify screening criteria for certain types of projects that typically reduce VMT and may be presumed to result in a less than significant VMT impact. To qualify for VMT screening, the project need only satisfy one of the following screening criteria:

- Local serving land uses
- Projects which generate less than net new 110 daily vehicle trips
- Projects located within a Transit Priority Area (TPA)
- Projects located within a low VMT area

Projects which generate less than net new 110 daily vehicle trips criteria ties directly to the OPR technical advisory and notes that CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area. It is reasonable to conclude that the addition of 110 or fewer trips could be considered not to lead to a significant impact. The proposed Project is forecast to generate fewer than 110 net new daily vehicle trips. Therefore, the 'projects generating less than 110 daily trips' screening criteria is satisfied, and the Proposed Project may be presumed to result in a less than significant VMT impact.

Furthermore, the proposed Project will provide construction material to DPW sites in the region, thereby reducing the transportation costs and fuel usage that would occur if material was transported from more distant material sources. Therefore, in accordance with CEQA Guidelines section 15064.3, subdivision (b), implementation of the proposed Project would allow the local need for construction material to be met while producing a minimal number of vehicles miles traveled. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?

Less than Significant Impact. The proposed Project would not affect public streets. The proposed Project does not involve any road development or design features that could substantially increase hazards on public roads, or changes in the transportation of materials on public roads. Access to the site will be from the existing NTH. Therefore, no significant impacts are identified or are anticipated, and no mitigation measures are required.

d) Result in inadequate emergency access?

No Impact. Activities associated with the proposed Project would not impede existing emergency response plans for the Project Site and/or other land uses in the Project vicinity. Vehicles and stationary equipment would be staged off public roads and would not block emergency access routes. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

XVIII. TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, lace, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

Substantiation

San Bernardino County Countywide Plan 2020; *Cultural Resource Investigation for the Essex Overhead Quarry*, *San Bernardino County*, *CA*. dated April 2018, ECORP Consulting, Inc.; *Cultural Inventory Survey of the Di Leva Property*, *an update to the Essex Overhead Quarry Project*, *Community of Essex*, *San Bernardino County*, *California*, November 2020, Jesse Yorck

Regulatory Setting

Effective July 1, 2015, Assembly Bill 52 (AB 52) amended CEQA to require that: 1) a lead agency provide notice to those California Native American tribes that requested notice of projects proposed by the lead agency; and 2) for any tribe that responded to the notice within 30 days of receipt with a request for consultation, the lead agency must consult with the tribe. Topics that may be addressed during consultation include Tribal Cultural Resources (TCRs), the potential significance of project impacts, the type of environmental document that should be prepared, and possible mitigation measures and project alternatives.

Pursuant to AB 52, Section 21073 of the Public Resources Code defines California Native American tribes as "a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of the Statutes of 2004." This includes both federally and non-federally recognized tribes.

Section 21074(a) of the Public Resource Code defines TCRs for the purpose of CEQA as:

1. Sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

- a. included or determined to be eligible for inclusion in the California Register of Historical Resources; and/or
- b. included in a local register of historical resources as defined in subdivision (k) of Section 5020.1; and/or
- c. a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Because criteria (a) and (b) also meet the definition of a historical resource under CEQA, a TCR may also require additional consideration as a historical resource. TCRs may or may not exhibit archaeological, cultural, or physical indicators.

Recognizing that California tribes are experts in their tribal cultural resources and heritage, AB 52 requires that CEQA lead agencies provide tribes that requested notification an opportunity to consult at the commencement of the CEQA process to identify TCRs. Furthermore, because a significant effect on a TCR is considered a significant impact on the environment under CEQA, consultation is used to develop appropriate avoidance, impact minimization, and mitigation measures.

Summary of AB 52 Consultation

On December 20, 2024, the County of San Bernardino mailed notification pursuant to AB52 to the following tribe: Twenty-Nine Palms Band of Mission Indians. Requests for consultations were due to the County by January 20, 2025. The table below shows a summary of comments and responses.

Tribe	Comment Letter Received	Summary of Response	Conclusion	
Twenty-Nine Palms Band of Mission Indians	No Response	-	-	

Each recipient was provided with a brief description of the proposed Project and its location, the lead agency contacts information, and a notification that the tribe has 30 days to request consultation. The 30-day response period concluded on.

Environmental Setting

The Project Site is located within the community of Essex, in the Mojave Desert approximately 35 miles west of Needles. The community of Essex, with a population of approximately 10 people, is dependent on the City of Needles for any services for its residents as it is the closest population center. The Project Site is bordered on the north, south, and east by vacant land. With a few rural structures on the adjacent parcel to the west. The Project Area is located in the southeastern portion of Fenner Valley. The area is situated east of Watson Wash that emanates from the New York Mountains, approximately 33 miles to the north. Watson Wash is an intermittent desert stream that drains into Cadiz Lake approximately 29 miles southwest of the Project Area. Vegetation within the Project Area consists mostly of creosote, saltbush, cholla, and mixed scrub. The Project Area is moderately level with multiple seasonal drainages

traversing the property from east to west. It is evident that the Project Area experiences numerous seasonal floods, as well as recreational off-highway vehicle traffic.

Sacred Lands File Record Search

A search of the Sacred Lands File by the Native American Heritage Commission (NAHC) in Sacramento, California was requested by ECORP in February 2018. This search was requested to determine whether there are sensitive or sacred Native American resources in the vicinity of the Project Area that could be affected by the proposed Project. The NAHC was also asked to provide a list of Native American groups that have historic or traditional ties to the Project Area who may have knowledge about the Project Area. The results of the search of the Sacred Lands File by the NAHC did not indicate the presence of any Native American cultural resources within one mile of the Project Area. The NAHC also provided a list of nine Native American groups that have historic or traditional ties to the Project Area who may have knowledge about the Project Area. It should be noted that this does not constitute consultation in compliance with SB 18 or AB 52.

Impact Analysis

- a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?
 - Less than Significant with Mitigation Incorporated. As concluded in Section 5(a), above, the Historical/Archaeological Resources Survey Report concluded that no "historical resources" are anticipated to be impacted by the proposed Project. However, the possibility of discovering a significant unanticipated find remains and therefore Mitigation Measure CUL-4 shall be implemented to ensure that less than significant impacts to potential historical resources occur. No additional mitigation measures are required.
- b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?

Less than Significant Impact. As stated in Section 5 above, the proposed Project will not cause a substantial adverse impact, and the geoarchaeological analysis suggests that the project location is low in sensitivity for archaeological remains of prehistoric or early historic origin in buried deposits. No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

Mitigation Measures

- If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to CUL-4 and State Health and Safety Code §7050.5 and that code shall be enforced for the duration of the project.
- TCR-2 Only the NAHC Designated MLD Tribal representative shall make all future decisions regarding the treatment of human remains of Native American origin within the response times outlined below. The MLD shall determine the disposition and treatment of Native American human remains and any associated grave goods following Native American Graves Protection and Repatriation Act (NAGPRA) protocols, and what constitutes

"appropriate dignity" as that term is used in the applicable statutes and in the Tribe's customs and traditions.

The MLD or his/her designee shall complete an inspection and provide written recommendations to the DPW and the landowner (if different than the DPW) within forty-eight (48) hours of being granted access to the site. If the descendant does not make recommendations within 48 hours, the landowner shall re-inter the remains in a secure area of the property where there will be no further disturbance. Should the landowner not accept the descendant's recommendations, either the owner or the MLD may request mediation by NAHC. According to the California Health and Safety Code, six (6) or more human burials at one (1) location constitute a cemetery (Section 8100), and willful disturbance of human remains in a cemetery is a felony (Section 7052).

TCR-3 Any and all archaeological/cultural documents as related to documented tribal cultural resources created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be disseminated to appropriate consulting Tribe(s) in the form of an un-redacted report (containing DPR forms). The Lead Agency and/or applicant shall, in good faith, consult with the appropriate Tribe(s) until construction completion of the project and completion of any measures imposed to protect resources.

With implementation of the above-listed measures, less than significant impacts would occur.

XIX. UTILITIES AND SERVICE SYSTEMS

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Wo	ould the project:				
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				
c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				

Substantiation

San Bernardino County Countywide Plan 2020

Environmental Setting

The Project Site is located 1.7 miles northeast of the community of Essex, in the Mojave Desert approximately 35 miles west of Needles. The community of Essex, with a population of approximately 10 people, is dependent on the City of Needles for any services for its residents as it is the closest population center. The Project Site is bordered on the north, south, and east by vacant land. With a few rural structures on the adjacent parcel to the west. There are no wastewater treatment or public water providers near the Project Site.

Impact Analysis

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

No Impact. The proposed Project does not include the construction of any new structures that would require the need for water or wastewater facilities. On-site stormwater flows would be retained on-site. Therefore, the Proposed Project would not require the relocation or construction of new storm water drainage facilities. Power for the Proposed Project would be supplied by portable generators. The Proposed Project would not require natural gas. Cellular service would not be required.

Therefore, the Proposed Project would not require the relocation or construction of electric power, natural gas, or telecommunications facilities.

Thus, the Project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

No Impact. As stated, water use on-site will be utilized to minimize dust generation. A water truck will be used for wetting-down material and roads during mining activities and for wetting-down haul trucks prior to site departure. Approximately 4,000 gallons of water a day (6 to 20 days a year) may be used for dust suppression activities. There are no water districts serving the community of Essex which has a current population of around 10 people. Private wells and septic systems would be utilized for any residents in the community. Water for dust controlled would be hauled to the site by DPW contractors and the sources would be dependent upon the contractor's selected locations over the course of the mine operation. Therefore, no new or expanded entitlements are anticipated. No impacts are identified or are anticipated, and no mitigation measures are required.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. See response to (a), above. There are no wastewater treatment providers in Essex or anywhere near the Project Site. Portable toilets will be used on-site for the proposed Project and serviced by a commercial vendor. No impacts are identified or are anticipated, and no mitigation measures are required.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

No Impact. All refuse on-site will be disposed into approved trash bins and removed by a commercial vendor when necessary. No impacts are identified or are anticipated, and no mitigation measures are required.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact. See response to (d), above.

Mitigation Measures

No impacts are identified or are anticipated, and no mitigation measures are required.

XX. WILDFIRE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project?				
Substantially impair an adopted emergency response plan or emergency evacuation plan?				\boxtimes
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				\boxtimes
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				\boxtimes
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			\boxtimes	

Substantiation

San Bernardino County Countywide Plan 2020, Countywide Plan/Policy Plan; Hazards Element, *Maps HZ-4 Flood Hazards*, *and HZ-5 Fire Hazard Severity Zones*

Environmental Setting

The Project Site is located within the Fenner Valley 1.7 miles northeast of the community of Essex, 35 miles west of Needles. According to San Bernardino County Hazard Overlay Map, *HZ-5 Fire Hazard Severity Zones* the Project parcel is within a Moderate Fire Hazard zone.

Impact Analysis

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact. Activities associated with the proposed Project would not impede existing emergency response plans for the Project Site and/or other land uses in the project vicinity. Vehicles and stationary equipment would be staged off public roads and would not block emergency access routes. Therefore, implementation of the proposed Project would not substantially impair an adopted emergency response plan or emergency evacuation plan. No impacts are identified or are anticipated, and no mitigation measures would occur.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact. The proposed Project does not include construction of habitable structures or permanent facilities and, therefore, implementation would not expose Project occupants to pollutant

- concentrations from a wildfire or the uncontrolled spread of a wildfire. No impacts are anticipated, and no mitigation measures are required.
- c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?
 - **No Impact.** The Project Site is located south of Interstate 40 between NTH and the BNSF railroad. Access to the site will be from the existing National Trails Highway. The proposed Project will not require the construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. Therefore, the proposed Project is not anticipated to require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary ongoing impacts to the environment. No impacts are identified or are anticipated, and no mitigation measures are required.
- d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?
 - Less than Significant Impact. The Project Site is not located in an area likely to become unstable as a result of on- or off-site landslide. The Project Site is located just outside a DWR 100-year flood awareness overlay. However, the proposed Project does not include construction of habitable structures or permanent facilities and, therefore, implementation of the Project would not expose people or structures to significant risks. Less than significant impacts are anticipated, and no mitigation measures are required.

Mitigation Measures:

No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

SECTION 5 - MANDATORY FINDINGS OF SIGNIFICANCE

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		\boxtimes		
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than Significant Impact with Mitigation. The results of the Initial Study show that there are potentially significant impacts to Biological Resources and Cultural Resources. These impacts will be reduced to less than significant levels after incorporation of Biological Resource mitigation measures BIO-1 thru BIO-6, Cultural Resource mitigation measures CUL-1 through CUL-2, and mitigation measures TCR-X to TCR-XX, as well as compliance with existing rules and regulations. Therefore, the proposed Project will not substantially degrade the quality of the environment and impacts to habitat, wildlife populations, plant and animal communities, rare and endangered species or important examples of the major periods of California history or prehistory; no additional mitigation is warranted.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant Impact. Cumulative impacts are defined as two or more individual affects that, when considered together, are considerable or that compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the development when added to the impacts of other closely related past, present, and reasonably foreseeable or probable future developments. Cumulative impacts can result from individually minor, but collectively significant, developments taking place over a period. The CEQA Guidelines, Section 15130 (a) and (b), states:

- (a) Cumulative impacts shall be discussed when the project's incremental effect is cumulatively considerable.
- (b) The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided of the effects attributable to the project. The discussion should be guided by the standards of practicality and reasonableness.

Impacts associated with the proposed Project would not be considered individually adverse or unfavorable. The proposed Project is a conditionally acceptable use identified in and previously evaluated as part of the San Bernardino County General Plan and EIR. No cumulative impacts are identified or are anticipated, and no mitigation measures are required.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact. Implementation of the existing rules and regulations, conditions from permit approvals and the mitigation measures identified in this Initial Study Checklist would result in a less than significant impact. There would be no substantial adverse effects on human beings, either directly or indirectly. No additional mitigation measures are required.

SECTION 6 - SUMMARY OF MITIGATION MEASURES

The following mitigation measures summarized below were identified to reduce potential impacts to less than significant:

BIOLOGICAL RESOURCES:

- BIO-1: To ensure compliance with the MTBA and the California Fish and Game Code, to the extent feasible, there shall be no vegetation cutting, removal, clearing, and/or grading allowed during the nesting season (February 15 August 15). To ensure compliance with the MTBA and the California Fish and Game Code, to the extent feasible, there shall be no vegetation cutting, removal, clearing, and/or grading allowed during the nesting season (February 15 August 15). If work is to be conducted within the nesting season, then a nesting bird survey shall be conducted by a qualified biologist within three days prior to disturbance. If nesting birds are not detected, no further action is necessary. If an active nest is detected and the qualified biologist determines that work activities may impact nesting, an appropriate buffer zone will be established around the nest. The buffer shall be established using highly visible construction fencing or flagging, and construction personnel shall be instructed on the sensitivity of nest areas. The size of the buffer may vary depending on site features, the sensitivity of the species, and the type of construction activity, but will be designed to prevent disruption of nesting activity. The nests and associated buffer zones shall be avoided until the nesting cycle is complete or it is determined by the qualified biologist that the nest has failed.
- **BIO-2:** No specials status plants were observed during focused surveys; however, annual plants with potential to occur may not have germinated or otherwise been detected. To mitigate potential impacts, the County shall separate native topsoil, which contains native seed bank, so it can be saved and set aside during the initial clearing stages and redistributed over areas to be revegetated at the end of operation. Details regarding topsoil salvage shall be outlined in a Revegetation Plan to be prepared by the County to meet Surface Mining and Reclamation Act (SMARA) performance guidelines for re-vegetation.

Living cacti and other species protected under the CDNPA could be impacted during quarry development and operation if they occur within the quarry development footprint. If individuals cannot be avoided, removal will comply with the CDNPA and the San Bernardino County Code.

BIO-3: The following mitigation measures are recommended to avoid potential impacts to desert tortoise. If at any time during the process desert tortoises are observed on the Project site, the County shall not initiate construction, and shall instead contact the USFWS and CDFW to develop an avoidance strategy and/or seek authorization for incidental take of desert tortoise.

Worker Environmental Awareness Program

Prior to any construction activities or site development at the quarry, the County will implement a Worker Environmental Awareness Program (WEAP) to educate on-site workers about sensitive environmental issues associated with the Project. The program will be administered to all on-site personnel, including the County's personnel, contractors, and all subcontractors, on the first day of work prior to commencing work on the site. The WEAP will emphasis the protected species that have potential to occur on or near the Project site, including the Mojave desert tortoise, burrowing owl, nesting birds, and desert kit fox, among other plant and wildlife species. The program will include the following elements:

- A presentation, developed by or in consultation with a qualified biologist, discussing the sensitive biological resources with potential to occur on-site, and explaining the reasons for protecting these resources and penalties for non-compliance.
- Contact information for the project biological monitor, and instructions to contact the monitor with any questions regarding the WEAP information.
- An acknowledgement form, to be signed by each worker indicating that they received WEAP training and will abide by the site rules protecting biological resources.

Mojave Desert Tortoise Exclusion Fencing and Monitoring

Prior to initiation of construction activities in each project Phase, a desert tortoise exclusion fence shall be installed around the perimeter of the active quarry pit and staging area to exclude desert tortoise from entering the facility throughout the operation of the Phase. If at any time during the process desert tortoises are observed on the Project site, the County shall not initiate construction, and shall instead contact the USFWS and CDFW to develop an avoidance strategy and/or seek authorization for incidental take of desert tortoise under the federal and state Endangered Species Acts.

After the location of the desert tortoise exclusion fence is staked, a qualified biologist shall conduct a survey in all disturbance areas and along the fence line for desert tortoise. Immediately following the survey (assuming no tortoises are detected), a desert tortoise exclusion fence shall be installed around the quarry areas. The exclusion fence shall be installed in accordance with the specifications set forth in Chapter 8 of the USFWS' Desert Tortoise Field Manual (USFWS 2009), and installation of the fence shall be monitored by a biologist familiar with the installation of tortoise exclusion fencing.

Following the installation of the exclusion fencing and prior to construction-related ground clearing and/or grading, the County shall retain a qualified biologist to conduct clearance surveys for the Mojave desert tortoise within the fenced area. Surveys shall follow the current guidelines for conducting clearance surveys used by the USFWS (2009, 2019). The surveys shall consist of conducting two consecutive surveys by walking five-meter-wide parallel belt transects in a north-south and then east-west direction to obtain 100 percent coverage of the survey area. Again, if any sign indicating the presence of Mojave desert tortoise is detected, the County shall not proceed with ground clearing and/or grading activities in the area of the find and shall instead contact the USFWS and CDFW to develop an avoidance strategy and/or seek authorization for incidental take of Mojave desert tortoise.

Mining activities are expected to occur sporadically on an annual basis to obtain material for emergency road maintenance and repair. Therefore, prior to use of the quarry each year, the perimeter of the fence shall be inspected for any signs of damage or wear that could potentially compromise the integrity of the exclusion perimeter. If damage or excessive wear is observed, the exclusion fence shall be repaired prior to mining activities. Results of any necessary fence inspections will be maintained to document compliance with this provision.

The results of the pre-construction surveys, including graphics showing the locations of any tortoise sign detected, and documentation of any avoidance measures taken, shall be submitted to the USFWS, CDFW, and the County to document compliance with applicable federal and state laws pertaining to the protection of Mojave desert tortoise.

BIO-4: Because no burrowing owls or their sign were present within the survey area and suitable habitat is present in the region, the loss of habitat due to the Project is not considered an adverse impact.

However, burrowing owls could move onto the site prior to Project development, so take avoidance pre-construction surveys for burrowing owl should be completed according to CDFG guidelines (CDFW 2012), with one survey being conducted within 14 days of planned construction and a second survey conducted within 24 hours of grading. Depending on the results of those surveys, a Burrowing Owl management Plan may be prepared in consultation with CDFW that will outline protection and avoidance and minimization measures that will be implemented for the project, including methods for avoidance, exclusion and burrow excavation, and passive relocation.

BIO-5: To avoid impacts to desert kit fox that could move onto the Project site prior to quarry construction, the County shall retain a qualified biologist to conduct preconstruction surveys within 14 days of ground disturbance. The survey shall be focused on detecting any desert kit fox individuals or dens within the disturbance footprint, including all the dens reported in this document. Each den shall be classified as inactive, potentially active, or definitely active based on field observations.

Active and potentially active dens in areas that would be impacted by construction activities shall be monitored by a qualified biologist for three consecutive nights using a tracking medium (such as diatomaceous earth or fire clay) and/or motion camera stations at the entrance. If no tracks are observed in the tracking medium or no photos of the target species are captured after three nights, the den shall be excavated and backfilled by hand to prevent reuse. If tracks are observed, the den shall be classified as active, and a management plan will be developed in consultation with CDFW to identify measures for avoidance, exclusion, and/or passive relocation.

- **BIO-6:** Based on Jurisdictional Delineation assessment, impact to potential jurisdictional waters is minimal. However, the following BMP measures are recommended to address any potential impacts:
 - Drainage from the development areas includes runoff of water, soil, as well as inorganic and organic matter. NRAI recommends standard water quality measures required for all projects be implemented for this Project. Project design shall incorporate measures, including measures required through the National Pollutant Discharge Elimination System (NPDES) requirements, to ensure that all measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes in adjacent areas.
 - Operation of motor vehicles near adjacent undeveloped lands may introduce undesirable
 petroleum products and solvents into the natural environment. All activity involving hazardous
 substances should be conducted in accordance with applicable local, State, and Federal
 safety standards.

CULTURAL RESOURCES:

CUL-1: If cultural/historical/archaeological resources are encountered during ground-disturbing activities, work in the immediate area shall cease and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service [NPS] 1983) shall be contacted immediately to evaluate the find(s). If the discovery proves to be

significant under CEQA, additional work such as data recovery excavation may be warranted and will be reported to the County.

Should prehistoric or historic archaeological resources be encountered during construction, the evaluation of any such resource should proceed in accordance with all appropriate federal, state, and local guidelines. Specifically, all work must be halted in the immediate vicinity of the cultural resource found until a qualified archaeologist can assess the significance of the resource. In accordance with the requirements of CEQA, recordation and evaluation of the resource(s) would be required.

- **CUL-2:** No quarrying activity shall take place within 15 feet of the abandoned portion of NTH. Additionally, no vehicles shall drive directly on the NTH alignment as this could damage the original 1926 historic oil macadam pavement.
- **CUL-3:** Exclusionary fencing shall be installed along the portion of the abandoned portion of NTH within the western segment of APN 0655-162-01 prior to project implementation. This fencing should also be extended to exclude this portion of NTH from the larger Project Area (including in APN 0655-151-01) during fence installation, to ensure that the entire road segment and its remnant oil macadam surface, within the overall Project Area, is not impacted during the life of the Project's implementation.
- CUL-4: If human remains of any kind are found during construction, the requirements of CEQA Guidelines § 15064.5(e) and AB 2641 shall be followed. According to these requirements, all construction activities must cease immediately, and the San Bernardino County Coroner and a qualified archaeologist must be notified. The coroner will examine the remains and determine the next appropriate action based on his or her findings. If the coroner determines the remains to be of Native American origin, he or she will notify the NAHC. The NAHC will then identify the most likely descendants (MLD) to be consulted regarding treatment and/or reburial of the remains. If an MLD cannot be identified, or the MLD fails to make a recommendation regarding the treatment of the remains within 48 hours after gaining access to the remains, the property owner shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.

All discovered human remains shall be treated with respect and dignity. California state law (California Health & Safety Code 7050.5) and federal law and regulations ([Archaeological Resources Protection Act (ARPA) 16 USC 470 & 43 CFR 7], [Native American Graves Protection & Repatriation Act (NAGPRA) 25 USC 3001 & 43 CFR 10] and [Public Lands, Interior 43 CFR 8365.1-7]) require a defined protocol if human remains are discovered in the State of California regardless of if the remains are modern or archaeological.

The San Bernardino County Coroner's Office must be contacted in accordance with state law within 24 hours of the discovery of human remains, and all work should be halted until a clearance is given by that office and any other involved agencies. The Coroner's Office may be contacted at the Coroner's Division, County of San Bernardino, 175 S. Lena Road, San Bernardino, CA. Tel: (909) 387-2978.

GEOLOGY AND SOILS:

GEO-1: There is unknown potential for locating significant paleontological resources during work at depth within the Project Area. Because of this potential, any excavation beyond 15 feet in depth should be monitored by a qualified paleontologist, as outlined in the recommended Paleontological Resource Impact Mitigation Plan (PRIMP) for the project included in Appendix E.

TRIBAL CULTURAL RESOURCES

- **TCR-1:** If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to CUL-2 and State Health and Safety Code §7050.5 and that code shall be enforced for the duration of the project.
- TCR-2: Only the NAHC Designated MLD Tribal representative shall make all future decisions regarding the treatment of human remains of Native American origin within the response times outlined below. The MLD shall determine the disposition and treatment of Native American human remains and any associated grave goods following Native American Graves Protection and Repatriation Act (NAGPRA) protocols, and what constitutes "appropriate dignity" as that term is used in the applicable statutes and in the Tribe's customs and traditions.
 - The MLD or his/her designee shall complete an inspection and provide written recommendations to the DPW and the landowner (if different than the DPW) within forty-eight (48) hours of being granted access to the site. If the descendant does not make recommendations within 48 hours, the landowner shall re-inter the remains in a secure area of the property where there will be no further disturbance. Should the landowner not accept the descendant's recommendations, either the owner or the MLD may request mediation by NAHC. According to the California Health and Safety Code, six (6) or more human burials at one (1) location constitute a cemetery (Section 8100), and willful disturbance of human remains in a cemetery is a felony (Section 7052).
- TCR-3: Any and all archaeological/cultural documents as related to documented tribal cultural resources created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be disseminated to appropriate consulting Tribe(s) in the form of an un-redacted report (containing DPR forms). The Lead Agency and/or applicant shall, in good faith, consult with the appropriate Tribe(s) until construction completion of the project and completion of any measures imposed to protect resources.

SECTION 7 – REFERENCES

- California Air Resources Board. *California Greenhouse Gas Emission Inventory 2018 Edition*. Accessed from https://www.arb.ca.gov/cc/inventory/data/data.htm
- California Department of Conservation. *California Important Farmland Finder*. Accessed on 12/12/2023 from DLRP Important Farmland Finder (ca.gov)
- California Department of Conservation, Division of Land Resource Protection. San Bernardino County Williamson Act FW 2015/2016 Sheet 2 of 2. 2016. Accessed on 12/12/2023 from ftp://ftp.consrv.ca.gov/pub/dlrp/wa/SanBernardino so 15 16 WA.pdf
- California Department of Conservation, *SMARA Statutes and Regulations*. Accessed on 1.17.24 from <u>SMARA Statutes and Regulations (ca.gov)</u>
- California Department of Fish and Wildlife. April 2019. *California Natural Community Conservation Plans*. Accessed on 12/14/2023 from https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline
- California Department of Toxic Substances Control. *EnviroStor*. Accessed on 12/12/2023. <u>EnviroStor</u>. (ca.gov)
- California Department of Transportation. *California Scenic Highway Program GIS layer representing California Eligible and Officially Designated scenic highway routes*. Accessed on 12/01/2023 from https://www.arcgis.com/home/item.html?id=f0259b1ad0fe4093a5604c9b838a486a
- California Energy Commission. 2018 Renewables Portfolio Standard (RPS). Accessed from http://www.energy.ca.gov/portfolio/
- California Energy Commission Efficiency Division. *Title 24: 2019 Building Energy Efficiency Standards*. Accessed on 12/01/2023 from https://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf
- California State Water Resources Control Board, Accessed 1.17.24 Home Page | California State Water Resources Control Board
- IPCC, 2013. Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 1535 pp. https://www.ipcc.ch/report/ar5/wg1/
- Mojave Desert Air Quality Management District. California Environmental Quality Act (CEQA) and Federal Conformity Guidelines. February 2020.
- South Coast Air Quality Management District. *Off-Road Mobile Source Emission Factors* (2025). Accessed 12/2024 from http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/off-road-mobile-source-emission-factors.

- United States Department of Labor, Bureau of Labor Statistics. *Economy at a Glance: Riverside-San Bernardino- Ontario, CA.* Accessed on 11/30/2023 from https://www.bls.gov/eag/eag.ca_riverside_msa.htm
- United States Department of Transportation, Federal Highway Administration. *Motor Fuel Use 2017*. Accessed 12/12/2023 from https://www.fhwa.dot.gov/policyinformation/statistics/2016/mf21.cfm
- United States Energy Information Administration (EIA). *California Profile Overview*. Last modified November 15, 2018. Accessed from https://www.eia.gov/state/?sid=CA
- U.S. Fish and Wildlife Service. 2009. Desert Tortoise (Mojave Population) Field Manual: (Gopherus agassizii). Region 8, Sacramento, California.

Project Specific References

- Bedford, D. R., D. M. Miller, and G. A. Phelps. 2010. Surficial Geologic Map of the Amboy 30' x 60' Quadrangle, San Bernardino County, California: U. S. Geological Survey Scientific Investigations Map 3109. https://ngmdb.usgs.gov/Prodesc/proddesc 93795.htm
- ECORP Consulting, Inc., Cultural Resources Investigation, Essex Overhead Quarry, April 2018
- L&L Environmental, Inc., A Phase I Paleontological Resources Inventory for Proposed Essex Overhead Quarry San Bernardino County, California July 2023
- L&L Environmental, Inc., Paleontological Resource Impact Mitigation Plan (PRIMP) for Proposed Essex Overhead Quarry San Bernardino County, California July 2023
- Leatherman BioConsulting, Inc., Biological Resources Assessment for the Essex Overhead Quarry San Bernardino County, California May 15, 2023
- Leatherman BioConsulting, Inc., Essex Overhead Quarry Revegetation Plan San Bernardino County, California, July 2023.
- Natural Resources Assessment, Inc., Jurisdictional Delineation Essex Overhead Mine, May 2024
- San Bernardino County Code of Ordinances. Updated July 2019.
- San Bernardino County Countywide Plan/Policy Plan. Adopted October 2020.
- Yorck, Jesse, M.A., RPA-Principal Investigator. Cultural Inventory Survey of the Di Leva Property, An Update to the Essex Overhead Quarry Project, November 2020