



AGENCY COMMENT REQUEST

Date 08/06/2025

We request your comments regarding the attached application currently under review.

DISTRIBUTION

INTERNAL

☒ Building Inspection ☒ Grading Inspection
☒ Advance Planning Housing Programs
☒ Trans. Planning Telecom Planner
ALUC Staff ☒ HCP/NCCP Staff
☒ County Geologist

HEALTH SERVICES DEPARTMENT

☒ Environmental Health ☒ Hazardous Materials

PUBLIC WORKS DEPARTMENT

☒ Engineering Services Special Districts
☒ Traffic
☒ Flood Control (Full-size)

LOCAL

☒ Fire District _____
San Ramon Valley – (email) rwendel@srvfire.ca.gov
☒ Consolidated – (email) fire@cccfdpd.org

Sanitary District _____
Water District _____
City of _____
School District(s) _____
LAFCO
Reclamation District # _____
East Bay Regional Park District
Diablo/Discovery Bay/Crockett CSD
☒ MAC/TAC Byron _____
Improvement/Community Association
☒ CC Mosquito & Vector Control Dist (email)

OTHERS/NON-LOCAL

☒ CHRIS (email only: nwic@sonoma.edu)
☒ CA Fish and Wildlife, Region 3 – Bay Delta
☒ Native American Tribes

ADDITIONAL RECIPIENTS
District 3, CAL Trans, BAAQMD

Please submit your comments to:
Project Planner Everett Louie
Phone # 925-655-2873
E-mail everett.louie@dcd.cccounty.us
County File # CDLP25-02019
Prior to 09/05/2025

We have found the following special programs apply to this application:

Landslide Active Fault Zone (A-P)
Liquefaction Flood Hazard Area
☒ 60-dBA Noise Control
CA EPA Hazardous Waste Site
☒ High or Very High FHSZ

AGENCIES: Please indicate the applicable code section for any recommendation required by law or ordinance. Please send copies of your response to the Applicant and Owner.

Comments: None Below ____ Attached

Print Name _____
Signature _____ DATE _____
Agency phone # _____



CONTRA COSTA

CONSERVATION & DEVELOPMENT

Planning Application Summary

County File Number: CDLP25-02018

File Date: 8/5/2025

Applicant:

G3 Enterprises, Inc
502 East Whitmore Avenue
Modesto, CA 95358

jeff.redoutey@g3enterprises.com
(209) 341-4045

Property Owner:

Project Description:

The applicant requests approval of a land use permit for an approximately 30 acre expansion of a sand quarry adjacent to an existing sand mine quarry. (LUP51-8). Concurrent CDLP25-02019.

Project Location: (Address: 0 NO ADDRESS , BYRON, CA 94514-), (APN: 003020049)

Additional APNs:

General Plan Designation(s): AL

Zoning District(s): A-3

Flood Hazard Areas: X

AP Fault Zone:

60-dBA Noise Control:

MAC/TAC:

Sphere of Influence:

Fire District: CONSOLIDATED FIRE Former ECC

Sanitary District:

Housing Inventory Site: NO

Specific Plan:

Fees:

Fee Item	Description	Account Code	Total Fee	Paid
048F	Fish & Wildlife Fee (\$75)	002606-9660-REV-000-5B048F	75.00	75.00
052B	Notification Fee (\$30)	002606-9660-REV-000-5B052B	30.00	30.00
060A	Geologic Review (\$3600)	002606-9660-REV-000-5B060A	3600.00	3600.00
HSDR	Environmental Health Fee (\$57)	002606-9660-REV-000-5BHSDR \$5.00	57.00	57.00
LPS0021	Land Use Permit (Quarry) - DCD	002606-9660-REV-000-5B0021	6500.00	6500.00
LPS0021P	Land Use Permit (Quarry) - PW	000651-9660-REV-000-6L0021	2000.00	2000.00
Total:			12262.00	12262.00



CONTRA COSTA

CONSERVATION & DEVELOPMENT

Planning Application Summary

County File Number: CDLP25-02019

File Date: 8/5/2025

Applicant:

G3 Enterprises, Inc
502 East Whitmore Avenue
Modesto, CA 95358

jeff.redoutey@g3enterprises.com
(209) 341-4045

Property Owner:

Project Description:

The applicant requests approval of a quarry reclamation plan for the 30 acre expansion of an existing sand quarry. (Concurrent CDLP25-02018)

Project Location: (Address: 0 NO ADDRESS , BYRON, CA 94514-), (APN: 003020049)

Additional APNs:

General Plan Designation(s): AL

Zoning District(s): A-3

Flood Hazard Areas: X

AP Fault Zone:

60-dBA Noise Control:

MAC/TAC:

Sphere of Influence:

Fire District: CONSOLIDATED FIRE Former ECC

Sanitary District:

Housing Inventory Site: NO

Specific Plan:

Fees:

Fee Item	Description	Account Code	Total Fee	Paid
048F	Fish & Wildlife Fee (\$75)	002606-9660-REV-000-5B048F	75.00	75.00
052B	Notification Fee (\$30)	002606-9660-REV-000-5B052B	30.00	30.00
060A	Geologic Review (\$3600)	002606-9660-REV-000-5B060A	3600.00	3600.00
HSDR	Environmental Health Fee (\$57)	002606-9660-REV-000-5BHSDR \$5.00	57.00	57.00
LPS0022	LUP-Quarry Reclamation Plan DCD	002606-9660-000-000-5B0022	6500.00	6500.00
LPS0022P	LUP-Quarry Reclamation Plan PW	000651-9660-REV-000-6L0022	2000.00	2000.00
LPS0022U	LUP-Quarry Reclamation Plan Acres	002606-9660-000-000-5B0022	2250.00	2250.00
Total:			14512.00	14512.00

PROJECT DESCRIPTION

G3 Enterprises, Inc. – Byron Kellogg/Eason Sand Mine Extension

Land Use Permit Amendment & Reclamation Plan Amendment CA Mine ID No. 91-07-0012

March 2025

Prepared for:

G3 Enterprises, Inc.
502 E. Whitmore Avenue
Modesto, California 95338
(209) 341-8831

Prepared by:

Sespe Consulting, Inc.
374 Poli Street, Suite 200
Ventura, California 93001
(805) 275-1515

EXECUTIVE SUMMARY

G3 Enterprises, Inc. (G3) currently operates a sand mine and processing facility, known as the Kellogg/Eason Mine, located within the County of Contra Costa (County), approximately two miles west of the unincorporated community of Byron, California. The existing Kellogg/Eason Mine operates under Land Use Permit (LUP) No. 51-8, approved in 1958, and a Reclamation Plan administered by the County in 1996.

To continue providing a local source of high-quality sand materials to the surrounding region, as well as furnish sand for glass manufacturing facilities, G3 is proposing to augment the existing shallow sand reserves by entitling approximately 30 acres of a 65.6-acre parcel (Assessor's Parcel Number [APN] 003-020-049-7), that adjoins the existing permitted mining boundary southeast of the existing Kellogg/Eason excavation pit (referred to herein as the "Project").

Existing Setting: The Project site is comprised of open space grasslands that have been subject to agriculture and livestock operations in the past. The Project site has a County zoning designation of "Agricultural Heavy (A-3)" and a General Plan designation of "Agricultural Lands (AL)." The entirety of the Project site is under the ownership of G3. Surrounding land uses include G3's existing mining/processing operations to the west and northwest, and to the south and southeast, open agriculture lands to the north, and Vasco Road to the east.

Operational Summary: The Project would not involve any changes to the existing operations other than allowing for the continued mining and primary processing of sand resources within the 30-acre portion of the adjacent property. Mining operations at the Project site would continue to be typical of surface sand extraction operations and would be conducted in the same manner as currently occurs at G3's existing facility. Consistent with G3's existing operations, sand material would be extracted from the Project site using mobile earth-moving equipment, where it would then be sorted onsite using the existing portable processing plant, and then finally conveyed from the Kellogg/Eason pit via the existing slurry pipeline that connects to G3's existing permitted processing facilities located offsite to the south. No on-road haul trucks would use public roads to transport the materials to the processing plant. From there, material would continue to be processed and shipped to delivery locations throughout the region in the same manner as presently occurs.

The table below describes the changes that would occur because of the proposed Project.

Activity / Item	Current Project	Proposed Project (Change)
Permitted Project Size (acres)	Existing Kellogg/Eason Mine: ~138 acres	Proposed Project Site Extension: ~30 acres (Increase of ~30 acres) TOTAL: ~168 acres
Total Reclamation Area (acres)	~79 acres (approximate)	~109 acres (~30-acre increase)
Total Mining/Excavation Area (acres)	~79 acres (approximate)	~109 acres (~ 30-acre increase)
Mining Method	Use of excavators, scrapers, dozers, loaders, etc. to extract sand material. Use of an onsite portable processing plant to size/sort excavated material.	No change
Anticipated Mining Depth	Kellogg Pit down to Elevation 0' above mean sea level (amsl). ~250' below ground surface (bgs)	Kellogg Pit down to Elevation 95' amsl. ~155' bgs. (Reduction in depth of 95')

Activity / Item	Current Project	Proposed Project (Change)
	Eason Pit down to Elevation 50' below mean sea level (bmsl). Approx. 290' bgs	Eason Pit down to Elevation 50' amsl. Approx. 190' bgs. (Reduction in depth of 100')
Estimated Total Material Volume	~12.6 million gross yd ³	~8.6 million gross yd ³ (Reduction in volume of ~4.0 million yd³)
Estimated Average Extraction Rate	~250,000 to 1,000,000 tons/yr	No change
Water Use (Dust Control)	Approximately 19.2 acre-feet/year	No change
Reclamation End Use	Revegetated grassland/grazing land.	No change
Material Transport Method	The extracted sand/clay material passing through the portable processing plant would be transported as a slurry through enclosed pipelines to G3's existing offsite processing plant operated under separate County permits.	No change

Reclamation: After sand reserves have been depleted, or concurrently if feasible, reclamation of the Project site would commence in accordance with the approved Reclamation Plan, as amended to include the proposed 30-acre Kellogg/Eason extension area.

Project Analysis: To analyze the potential impacts of the proposed Project, multiple technical studies were prepared and included as attachments within this Project Description as listed below

Drainage Study (Attachment 2)

Paleontological Resources Assessment (Attachment 3)

Geology and Soils Study (Attachment 4)

Slope Stability Assessment (Attachment 5)

Noise Impact Analysis (Attachment 6)

Air Quality Impact Assessment (Attachment 7)

Cultural Resources Study (Attachment 8)

Biological Assessment (Attachment 9)

Tree Survey Report (Attachment 10)

Visual Resources Assessment (Attachment 11)

In all cases, impacts were determined to be less than significant with mitigation in some areas. Refer to Section 3.0 below for a comprehensive summary of each technical study that was prepared for the Project.

PROJECT DESCRIPTION

G3 Enterprises, Inc. – Byron Kellogg/Eason Sand Mine Extension Land Use Permit Amendment & Reclamation Plan Amendment

March 2025

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1. Figures
2. Drainage Report
3. Paleontological Resources Assessment
4. Geology and Soils Study
5. Slope Stability Assessment
6. Noise Impact Analysis
7. Air Quality Impact Assessment
8. Cultural Resources Study
9. Biological Assessment
10. Tree Survey Report
11. Visual Resources Assessment

PROJECT DESCRIPTION

Byron Kellogg/Eason Sand Mine Extension
G3 Enterprises, Inc.

March 2025

1.0 INTRODUCTION

1.1 Purpose & Scope

G3 Enterprises, Inc. (G3) currently operates a sand mine and processing facility, known as the Kellogg/Eason Mine, located within the County of Contra Costa (County), approximately two miles west of the unincorporated community of Byron, California. The existing Kellogg/Eason Mine currently operates pursuant to Land Use Permit (LUP) No. 51-8 approved in 1958, as well as an associated Reclamation Plan, administered by the County and approved in 1996.

To continue providing a local source of high-quality sand materials to the surrounding region, as well as furnish sand for glass manufacturing facilities, G3 is proposing to augment the existing sand reserves by entitling an approximately 30-acre area within a 65.6-acre parcel (Assessor's Parcel Number [APN] 003-020-049-7), known as the Soite property. This property adjoins the existing mining boundary southeast of the existing Kellogg/Eason excavation pit (referred to herein as the "Project"). The purpose of this Project is to secure the requisite approvals from the County and State, which would permit the continued extraction and processing of the sand resources, along with ancillary activities that would allow for handling and conveyance of the excavated materials, by extending the existing Kellogg/Eason mining pit into the ~30-acre portion of the adjacent Soite property. Specifically, this Project's objectives include the following: (1) extend the existing Kellogg/Eason mining boundary thereby increasing mineable shallow sand reserves; (2) ensure access to known Domengine sandstone deposits, which the County's General Plan recognizes as a valuable commodity for the continued economic vitality of the County, as well as a nationally-important resource; (3) maintain mining operations and employment at G3's existing plant; and, (4) eliminate or minimize the environmental impacts associated with the extraction of this important mineral resource. This Project would amend the existing LUP 51-8 and the existing Reclamation Plan to include proposed mining, processing, and reclamation activities within the Project site.

The Project would not involve any changes to the existing operations other than allowing for the continued mining and primary processing of sand resources within the 30-acre portion of the adjacent property, which are described in detail below. Mining operations at the Project site would be typical of surface sand extraction operations and would be conducted in the same manner as currently occurs at G3's existing Facility. Consistent with G3's existing operations, sand material would be extracted from the Project site using mobile earth-moving equipment, where it would then be sorted onsite using the existing portable processing plant, and then finally conveyed from the Kellogg/Eason pit via the existing slurry pipeline that connects to G3's existing permitted processing facilities located offsite to the south. No on-road haul trucks would use public roads to transport the materials to the processing plant. From there, material would continue to be processed and shipped to delivery locations throughout the region in the same manner as presently occurs.

Currently, the Project site (i.e., ~30-acre portion of the 65.6-acre Soite property) is comprised of open space grasslands that were subject to agriculture and/or livestock operations in the past. There is an existing dirt road running through the center of the site connecting to Camino Diablo in the southwest corner of the site. There is also a small rural structure and an ephemeral drainage and pond within the center portion of the extension site. Surrounding land uses include G3's existing mining/processing operations to the west and northwest, and to the south and southeast, open agriculture lands to the north, and Vasco Road to the east. The unincorporated community of Byron is located approximately two miles east of the proposed Project site.

After sand reserves have been depleted, or concurrently if feasible, reclamation of the Project site would commence in accordance with the approved Reclamation Plan, as amended to include the proposed ~30-acre Kellogg/Eason extension area. Project reclamation would generally follow the same procedures as described in the existing Reclamation Plan, and would typically involve regrading, re-soiling, and revegetation of the mined lands to grazing lands and habitat consistent with the surrounding area. The amended Reclamation Plan would comply with the current reclamation performance standards pursuant to the California Surface Mining and Reclamation Act (SMARA).

The major components of the proposed Project operations would include the following activities:

- Site preparation, including clearing the site, removal and salvaging of topsoil and subsoil;
- Surface mining and material conveyance;
- Operation of mobile earth-moving equipment;
- Onsite primary processing using the existing processing plant;
- Conveyance of sand material via the existing slurry pipeline to G3's offsite processing facility;
- Various site improvements as needed for access, safety, and other requirements; and
- Post-mining reclamation and revegetation to open space grasslands.

The Project design and methodology is consistent with the existing mining/processing operations at G3's existing Facility. The number of employees and hours of operation would remain the same, as once the Project commences, existing employees would simply move to conduct mining on the adjacent Project site. Please see Figure 2 for the proposed mine plan, and Figure 3 for the planned reclamation design of the Project site. Table 1 provides a summary of the Project's operational parameters and compares these to the existing mining and reclamation activities at G3's existing Kellogg/Eason Mine.

Table 1 – Project Site Summary

Activity / Item	Current Project	Proposed Project (Change)
Permitted Project Size (acres)	Existing Kellogg/Eason Mine: ~138 acres	Proposed Project Site Extension: ~30 acres (Increase of ~30 acres) TOTAL: ~168 acres
Total Reclamation Area (acres)	~79 acres (approximate)	~109 acres (~30-acre increase)
Total Mining/Excavation Area (acres)	~79 acres (approximate)	~109 acres (~ 30-acre increase)
Mining Method	Use of excavators, scrapers, dozers, loaders, etc. to extract sand material.	No change

Activity / Item	Current Project	Proposed Project (Change)
	Use of an onsite portable processing plant to size/sort excavated material.	
Anticipated Mining Depth	Kellogg Pit down to Elevation 0' above mean sea level (amsl). ~250' below ground surface (bgs).	Kellogg Pit down to Elevation 95' amsl. ~155' bgs. (Reduction in depth of 95')
Estimated Total Material Volume	~12.6 million gross yd ³	~8.6 million gross yd ³ (Reduction in volume of ~4.0 million yd³)
Estimated Average Extraction Rate	~250,000 to 1,000,000 tons/yr	No change
Water Use (Dust Control)	Approximately 19.2 acre-feet/year	No change
Reclamation End Use	Revegetated grassland/grazing land.	No change
Material Transport Method	The extracted sand/clay material passing through the portable processing plant would be transported as a slurry through enclosed pipelines to G3's existing offsite processing plant operated under separate County permits.	No change

1.2 Project History & Background

1.2.1 Existing Site History

G3's existing Kellogg/Eason Mine operates under an approved LUP (No. 51-8, approved February 25, 1958) and Reclamation Plan administered by the County (approved 1996). Mining operations on the Kellogg/Eason Mine began and have been ongoing since 1958, with the most recent iteration of the existing LUP/Reclamation Plan approved by the County in 1996.

See Figure 1 in Attachment 1 which provides an overview of G3's existing Kellogg/Eason Mine which would be modified by the proposed Project. Per the existing approved Reclamation Plan, the fully mined areas would be reclaimed to grazing land .

1.2.2 Project Location & Surrounding Land Uses

As shown in Figure 1 (Attachment 1), the Project site is located approximately two miles to the west of the unincorporated community of Byron, California and is approximately 0.5 miles northwest of the intersection of Vasco Road and Camino Diablo. The Project property is comprised of a single, 65.6-acre parcel (APN 003-020-049-7), of which approximately 30 acres would be disturbed by the proposed Project operations. The Project site is generally undeveloped and has recently been used for grazing cattle, which is also the predominant land use on the surrounding parcels.

As noted above, the Project site is bordered to the northwest and southeast by G3's existing quarries, and grazing land and open space to the north and east. Please refer to Table 2 for a summary of land uses surrounding the proposed Project site.

Table 2 – Surrounding Land Uses

Direction	Zoning Designation	General Plan Designation	Description
North	Agricultural Heavy (A-3) and Agricultural Preserve (A-4)	Agricultural Lands (AL)	Agricultural lands are located immediately north of the Project site.
East	Agricultural Heavy (A-3)	Agricultural Lands (AL)	Agricultural land and Vasco Road border the eastern side of the Project site.
South	General Agricultural (A-2) and Agricultural Heavy (A-3)	Agricultural Lands (AL)	The existing processing facility and other quarries operated by G3 are located immediately south of the Project site.
West	Agricultural Heavy (A-3)	Agricultural Lands (AL)	Camino Diablo Road borders the western side of the Project site along with agricultural lands and a few private residences.

1.2.3 Existing General Plan & Zoning Land Use Designations

The Project site has a County zoning designation of “Agricultural Heavy (A-3)” and a General Plan designation of “Agricultural Lands (AL)”. The entirety of the Project site (APN 003-020-049-7) is under the ownership of G3. Per the Contra Costa County Code, mining is consistent with this agricultural land use designation, and allowable in A-3 zones under General Plan Policy 8-54 which states that *“mining and quarrying shall be a permitted use in certain privately owned areas which are in an open space designation in the General Plan (e.g. Open Space, Agricultural Lands, etc.) and which contain known mineral deposits with potential commercial value. These deposits include, but are not limited to, rocks, gravel, sand, salt and clay”*. (Contra Costa County, 2005-2020).

1.3 Project Information

Applicant/Operator: G3 Enterprises, Inc.
502 East Whitmore Avenue
Modesto, California 95358
(209) 341-4045
Contact: Jeffrey Redoutey, Vice President
Contact Email: jeff.redoutey@g3enterprises.com

Property Owners: G3 Enterprises, Inc.
502 East Whitmore Avenue
Modesto, California 95358

Applicant’s Agent: Sespe Consulting, Inc.
374 Poli Street, Suite 200
Ventura, California 93001
(805) 275-1515
Contact: Doug Mason, Project Manager
Contact Email: dmason@sespeconsulting.com

Lead Agency: Contra Costa County
Department of Conservation and Development

30 Muir Road
Martinez, California 94553

2.0 PROJECT DESCRIPTION

2.1 Operational Summary

As summarized above, the proposed Project would extend the mining boundary of G3's existing Kellogg/Eason Mine by approximately 30 acres into a portion of the adjacent property (APN 003-020-049-7), known as the Soite property, located immediately east of the existing Kellogg/Eason Mine boundary. Other than the addition of the approximately 30-acre area to the existing mining/reclamation boundary, a decrease in mining depth, and the creation of a consolidated quarry footprint, no other changes to the existing operations are proposed. The pace and nature of onsite mining/processing, the equipment used, and traffic generation/routes would not change as a result of the Project.

Mining operations would be conducted in the same manner as currently occurring at the Kellogg/Eason Mine. Specifically, sand ore would continue to be excavated from open pit quarries, where it would then be transferred to an onsite portable processing plant to remove oversized stones. From there, sand/clay materials would then be passed through a screen slurry and then transported via an existing slurry pipeline to G3's offsite processing plant located to the south of the Project site. Consistent with G3's existing operations, Project operations would generally continue to occur in three distinct phases:

- **Site Preparation and Topsoil/Subsoil Removal:** Prior to mining, the Project site would be cleared, and the topsoil/subsoil and overburden would be removed. Consistent with G3's existing procedures at the Kellogg/Eason Mine, topsoil/subsoil would be salvaged and stored within onsite stockpiles. During reclamation, topsoil and subsoil stored within the stockpiles would be used as needed to support revegetation in those areas within the Project site where the vegetative community would be re-established following completion of mining. Following removal of topsoil/subsoil, overburden consisting of sub-soil and intermittent sand lenses would then be stripped to expose underlying sand reserves. Overburden and interburden materials would be stored onsite for later use during reclamation (see Section 2.3.5).
- **Normal Mining:** After site preparation (i.e., removal of topsoil/subsoil and overburden), mining within the approximately 30-acre Project site would commence and generally continue until reaching the respective design pit depth which in the Kellogg and Eason pits has been decreased from the currently approved mine design. Generally, mining would commence in the western portion of the Project site, extending from the existing excavation area, and move to the east (see Figure 2 in Attachment 1). Sandstone would be excavated using existing mobile earth-moving equipment (e.g., scrapers, dozers, excavators, off-road haul trucks, etc.) and unloaded into the portable onsite processing plant. Once processed in the portable plant, sand ore would then be conveyed in existing sealed pipes as a sand/water slurry to the existing offsite processing plant located to the south. All saleable material excavated from the Project site would be conveyed via the existing slurry pipes, and no haul trucks would be used to transport materials offsite.
- **Reclamation:** After the sand reserves are fully exhausted and mining ceases, reclamation of the Project would commence in accordance with the approved Kellogg/Eason Reclamation Plan, which would be amended to include the 30-acre portion of the Project property. Project reclamation would generally follow the same procedures in effect at the Kellogg/Eason Mine, and would typically involve regrading, re-soiling, and revegetation of the mined lands to grazing lands and habitat. Finished

slopes and the pit bottom would then be covered with topsoil and reclamation materials as needed, and seeded. The existing ephemeral drainage which crosses the extension area will be reclaimed to its pre-mining contours and restored. The seed mix would remain the same as currently described in the existing Reclamation Plan and would consist primarily of annual grass species found in the Project area. The amended Reclamation Plan would comply with the current reclamation performance standards pursuant to SMARA.

The Project design and methodology is consistent with the existing mining operations at the Kellogg/Eason quarries. The number of employees and hours of operation would remain the same, as once the Project commences, existing employees would simply move to conduct mining on the adjacent Project site. See Figure 3 (Attachment 1) for the planned reclamation design of the Project site.

2.2 Project Approvals

Implementation of the Project would require the following County approvals:

- Amendment to LUP 51-8 to allow mining and ancillary activities, as well as post-mining reclamation, within the approximately 30-acre area of the Project property (APN 003-020-049-7).
- Amend the Kellogg/Eason Reclamation Plan (Mine ID No. 91-07-0012) to address post-mining reclamation within the 30-acre portion of the Project property.

In addition to above-reference approvals from the County, other agencies whose review and/or approval of the Project may be necessary include the following:

- Department of Conservation, Division of Mine Reclamation (DMR);
- California Department of Fish and Wildlife (CDFW);
- U.S. Fish & Wildlife Service (USFWS/Service);
- U.S. Army Corps of Engineers (USACE); and
- Central Valley Regional Water Quality Control Board (Regional Board).

2.2.1 Surface Mining and Reclamation Act

SMARA requires that cities and counties adopt local surface mining operation ordinances as a prerequisite to assuming “lead agency” status under SMARA. The County has adopted such an ordinance, which is codified in Chapter 88-11 of the County Code (Contra Costa County, 2023). SMARA requires that all surface mining operations have either a permit or vested rights definition, as well as a reclamation plan (Public Resources Code [PRC] Section 2770(a)¹; County Code Sections 88-11.402, 88-11.602 and 88-11.612)². G3’s existing Mine is a “surface mining operation” as defined in State law and County Code and is subject to both an existing surface mining permit (LUP 51-8) and a Reclamation Plan, of which the most recent iterations were approved by the County in 1996.

2.2.2 Consistency with the General Plan

The proposed amendments to LUP 51-8 and the Reclamation Plan meet the requirements of the County General Plan and Zoning Ordinance. Specifically, the Project:

¹ [Public Resources Code Section 2770](#)

² [Contra Costa County Code - Chapter 88-11 Surface Mining and Reclamation](#)

- Is consistent with the intent and provision of the current County General Plan and applicable provisions of the County's Codes and Ordinances;
- Is compatible with the character of surrounding legally-established development;
- Would not be obnoxious or harmful, or impair the utility of neighboring property or uses;
- Would not be detrimental to the public interest, health, safety, convenience, or welfare;
- Is compatible with existing and potential land uses in the general area where the Project is to be located;
- Will occur on a legal lot;
- Will not have an adverse impact on environmental resources; and
- Will continue to support local employment opportunities.

As discussed above, the Project site has a General Plan designation of "Agricultural Lands (AL)". General Plan Chapter 3.7 states that the AL designation *"is intended to be descriptive of the predominant land-extensive agricultural uses that take place in these areas, but the land use title or description shall not be used to exclude or limit other types of agricultural, open space or non-urban uses..."* (General Plan, Land Use Element, pg. 3-34)³.

Concerning mineral resources, the County's General Plan policies are favorable to mineral resource development. Specifically, General Plan Policy 8-54 states that *"Mining and quarrying shall be a permitted use in certain privately owned areas which are in an open space designation in the General Plan (e.g., open space, agricultural lands, etc.) and which contain known mineral deposits with potential commercial value. These deposits include, but are not limited to, rocks, gravel, sand, salt, and clay."* (General Plan, Conservation Element, pg. 8-35)⁴.

The Project site is in an area designated by the General Plan as the "East County Area," which includes residential, agricultural, recreational, and open space uses (General Plan, Land Use Element, pg. 3-7 and 3-50). The County Conservation Element expressly identifies the Project area as a valuable mineral resource area for Domengine sandstone on Figure 8-4 (pg. 8-34) within the General Plan. The General Plan states, in relevant part, as follows:

"Figure 8-4 identifies a geological deposit of domengine sandstone, located just south of Camino Diablo and east of Vasco Road. This mineral resource is a valuable commodity for the continued economic vitality of Contra Costa County, as it is the sole deposit of this material in the State of California, and an important resource nationally. Domengine sandstone is used by Pacific Gas & Electric Company as a trench backfill and is a primary ingredient in the manufacture of heat-resistant glass used in the national space program. The resource extends beyond the boundaries designated by the State. This plan calls for the protection of the sandstone resource area." (General Plan, Conservation Element, p. 8-35).

The County identifies the proposed Project site as having a mineral resource that is an important commodity for the County's economic viability. The County continues to state the value of these resources within their surface mining and reclamation ordinance. County Code, Chapter 88-11.606, establishes the criteria for

³ [General Plan Ch. 3 - Land Use Element](#)

⁴ [General Plan Ch. 8 - Conservation Element](#)

issuing a land use permit for surface mining operations stating that the Project shall meet the following standards:

1. Is consistent with the County General Plan;
2. Will not be substantially detrimental to existing residents, structures, or land uses;
3. Will not impose significant adverse impacts on the physical environment; and
4. Will have adequate access.

As noted above, the General Plan recognizes the significance of mineral resources in the Project area and calls for protection of these resources to ensure they can be extracted and utilized. Because the Project consists of adding approximately 30 acres to G3's existing permitted Kellogg/Eason Mine, thereby allowing G3 to continue to develop this locally-important Domengine sandstone resource, the Project would be consistent with the County's General Plan goals and policies. The Project would not be substantially detrimental to existing residents, structures, or land uses and would not impose significant adverse impacts on the physical environment (see summaries in Section 3.0 below for additional detail). The Project site currently has and would continue to have adequate access for mining activities, employment access, as well as emergency access routes. Furthermore, as summarized above, the Project would continue to be consistent with all applicable General Plans and County Ordinances.

2.3 Operational Details

2.3.1 Hours of Operation & Workforce

Consistent with G3's existing entitlements and operations, Project operations would continue to occur up to 24 hours per day, seven days per week. G3 maintains approximately three to five onsite employees during normal mining operations. Following Project approval, these same employees would work within the extended Project site. As such, the number of employees and the hours of operation would remain the same as currently approved.

2.3.2 Site Access & Vehicle Activity

The Project site would continue to be accessed primarily via the existing ingress/egress point connecting to Camino Diablo Road within the southwestern corner of the Project site. Additional site access routes in the north and via an off-road frontage road from the south would continue to be utilized as needed. There would be no change or increase in the number or type of vehicles or haul trucks traveling to and from the site, nor would these existing access points be altered or expanded in any way.

2.3.3 Excavation Equipment

G3 currently utilizes mobile off-road earth-moving equipment for normal operations at the existing Kellogg/Eason Mine. As with the existing employees, existing mobile earth-moving equipment would move into the Project site to continue operations following Project approval, and therefore the number and type of onsite equipment would not change as a result of the Project. The following provides a description of the existing equipment list at G3's Kellogg/Eason Mine, and that would continue to operate at the Project site:

- Two (2) scrapers;
- One (1) wheel loader;
- One (1) off-road haul truck;
- One (1) mobile water truck;

- One (1) grader;
- One (1) dozer; and
- One (1) mobile fuel truck.

2.3.4 Processing & Ancillary Facilities

The primary processing plant, or a functional equivalent, historically utilized at the Kellogg/Eason quarry would continue to be used at the Project site. Similar to employees and excavation equipment, the existing processing plant would move into the Project site to continue operations following Project approval. The rate and manner in which excavated material would be processed would not change as a result of the Project. Other than relocating the existing processing plant into the extension area, the Project does not propose the construction of any new buildings or structures. Processed sand/clay materials would continue to be transferred via the existing slurry pipeline to G3's existing processing facilities to the south.

2.3.5 Management of Quarry Overburden

Consistent with G3's existing operations, overburden from the Project would continue to be stockpiled within the existing onsite storage areas, or used as reclamation backfill and re-soiling in those onsite areas where mining is complete. Overburden stockpiles would continue to be built with minimum slopes of 3:1 (horizontal to vertical) to ensure they remain stable and to prevent erosion. Overburden storage will occur in various locations within the LUP boundary until final placement, as needed during reclamation.

2.3.6 Blasting

Due to the nature of the sand reserves, blasting would continue to not be required. Therefore, explosives would continue to not be stored and/or utilized within the Project site.

2.3.7 Water Use & Supply

The Project would not change or increase the quantity of water used onsite. Project operations would continue to use water trucks for dust control during mining activities and on internal haul roads as needed. Process water would also continue to be used within the primary processing plant. Specifically, water from the nearby settling ponds on the existing Kellogg/Eason Mine, from settling ponds on the adjacent Byron mine, from wells on adjacent parcels or from municipal water sources would continue to be pumped to the wet screens at the existing hopper location and combined with sand from mining activities, so it could then continue to be hydraulically transported to G3's offsite processing facility via the existing slurry pipeline. There would be no additional water use for the proposed Project operations compared to G3's existing Kellogg/Eason operations.

2.3.8 Site Lighting & Security

Other than small portable light fixtures to ensure a safe working environment, no new source of lighting would be required within the Project site. If used, light sources would continue to be limited to those necessary for normal maintenance, security activities, and nighttime operations. Sources of light and/or glare within the extension area would include vehicles and equipment used for quarry establishment and mineral extraction (i.e., mining equipment headlights/safety lights); however, these sources would not create significant levels of light and/or glare, or adversely affect day or nighttime views of the Project site.

24-hour security is currently provided by existing perimeter fencing surrounding the existing mining area, nighttime lighting, and access gates/signage along Camino Diablo. As needed, existing site security fencing and signage would be extended within the proposed ~30-acre extension area prior to commencing onsite operations.

2.4 Reclamation Details

2.4.2 Revegetation

Consistent with the existing approved 1996 Reclamation Plan, portions of the site would continue to be revegetated as part of reclamation. There are no changes to the existing revegetation methods established previously within the existing approved Reclamation Plan. As such, following the completion of mining operations, the following typical sequence of revegetation activities would be undertaken:

- Re-contouring of planting areas, if necessary;
- Control of invasive weeds;
- Placement of topsoil and subsoil;
- Installation of temporary irrigation systems, if necessary;
- Installation of erosion control devices;
- Planting and seeding;
- Maintenance and monitoring; and
- Reporting.

Upon completion of mining, the slopes may be ripped to as needed break up compacted areas. The stored surface stockpiled overburden and topsoil materials would then be spread over the areas to be revegetated to create islands of material with ridges and furrows to aid in holding moisture and windblown seeds. Hydroseeding and broadcast seeding of local native species obtained at local native plant nurseries would augment the revegetation efforts. Commercially available seeds of local native species would also be used to supplement local seeds, all due to availability. Seeding would generally take place between November and January to take advantage of winter precipitation and eliminate or minimize the need for irrigation. Revegetation areas would be clearly staked and flagged to eliminate additional disturbance.

The existing approved reclamation seed mix would not change under the Project. Seed application would be accomplished with hydroseeding equipment or other appropriate application methodology, using both contractors and existing onsite personnel when possible. Consistent with existing protocols, seeding would continue to be done in the fall to early winter to maximize the potential benefit of rainfall.

Lastly, although not anticipated, test plots may be utilized if needed. Irrigation is not planned or proposed at this time but may be incorporated in the future, if necessary, as informed by the success of the test plots, or to success of existing reclaimed areas within the Kellogg/Eason Mine site. If irrigation is needed, systems would be utilized until it's demonstrated that revegetation areas are self-sustaining for at least two years, at which point active irrigation could be discontinued.

2.4.3 Monitoring & Reporting

In general, the existing monitoring and reporting protocols outlined in the 1996 Reclamation Plan would continue to be implemented onsite. Specifically, one year after seeding, the site would be assessed for the

success of seeding efforts and erosion control. If needed, remedial actions that may be employed at that time would include the removal of non-native species, reseeding if necessary, and replacement of erosion control devices. Monitoring would be performed annually for a period of up to five years after reclamation, or until the success criteria described in the 1996 Reclamation Plan. Monitoring and sampling methods would not change and would continue to follow the protocols set forth in the Amended Reclamation Plan.

2.4.4 Financial Assurance

G3 currently maintains an existing Financial Assurance Cost Estimate (FACE) approved by the County for the existing Kellogg/Eason quarry. In accordance with SMARA, this FACE would be reviewed annually and updated accordingly. The FACE would also be updated as needed to address any additional changes described in the Amended Reclamation Plan (i.e., expansion of the area of disturbance), and would be submitted to the County for review and approval under separate cover.

3.0 ENVIRONMENTAL SETTING SUMMARY

3.1 Water Resources

3.1.1 Water Supply

As stated above, the Project operations would continue to use water onsite for dust control and material processing. There would be no change or increase in the quantity of water used onsite, and water would continue to be sourced from wells adjacent to the site under long-term agreements and from the Byron Bethany Irrigation District. Additionally, water collected within the existing onsite settling ponds would continue to be pumped to the wet screens at the existing hopper location at the portable processing plant, where it would continue to be combined with sand and then hydraulically transported via the existing slurry pipeline to G3's offsite processing facility.

3.1.2 Surface Water

Sespe Consulting, Inc. (Sespe) prepared a Drainage Report in March 2025 which included a discussion of the site's surface water features. An ephemeral channel within the Soite property conveys runoff from one upstream drainage area to an ephemeral pond on the eastern end of the property. During mining operations, best Management Practices (BMPs) would control erosion and may divert flows from the ephemeral drainage; however, flows to the stock pond would be maintained as required for biological considerations. Upon reclamation, the channel would be restored to pre-Project condition, ensuring continued flow to the pond. The reclaimed pit would retain stormwater, which would dissipate through infiltration or evaporation. Please refer to Attachment 2 for the full copy of the Drainage Report prepared by Sespe in 2025.

3.1.3 Groundwater Conditions and Quality

Sespe prepared a Geology and Soils Study in July 2024 that included a discussion of the hydrogeologic characteristics of the extension Project area. The study found the Project site is located just outside of Bulletin 118 Groundwater Basin: 5-022.19 San Joaquin – East Contra Costa (ECC) Subbasin (Figure 5), which consists of two primary aquifer zones composed of alluvial deposits: an unconfined to semi-confined Shallow Zone and a semi-confined to confined Deep zone, with clay layers separating the two.

To assess groundwater conditions in the Project vicinity, a review was conducted using various data sources,

including the California Statewide Groundwater Elevation Monitoring (CASGEM), Sustainable Groundwater Management Act (SGMA), the California DWR databases, particularly the Well Completion Report Map Application, and the DWR's Water Data Library. This analysis revealed over 80 wells in the Project's vicinity, encompassing domestic, irrigation, and monitoring wells. These wells, ranging in depth from 160 feet to 640 feet below ground surface (bgs), are located roughly 0.5 to five miles from the site. Based on the publicly available data from the SGMA database and exploratory drilling data conducted by G3 and its predecessors, groundwater is interpreted to flow from southwest to northeast across the region, with a gradient of approximately five feet per mile.

The Project lies outside of a regulated groundwater basin and is therefore not subject to active management or prioritization under SGMA. However, the Project does lie within the East Contra Costa County (ECCC) Integrated Regional Water Management (IRWM) Region. The IRWM is a collaborative effort to manage all aspects of water resources within a specific region. While the Project lies within the IRWM Region, the program does not specifically regulate groundwater used at the site.

To assess groundwater quality, the state Aquifer Risk Map was reviewed. The map assesses the relative risks of groundwater contamination and exposure, measuring numerous factors such as water quality and exposure risks. These risks are ranked on a percentile basis, where lower percentiles indicate lower risk levels. This tool is critical for understanding the potential impact on groundwater resources and for planning appropriate mitigation measures. Based on the Aquifer Risk Map, the Project area falls between a combined risk percentile of 15 and an exposure risk percentile of 33 at the very northeastern edge of the property boundary. However, most of the Project site as mapped indicate an 11th percentile for water quality risk and a 19th percentile for exposure risk. Accordingly, the area around the Project has a low to moderate risk in terms of water quality exposure. As designed, the Project would not entail mining below the regional groundwater level, and considering that equipment maintenance would continue to occur outside of the footprint of excavation, the potential effects of the Project on groundwater quality are considered to be low. Consequently, the Project is not expected to alter or otherwise change the existing water quality exposure risk established for the area. Please refer to Attachment 4 for the full Geology and Soils Study prepared by Sespe in July 2024.

3.1.4 Floodplain

The Project site is situated outside a Federal Emergency Management Agency (FEMA) designated special flood hazard area. According to Flood Map 06013C0510G, effective 3/21/2017, the site is classified within "Zone X," indicating an area of minimal flood hazard.

3.2 Geology and Geologic Hazards

The Project site lies on the east flank of the California Coast Range where sedimentary rocks of the Great Valley have been gently turned upward against the core complex by the tectonic processes forming the coastal mountains. Development of the Project would continue to implement good design and construction practices that would avoid potential geological impacts.

Sespe prepared a Geology and Soils Study in July 2024 to document the geology, soils, and hydrogeologic characteristics of the extension Project. More specifically, this study assesses the potential effects of the Project on the geologic and hydrogeologic setting and surrounding vicinity, with a specific focus on geologic hazards, soils, and groundwater conditions underlying the site. To support this assessment, Sespe utilized

various data sources, including observations from a site visit on March 12, 2024, drilling data provided by G3, and maps from the United States Geological Survey (USGS). Reviews of relevant regulatory documents, basin plans, and water quality control plans also contributed to the analysis. Key sections of the California Public Resources Code (PRC) that guide the evaluation of geological and soil conditions under the California Environmental Quality Act (CEQA) guidelines were also used. This study did not include a site-specific geotechnical analysis related to the quarry mine plan and/or reclamation design, which would be prepared as a stand-alone technical study. Finally, this geologic evaluation did not encompass an assessment of paleontological resources as required under CEQA. The investigation into possible fossil occurrences within the Project site is being managed through a separate Study. Refer to Section 3.10 for a summary of the paleontological study and Attachment 3 for the full report.

Sespe conducted a site reconnaissance on March 12, 2024, to document the geology and soils within the extension area. The site inspection consisted of a pedestrian survey, which was completed by Sespe field geologists. The visual survey focused principally on identifying potential geologic hazards and confirming the mapped geology formations. This fieldwork involved walking along transect lines across the Project site, with an emphasis on areas with exposed rock outcrops and soils. This comparison facilitated a better understanding of the surface geology and soil profiles, along with their correlation with underlying formations and/or structural discontinuities. During the pedestrian survey, Sespe dug trenches and “potholes” into the ground using a rock hammer to characterize the soils. These observations were compared to existing NRCS soil maps to identify relevant soil classification types present at the site. Sespe also performed field plasticity tests by rolling the soil to determine its behavior and aid in correlating the soils to the NRCS soil types mapped for the area.

As part of Sespe’s site reconnaissance, the potential for unique geologic features was evaluated. Such features are those that represent a novel or rare naturally occurring element or feature, are of special interest, or possess the Project area to identify significant scientific or aesthetic value. During the site visit, Sespe did not identify any geologic features that can be classified as unique. Therefore, it is Sespe’s opinion there is no indication for there to be the potential for a unique geologic feature to occur within the Project site.

During the field reconnaissance, Sespe focused on documenting geologic and soil characteristics within the Project boundaries. The main emphasis was on the Quaternary alluvial deposits, the Tertiary Domengine Formation, and the Kreyenhagen Shale Formation. Field observations revealed that the Domengine Formation is the predominant lithology exposed at the surface, with bedding planes generally striking at approximately 322° and dipping 40° to the northeast. The Domengine Formation displayed variations from massively to vaguely bedded, medium-grained, arkosic to quartzose sandstone. Also, present onsite, the Kreyenhagen Shale Formation consisted of thinly bedded diatomaceous shale with some gray shale, as well as undifferentiated Quaternary alluvium. Notably, the presence of significant clay content in the soils indicates the presence of shale. Soil observations, aligned with NRCS soil map descriptions, highlighted the Briones loamy sand and Altamont clay, consistent with well-drained conditions developed from the weathering of underlying bedrock and sedimentary deposits. The potential for these soil types to exhibit expansive properties is deemed to be low.

To assess the potential for fault rupture, the CGS Fault Activity Map was reviewed. No Holocene-Active faults were identified crossing the extension site, however, the Greenville Earthquake Fault Zone, the nearest

Holocene-Active zone (portions of which have been active within the last 200 years) is approximately eight miles southwest of the Project site. Other Holocene-Active faults within a 50-mile radius of the site include the Pleasanton fault (17 miles, west), Calaveras fault zone (19 miles, west), Concord fault (20 miles, northwest), Hayward fault zone (27 miles, west), Green Valley fault zone (30 miles, northwest), Cordelia fault (36 miles, northwest), West Napa fault (40 miles, northwest), Monte Vista fault zone (43 miles, southwest), Rodgers Creek fault (43 miles, northwest), San Andreas fault zone (45 miles, west), and the Ortigalita fault (46 miles, southeast). Pre-Holocene faults in the area include the Midland fault zone, located southeast of Project site. Additionally, several mapped unnamed faults are within the local Project area; however, none of these are classified as active faults based on the review of the CGS data viewer tool. Based on activity status and proximity, none of the faults listed are considered to pose a risk with respect to fault rupture at the Project site.

The study examined the potential for geohazards encompassing the Project area, including active faults, ground shaking, indications of subsidence or lateral spreading, liquefaction susceptibility, and landslides. Combined with a review of data available through CGS and site-specific inspection, geohazards that could potentially adversely impact the Project site were not identified. The review of the CGS data viewer tools confirmed that no active faults cross the Project site, and the nearest Holocene-Active fault (AP fault), the Greenville fault zone, is approximately eight miles southwest of the Project site. Thus, the potential for fault rupture is low. Moreover, the Project site was assessed to have a low to moderate risk for strong seismic ground shaking based on historical earthquake data and proximity to known faults.

The Project site falls within an area showing an earthquake-shaking potential near the mid-to-lower end of the scale, between 0.65-0.75 times gravity (X_g), as indicated by the MS48: Earthquake Shaking Potential for California (revised 2016) layer. This suggests a moderate expected impact from seismic ground shaking. The proximity of notable fault zones, including the Greenville AP Earthquake Fault Zone adds context to the seismic setting of the Project. While this information indicates the area encompassing the Project site may be subject to ground shaking, since no structures would be constructed, the consequential effects are not considered to be pertinent to this evaluation. With respect to landslide potential, the review of the CGS data indicates there are no mapped active or historic landforms, or dormant young slides within and surrounding the immediate Project area. The area does not appear to be particularly susceptible to significant effects of deep-seated landsliding, as well based on the information provided in the state database. Likewise, the soils and geologic properties of the formations do not exhibit characteristics that would indicate significant potential for subsidence, lateral spreading or localized liquefaction. Consequently, ground shaking associated with area seismic activity is not expected to have an adverse effect with respect to these types of geohazards.

To assess the potential for liquefaction, the CGS Liquefaction Zones Map was reviewed. The nearest areas prone to liquefaction are approximately one mile north and northeast of the Project site. No mapped zones are within the Project boundary. Given the Project site's geologic composition, primarily consisting of Briones loamy sand and Altamont clay, the proximity to bedrock, and the depth to groundwater, the potential for liquefaction, subsidence, and lateral spreading is considered minimal. Since no known areas have been identified as susceptible to liquefaction, the potential for lateral spreading and subsidence is considered to be low, as well.

An evaluation of landslide risk was conducted using the DOC Maps Data Viewer, specifically referencing the Deep-Seated Landslide Susceptibility (CGS Map Sheet 58). This analysis provided an overview of the Project

site's susceptibility to landslides, categorizing risk levels from III (low) at lower elevations to VIII (medium) at the ridge crests, based on a standardized susceptibility scale. Based on the state Landslide Inventory database, there is no map of active or historic landslides or dormant young landslide forms at the Project site, nor is there an indication of highly susceptible deep-seated landslides in the immediate vicinity. Therefore, the Project site is not considered to be of significant risk from landslide geohazards.

No other identified geologic hazards that could pose a risk to the Project site were identified as part of this evaluation. Please refer to Attachment 4 for the full Geology and Soil Study prepared by Sespe in July 2024.

3.2.1 Slope Stability Analysis

WSP USA Inc. (WSP) prepared a Slope Stability Assessment (SSA) dated March 7, 2025, to develop the recommended slope angles that are expected to result in globally stable slopes for both the proposed ultimate mining limits and the proposed final reclamation grades in the extended pit. As part of the SSA, WSP reviewed existing geotechnical and geological documentation and other readily available sources including the California Geological Survey (CGS) and the United States Geological Survey (USGS) for the site and surrounding areas. A California Certified Engineering Geologist (CEG) from WSP performed a field reconnaissance of the Kellogg and Eason pits and the Soite area from June 24-25, 2024. 28 geologic altitudes (strike and dip orientations) using a Brunton compass were measured during the field reconnaissance. Geologic discontinuity surfaces consisted of sedimentary bedding planes, joint planes, joint plane sets, and shear/fault surfaces. Five rockslides were observed in the western portion of the Eason pit footwall slope, extending from five to 20 feet below the crest down to the footwall toe, where rock debris has accumulated. The slide masses likely moved as wedges along bedding planes, controlled by steeply dipping joints on their southwest margins.

Ponded water was observed at an elevation of about 95 feet amsl in the Eason Pit during WSP's field reconnaissance in June 2024, with seasonal fluctuations over the past seven years. Groundwater was encountered at approximately nine to 11.5 feet below the pit bottom in 2013, corresponding to an elevation of 100 feet amsl, though there is some uncertainty due to unsurveyed boring locations. A boring drilled above the Kellogg Pit hanging wall in 2012 recorded a maximum groundwater elevation of approximately 85 feet amsl. WSP assumes the historical high groundwater elevation at the site is around 95 feet amsl, but levels fluctuate seasonally and temporally, likely being lower during mining in the proposed extended pit.

The Kellogg/Eason Mine is located in a seismically active area of northern California. As such, the proposed slopes of the extended pit were analyzed by WSP for seismic stability in addition to static stability. Based on the available geologic data and WSP's site observations, active faults with the potential for surface fault rupture are not known to be located beneath or projecting toward the site. In WSP's opinion, the potential for surface rupture at the Kellogg/Eason Mine due to fault plane displacement propagating to the ground surface during the design life of the project is considered low.

The site is underlain at relatively shallow depths by slightly to moderately cemented bedrock of Eocene age, which is not susceptible to liquefaction. Although some alluvial deposits in the Kellogg Creek drainage area are moderately susceptible to liquefaction, they are outside the mined area and would not impact the proposed pit extension. WSP recommends using engineered fill in certain areas to mitigate any potential liquefaction risk, ensuring very low susceptibility.

The results of the slope stability analyses performed indicate that the proposed pit slopes meet the global slope stability criteria of the current study for the critical cross-sections analyzed. The native materials underlying and surrounding the proposed extended pit are not considered to be susceptible to liquefaction, and any backfill that would be placed below the historical high groundwater level is assumed to be adequately compacted to mitigate the liquefaction potential of the fill. WSP considers the likelihood of surface fault rupture occurring in the proposed extended pit to be low.

Based on the results of the data review, field observations, geologic mapping, and geotechnical analyses performed, WSP recommends the following:

- Both interim (i.e., final excavation) and final reclaimed pit slopes should be inclined no steeper than 1H:1V for the north, south, west, and southwest-facing slopes for the configuration and slope heights.
- Both interim and final reclaimed pit slopes should be inclined no steeper than 1.6H:1V for the northeast-facing slopes in the Eason Pit and Soite area and no steeper than 2H:1V for the east and northeast-facing slopes in the Kellogg Pit for the configuration and slope heights.
- The final fill slopes in the southernmost portion of the extended pit should be inclined no steeper than 3H:1V. This recommendation is applicable for the proposed fill slope configuration and heights.
- Fill placed in the southernmost portion of the proposed extended pit should be placed in thin lifts (typically no greater than ten inches) and thoroughly compacted if the fill is located below the historical high groundwater level of Elevation 95 feet amsl.
- Fill placed above the historical high groundwater Elevation of 95 feet amsl in the southernmost portion of the proposed extended pit need not be thoroughly compacted as engineered fill.
- If a groundwater level higher than Elevation 95 feet amsl is observed/measured during the mining operations, then this higher level shall represent the boundary between compacted engineered fill (below) and uncompacted fill (above) for the reclamation fill to be placed in the proposed extended pit. Hence, engineered fill shall be placed up to Elevation 95 feet amsl or up to the highest groundwater level encountered during mining, whichever is higher.
- No further mining or excavation should occur within the current unmined zone between the existing slope crest and Camino Diablo Road between approximately Sections A-A' and C-C'. In other words, mining activities should not progress any closer to Camino Diablo Road within this area (See Figure 2 in Attachment 5).
- The existing toes of the pit slopes between approximately Sections A-A' and CC' lie at an average elevation of approximately 100 feet amsl. Prior to further excavation of pit slopes within this area, a minimum 100-foot wide bench should be maintained between the existing upper slopes above elevation 100 feet amsl and the lower slopes to be excavated below elevation 100 feet amsl.

Please refer to Attachment 5 for the full SSA completed by WSP in March 2025.

3.3 Site Drainage

Consistent with the existing Kellogg/Eason Mine operations, all mining and reclamation operations within the Project site would continue to comply with the National Pollutant Discharge Elimination System (NPDES) General Reclamation Plan for Storm Water Discharges associated with industrial activities (i.e., Industrial General Permit), and would continue to employ storm water Best Management Practices (BMPs). The existing Storm Water Pollution Prevention Plan (SWPPP) would continue to be implemented for the site and

would be updated as required to include operations within the approximately 30-acre extension area. The existing SWPPP would be updated as needed following Project approval.

Sespe prepared a Drainage Report in March 2025 to identify the tributary watershed(s) to the Project site; calculate the onsite runoff volumes and peak flows following reclamation; and calculate the upstream drainage area runoff volumes and peak flows following reclamation. The general methodology, requirements, and recommendations outlined in the Contra Costa County Flood Control and Water Conservation District's (CCC FCWCD) hydrograph and hydrology standards were used as a basis for the report's calculations. The report analysed the 25-year, 3-hour and a 100-year, 3-hour storms for the Project. Calculations were performed for the site drainage conditions for the Project's final reclaimed condition. The upstream runoff volume and peak flows were determined to be similar under the existing conditions, operational mining conditions, and final reclamation conditions for the Project. Therefore, the upstream runoff volume and peak flow calculations presented in the report adequately characterized those for the Project maximum extent of mining condition.

The results of the calculations demonstrated that the 100-year, 3-hour storm event volume for the reclaimed Kellogg/Eason/Soite Pit drainage area would be captured in the reclaimed mining pit. The runoff within the reclaimed pit would be retained until it either infiltrates or evaporates. It was determined that the reclaimed pit storage capacity is many times more than the 100-year storm volume, so the reclaimed pit would contain the maximum water surface elevation due to the 100-year storm with sufficient freeboard. The ephemeral channel that drains to the ephemeral pond east of the site would be restored to the existing conditions as part of Project reclamation. As the channel would be reconstructed post-mining to maintain existing flow conditions, the Project would not have any added flooding impact to surrounding water bodies under the reclaimed condition.

The upstream runoff volume and peak flow under the maximum extent of mining and final reclamation conditions for the Project would be similar. At the maximum extent of mining (prior to reclamation), the mining pit would encompass the entire proposed Soite expansion area and likely receive runoff from the drainage areas denoted as Upstream Drainage Area 1 and Reclaimed Soite Pit (East). Therefore, the combined 100-year, 3-hour storm event runoff volume from Upstream Drainage Area 1, Reclaimed Kellogg/Soite/Eason Pit, and Reclaimed Soite Pit (East) (27.71 acre-feet) represents the total runoff the pit would receive under operational (maximum extent of mining) conditions. As noted above, the mining pit provides sufficient storage capacity to contain the cumulative 100-year, 3-hour storm event volume during this operational condition. Refer to Figure 2 in Attachment 2 for the locations of the site's drainage areas.

As reclaimed, the pit would retain all storm water from the 100-year storm event on-site for the Project's reclaimed condition and maximum extent of mining condition with sufficient freeboard. The proposed mining pits would not contribute to off-site flow under both operational and reclaimed conditions. As mining activities progress, additional drainage control measures/operational BMPs (i.e., basins) would be implemented, as needed to control run-on to the Project. Additionally, the Project will restore the ephemeral drainage channel in the proposed Soite expansion area to its existing condition. Therefore, the site is not expected to have any significant impact to on-site drainage areas. Please refer to Attachment 2 for the full Drainage Report prepared by Sespe in March 2025.

3.4 Traffic / Trip Generation

As stated above, the proposed Project would not generate additional vehicle or truck trips beyond the levels associated with G3's existing Kellogg/Eason Mine operations. Additionally, there would be no change to the existing ingress/egress points, and existing employee and vendor vehicles would continue to access the Project site via the existing driveway connecting to Camino Diablo Road within the southwestern corner of Project site. Additionally, no haul trucks would be used to transport materials offsite via public roadways, as all mined/processed saleable sand materials would continue to be transported offsite using the existing slurry pipeline. The proposed Project would also not require new or additional parking facilities, and vehicles would continue to be parked onsite away from public roadways/rights-of-ways.

3.5 Hazardous Materials / Hazardous Waste

Other than minimal quantities of fuel and lubricants found within heavy equipment and personnel vehicles operating onsite, no hazardous materials would be stored onsite. As needed, minimal vehicle refueling and maintenance would continue to occur onsite and would continue to be in compliance with applicable State and local regulations. Additionally, Project site operations would continue to be subject to provisions for spill prevention and containment/cleanup described within G3's existing Spill Prevention, Control, and Countermeasures (SPCC) Plan and the Hazardous Materials Business Plan (HMBP), which would be updated as needed following Project approval. No hazardous waste would be generated on the Project site. The proposed Project operations would also not generate wastewater.

3.6 Noise

Sespe completed a Noise Impact Analysis (NIA) in March 2025 to quantify the potential noise and vibration effects associated with the continued operation of the existing Kellogg/Eason Mine. The NIA quantified the results of ambient/background noise monitoring and assessed the potential noise effects on nearby sensitive receptors associated with the development and operation of the proposed Project (i.e., material extraction, handling, processing, ancillary operations, and post-mining reclamation within the 30-acre Kellogg/Eason Mine extension area). The NIA was developed to address the following specific impact statements within CEQA Guidelines Appendix G Environmental Checklist Form (California Code of Regulations, Title 14, Division 6, Chapter 3, §15000 – 15387).

- a) Would the project generate 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?*

Project noise levels resulting from onsite mining and processing operations were found to be acceptable and below applicable Contra Costa County noise standards at the receptors analyzed, with no additional control or mitigation measures required. Therefore, Project noise impacts would be less than significant with no mitigation required.

- b) Would the Project generate excessive groundborne vibration or groundborne noise levels?*

To assess Project vibration impacts at each receptor location, a predicted Project Vibration (PPV) value of 0.089 inches per second (i.e., large bulldozer) was utilized. Estimated Project vibration levels experienced at nearby receptors are below the applicable Caltrans significance criteria and are considered "barely

perceptible” to “imperceptible” per applicable Caltrans criteria for human response to transient vibration. Therefore, groundborne vibration impacts to nearby receptors resulting from Project operations would be less than significant with no mitigation 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?*

The Project site is not located within two miles of any private or public airports or airstrips, or in an area governed by an airport land use plan. The Project does not involve the creation of a new noise-sensitive land use (such as residences). For these reasons, the Project would have no impact related to airport/airstrip noise levels.

In summary, the Project would not result in the generation of a substantial, temporary, or permanent increase in ambient noise levels in the vicinity of the Project and would not result in the generation of excessive groundborne vibration. Accordingly, the Project would have less than significant noise and vibration impacts, therefore no mitigation measures were recommended. Please refer to Attachment 6 for the full NIA completed by Sespe in March 2025.

3.7 Utilities and Energy

The proposed Project operations would not require the construction of new water, electricity, natural gas, or telecommunication utilities, nor would it require the alteration of existing utility infrastructure.

3.8 Solid Waste

Other than minimal quantities of refuse generated by onsite employees, the Project would not generate or require the handling, storage, processing, or disposal of significant quantities of solid waste. All municipal and small quantities of waste would continue to be managed in compliance with State and Federal regulations.

3.9 Air Quality / Odor

Trinity Consultants completed Air Quality Impact Assessment (AQIA) dated January 2025 to evaluate the potential air quality impacts associated with the Soite expansion Project, which includes a short overburden removal phase and mining phase of the expansion area. The AQIA was prepared in accordance with the standards, procedures, and methodologies established in the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines, dated April 2022, and the California Natural Resources Agency’s CEQA Guidelines. CEQA requires that a lead agency evaluate the potential air quality and greenhouse gas (GHG) impacts of a project. Since the Byron Mine is an existing Facility, net project impact emissions were considered. The AQIA evaluated the net change in emissions and net project impact emissions were evaluated to determine whether the Project would result in a significant impact on the environment. The existing Maria South mining operations were used to represent baseline emissions. Refer to the Environmental Impact Report (EIR) associated with SCH#2020040196 for detailed information about Maria South. Sources of emissions from the Project included; material drops points, wind erosion, mining operations, fugitive dust, and mobile sources. The Project results in emissions of reactive organic gases (ROG) or volatile organic compounds (VOC), carbon monoxide (CO), nitrogen oxides (NOx), sulfur oxides

(represented as SO₂), particulate matter (PM₁₀ and PM_{2.5}), and GHGs.

The Net Project emissions were analyzed for 2026 (includes overburden removal phase and mining phase emissions) and 2027 and all subsequent years until the reclamation year (typical mining operations). Project emissions result from the operation of stationary sources (i.e., drop points and wind erosion) and mobile sources (i.e., scrapers, bulldozers, graders, water trucks and contractor trucks). Project maximum emissions were quantified based on the maximum projected throughput for each emission source. Net Project emissions (i.e., maximum Project emissions less Baseline Period emissions) are compared to the BAAQMD's Thresholds of Significance and result in less than significant impacts. Net Project emissions (i.e., maximum Project emissions less Baseline Period emissions) were compared to the BAAQMD's Thresholds of Significance and resulted in less than significant impacts.

The AQIA also evaluated the potential health risks associated with toxic air containment (TAC) emissions, such as diesel particulate matter (DPM) and respirable crystalline silica, and PM_{2.5} from the Project. AERMOD dispersion modeling software and the Hotspots Analysis and Reporting Program (HARP) were used to estimate carcinogenic, acute, and chronic health risks at residential, worker, and sensitive receptors as a result of the TAC emissions. The analysis concluded that Project health risk contributions as well as cumulative risks are below BAAQMD's Thresholds of Significance for Local Risks and Hazards and therefore would result in less than significant impact.

The AQIA was developed to analyze specific impact statements within the CEQA guidelines for air quality and GHG impacts as discussed below.

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

As shown in Table 5-3 through Table 5-6 in the attached AQIA (Attachment 7), the net emissions associated with the Project do not exceed applicable significance thresholds and result in less than significant operational impacts. Therefore, the Project does not conflict with or have any adverse impact on the implementation of the 2017 Bay Area Clean Air Plan, nor would the Project disrupt or hinder the implementation of any plan control measures with mitigation incorporated. Therefore, the impacts would be less than significant and no mitigation would be required.

b. Would the project 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?

As shown in Table 5-3 through Table 5-6 in the attached AQIA (Attachment 7), the Project results in a net emissions increase for PM₁₀ and PM_{2.5} on a daily and annual basis for all operational years. The Project results in a net emission increase for SO₂ on an annual basis for the 2026 operational year and on a daily and annual basis for 2027+ operational years. The Project region is nonattainment for PM_{2.5} and 8-hour ozone. All net emissions increases of criteria air pollutants are below the BAAQMD CEQA Thresholds of Significance. Therefore, the Project's operational emissions have less than significant impacts. As the Project does not conflict with any applicable air quality plans with mitigation incorporated, the Project also does not contribute to cumulatively considerable air quality impacts. Therefore the impacts would be less than significant and no mitigation would be required.

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

The primary air toxics associated with the Project are from DPM and crystalline silica from mobile source exhaust and fugitive dust generated by the Project's overburden removal and mining operations. Health risk to local receptors is analyzed using dispersion modeling. The results of the HRA demonstrate the highest cancer, chronic, and annual average PM_{2.5} concentrations as a result of this Project are below BAAQMD's Thresholds of Significance for Risks and Hazards. Table 5-8 in the attached AQIA (Attachment 7) demonstrates that the cumulative impacts from off-site sources summed with the Project's impacts are below BAAQMD's Thresholds of Significance for Risks and Hazards. Therefore the impacts would be less than significant and no mitigation would be required.

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The Project does not involve the development of the types of land uses that would result in emissions that are typically associated with odor issues, such as wastewater (sewage) treatment plants, landfills, composting facilities, refineries, or chemical plants. Nor does the Project locate sensitive receptors within proximity of these types of odor-producing sources. Therefore, the Project does not result in impacts associated with odor. The impacts would be less than significant, and no mitigation is required.

Greenhouse Gas Emissions:

a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The Project's operational GHG emissions are presented in Table 5-9 and Table 5-10 in the attached AQIA (Attachment 7) and are compared to the BAAQMD Threshold of Significance applicable to the GHG emissions from stationary sources. GHG emissions associated with the Project are well below the 10,000 MT CO₂e per year significance threshold. The Project's operational emissions are therefore considered to have less than significant GHG impacts and no mitigation is required.

b. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

None of the Project elements, nor the Project as a whole, conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. The Project does not conflict with the goals of AB 32, does not hinder the implementation of any of the measures specified in the updated AB 32 Scoping Plan, and complies with all applicable GHG measures already adopted under AB 32 and other authorities. Nor would the Project conflict with the BAAQMD 2017 Clean Air Plan or Contra Costa Climate Action Plan. For these reasons, the Project's GHG emissions are considered to have less than significant impact associated with potential conflicts with a plan, policy or regulation adopted for the purpose of reducing GHG emissions and no mitigation is required.

Please refer to the full AQIA completed by Trinity Consultants in January 2025 for further information

(Attachment 7).

3.10 Paleontological / Cultural Resources

3.10.1 Paleontological Resources

Sespe completed a Paleontological Resources Assessment (PRA) in June 2024 to analyze potential impacts on paleontological resources, which are fossilized remains, traces or imprints of organisms preserved in or on the earth's crust that provide information about the history of life on earth and its evolution. They are considered limited, nonrenewable resources of scientific, cultural, and educational value and are afforded protection under certain federal and state laws and regulations. The PRA identified and summarized existing paleontological data in the vicinity of the Project area, and classified and discussed the relative significance of these resources in the context of the extension Project.

The Project site consists of Quaternary alluvial pebble gravel, sand and clay of valley areas, the Tertiary (middle Eocene) Domengine Formation, and the overlying Tertiary (late Eocene) Kreyenhagen Shale Formation. Fossil occurrences in the Domengine Formation have been documented in several paleontological Publications, while the Kreyenhagen Shale Formation is reported to contain scarce and poorly preserved Foraminifera microfossils, but abundant Radiolaria, based on an assessment of a type locality of the formation.

Information for the PRA was obtained through literature review, museum records, and site observation were used to evaluate the potential for the Project site to yield significant paleontological resources. The PRA also included performing a pedestrian survey to observe for the presence of paleontological resources, and if identified determine their significance with respect to taxonomic, phylogenetic, paleoecologic, taphonomic, biochronologic, or stratigraphic context. The pedestrian survey encompassed walking along transect lines across the Project site, with particular focus on areas with exposed outcrop, visually sweeping side-to-side along each line to examine the ground surface and outcrop, to the extent available, for fossil evidence. In addition, during the pedestrian survey, the observer dug trenches and "potholes" into the ground using a rock hammer to inspect for fossil evidence.

Sespe contacted the Los Angeles County Natural History Museum (LACNHM) to request a search of the museum's database for potential recorded fossil localities on the Project site, and within the general vicinity. The requested search domain encompassed the following USGS 7.5-minute topographic map: Byron Hot Springs, CA quadrangle. For any fossil localities identified through the database search, information pertaining to the stratigraphic context was also requested, to the extent available. Based on the records search, the LACNHM did not identify fossil localities on the Project site, nor in the immediate surrounding area.

The pedestrian survey was conducted on March 12, 2024, and consisted of an approximately 1.7-mile transect that looped across the Project site. No paleontological resources were identified along the transect within the PFV limits. Moreover, along the transect, no evidence of fossil material was observed at the surface, in any of the locations potholed or in the exposed outcrop. A partially bleached, recent-age, non-fossilized cow skull was observed at Station PS-4 as float with no stratigraphic context. Near Station PS-4, at Station PS-5 a pile of bleached, recent-age, non-fossilized cow bones were identified as float, presumably related to Station 1. Additionally, a non-descript, bleached, recent-age, non-fossilized bone was identified at Station PS-12 as surface float. None of the vertebrate bones identified exhibit indications of early diagenesis

or permineralization. Please refer to Attachment 3 for the exact location of the above listed items.

Because no fossils were identified in the material to be mined at the Project site, and no recorded fossil localities were identified by the LACNHM, it is Sespe's opinion that the potential for significant paleontological resources to occur within the site is low. In addition, although fossils have been known to occur in the Domengine and Kreyenhagen Shale Formations, because these fossil occurrences are well documented in paleontological literature, there is a low potential for the site to yield fossils that provide new and significant taxonomic, phylogenetic, paleoecologic, taphonomic, biochronologic, or stratigraphic data. Please refer to Attachment 3 for the full PRA completed by Sespe in June 2024.

3.10.2 Cultural Resources

Tom Origer & Associates completed a Cultural Resources Study for the ~30-acre portion of the Soite property in February 2024. The study was conducted to meet the requirements of Contra Costa County and those of the CEQA. The purpose of the study was to identify potential historical resources other than Tribal Cultural Resources, as defined in Public Resources Code [PRC] 21074 (a)(1)(A)-(B) and discussed in the Regulatory Context section. Tribal Cultural Resources are defined in Public Resources Code [PRC] 21074 (a)(1)(A)-(B). The study area comprises approximately 30 acres off Camino Diablo as shown on the Byron Hot Springs, California 7.5' USGS topographic map.

Archival research found that the portions of the study area had been included in prior cultural resources surveys (Bramlette, Praetzellis, Praetzellis, & Fredrickson, 1988). Nine studies have been completed within a quarter mile of the study area; however, no cultural resources were documented within the study area. One isolated artifact was documented within a quarter-mile of the study area; no other cultural resources had been documented nearby. There are no reported ethnographic sites within a mile of the study area (Kroeber, 1925); (Levy, 1978); (Wallace, 1978).

The Cultural Resources Study included an intensive field survey of the study area that was completed by Julia Karnowski and Taylor Alshuth on January 30, 2024. Field conditions were mostly sunny and cool. Surface examination consisted of walking in 15-meter transects when possible and hoes were used, as needed, to expose the ground surface. Ground visibility ranged from excellent to poor, with vegetation being the primary hindrance. The bank of the seasonal creek that runs through the study area was also examined for evidence of buried sites. The profile of the bank of this creek provided a view of subsurface soils at least five feet below the ground surface. No archaeological site indicators were observed within the study area. Examination of the creek banks did not indicate the presence of buried archaeological site indicators. They concluded, in their opinion, that the high sensitivity is reduced to moderate.

The buildings and structures within the study area meet the age threshold for consideration to the California Register; however, research did not show that the study area was associated with persons important to the history of the Byron area or Contra Costa County, therefore Criterion 1 of the California register is not met.

Research and field surveys suggests that use of the study area has historically been related to agriculture. While the existing buildings and structures are associated with agriculture and likely cattle ranching, the features that remain are simple ubiquitous structures that range in date of construction. Because the buildings and structures are not part of a cohesive complex or significant operation related to agriculture+ and are not good representations of important agricultural use in the area; they are unlikely to meet Criterion

2 of the California Register. The buildings and structures present are not architecturally distinctive and do not meet Criterion 3 of the California Register. Buildings do not generally meet Criterion 4 of the California Register. As such, no archaeological resource or built environment recommendations were determined to be warranted. Please refer to Attachment 8 for the full Cultural Resources Study completed by Tom Origer & Associates in February 2024.

3.11 Biological Resources

LSA Associates, Inc. (LSA) completed a Biological Assessment (BA) dated January 2025 to analyze the potential effects of the Project on federally listed species within the Action Area (i.e., disturbing 29.6 acres of the 65.6-acre parcel). The BA also analyzed the potential effects on state-listed species and state species of special concern.

A total of six federally listed animal species were considered under this BA based on the USFWS species list for the site and the presence of suitable habitat within the Action Area, including vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardii*), California red-legged frog (*Rana draytonii*), California tiger salamander (*Ambystoma californiense*), California condor (*Gymnogyps californianus*), and San Joaquin kit fox (*Vulpes macrotis mutica*). The Western pond turtle (*Actinemys [=Emys] marmorata*) is currently a candidate for listing under the ESA and was considered under this BA. No federally listed plants were determined to likely to occur in the Action Area. The BA determined that the proposed Action may affect, is likely to adversely affect, four of the federally listed species: vernal pool fairy shrimp, California red-legged frog, California tiger salamander, and San Joaquin kit fox due to the removal of suitable habitat and potential adverse effects to individual animals. The BA determined that the proposed Action may affect, is not likely to adversely affect, vernal pool tadpole shrimp, western pond turtle, and the California condor.

The BA also determined that there was no critical habitat within the Action Area, therefore, the proposed Action would have no effect on critical habitat.

Some of the species discussed in the previous section are also considered special-status species under CDFW jurisdiction, including California red-legged frog, California tiger salamander, western pond turtle, California condor, and San Joaquin kit fox. An additional three plant and nine animal species that are state listed, candidates for state listing, fully protected, California Species of Special Concern, or have a California Rare Plant Rank of 1A, 1B, or 2 also have the potential to occur within the Action Area, including big tarplant (*Blepharizonia plumosa*), diamond-petaled poppy (*Eschscholzia rhombipetala*), Mount Diablo buckwheat (*Eriogonum truncatum*), Crotch's bumble bee (*Bombus crotchii*), coast horned lizard (*Phrynosoma blainvillii*), northern California legless lizard (*Anniella pulchra*), San Joaquin coachwhip (*Masticophis flagellum ruddocki*), burrowing owl (*Athene cunicularia*), golden eagle (*Aquila chrysaetos*), Swainson's hawk (*Buteo swainsonii*), tricolored blackbird (*Agelaius tricolor*), and American badger (*Taxidea taxus*). The BA determined that the proposed Project may impact these twelve species due to the removal of suitable habitat (golden eagle, Swainson's hawk, and tricolored blackbird foraging habitat only). Mitigation for permanent and temporary impacts would be provided through the preservation of 90 acres of grassland habitat (3:1 ratio), the improvement of one pond to make it more suitable for California tiger salamander breeding, and the restoration of an 830 linear foot reach of Kellogg Creek. Refer to Attachment 9 for the full BA completed by LSA in January 2025 for additional information.

3.11.1 Tree Survey Report

LSA completed a Tree Survey Report dated September 13, 2024, that identified, located, and assessed the condition of all trees within the Quarry extension area. The survey was completed by LSA arborist Michelle Nicholes on August 26, 2024. Trees included in the survey were those with a DBH (diameter at breast height) of six inches or greater. The trees were then classified into three categories based on their health and structural condition.

- Good – Trees with good health and structure that have potential for longevity onsite;
- Fair – Trees with somewhat declining health and/or structural defects; or
- Poor – Trees in poor health or with significant structural defects that cannot be mitigated. Trees in this category are expected to continue to decline.

A total of 15 trees were surveyed and it was determined that only three of them were found to be native to the region, the remaining 12 trees were found to be non-native. Native trees include three Blue oaks (*Quercus douglasii*), two of them found to be in good condition with the third found to be in poor condition. The non-native trees included ten Peruvian pepper (*Schinus molle*) trees, one Blue gum eucalyptus (*Eucalyptus globulus*) tree, and one Italian cypress (*Cupressus sempervirens*) tree. Four of these trees were found to be in “poor” condition, seven were found to be in “fair” condition, and one was found to be in “good” condition. Refer to Attachment 10 for the full Tree Survey Report completed by LSA dated September 23, 2024, for additional information including the detailed tree data in Table A and the location of the trees that were surveyed.

3.12 Agricultural Resources

The Project site does not contain farmland designated as “Prime,” “Unique,” or “Statewide Importance” as determined by the California Department of Conservation⁵. As discussed in Section 1.2.3 above, the Project is consistent with the current General Plan and zoning designations. Further, the Project site would be reclaimed for open space and grazing uses, which are consistent with the Project site’s current agricultural uses.

3.13 Visual Resources

LSA completed a Visual Resources Assessment (Assessment) for the Project in March 2025. The Assessment was prepared pursuant to CEQA in order to identify any potential long-term and short-term potentially adverse visual impacts that might result from the Project. The Assessment’s methodology includes defining the Project and its visual setting; identifying sensitive viewpoints for assessment; analyzing the baseline visual quality and character of the identified views; depicting the visual appearance of the project from identified views; assessing the Project’s impacts to those views in comparison to the baseline visual quality and character; and proposing methods to mitigate any potentially significant visual impacts.

The Project is not located in proximity to a State scenic highway however, both Vasco Road and Camino Diablo Road are County-designated scenic routes. The Project also is not located within viewing distance of a designated scenic ridgeway or waterway, but the Project does include rolling hills and rock formations that contribute to the scenic quality of eastern Contra Costa County. The Assessment included four visual

⁵ [Department of Conservation - California Important Farmland Finder](#)

simulations for locations along Vasco and Camino Diablo Road. Assuming a traffic speed of 50-55 miles per hour, the project is estimated to be viewable for approximately three to eight seconds from each viewpoint.

Potential long-term visual impacts of the proposed mining expansion were compared and analyzed as part of this assessment. Views from neighboring properties were assessed, and it was determined to have no direct line of sight to quarry activities due to the intervening topography. Further, quarry activities currently occurring in the Kellogg/Eason excavation pit would continue with the expansion of the quarry onto the proposed Project site. It was determined that implementing the proposed project would result in minimal visual change.

Four different viewpoints representing motorists traveling along Camino Diablo Road and Vasco Road and two County-designated scenic corridors have been identified to show various Project conditions through prepared visual simulations. Due to the screening provided by the terrain and the short duration of views, visual changes to the Project site resulting from the expansion of the quarry area onto the adjacent property would be minimal. Therefore, no significant visual impacts would result from the implementation of the Project, and no mitigation is required. This conclusion was determined based on the significance identified in Appendix G of the CEQA Guidelines, which is the CEQA Environmental Checklist. The aesthetics section of the CEQA Environmental Checklist is included in the Assessment. Refer to Attachment 11 for the full Visual Resources Assessment prepared by LSA in March 2025.

Please contact Planner for Attachments:
Everett.Louie@dcd.cccounty.us

ATTACHMENT 1

Figures

ATTACHMENT 2

Drainage Report

ATTACHMENT 3

Paleontological Resources Assessment

ATTACHMENT 4

Geology and Soils Study

ATTACHMENT 5

Slope Stability Assessment

ATTACHMENT 6

Noise Impact Analysis

ATTACHMENT 7

Air Quality Impact Assessment

ATTACHMENT 8

Cultural Resources Study

ATTACHMENT 9

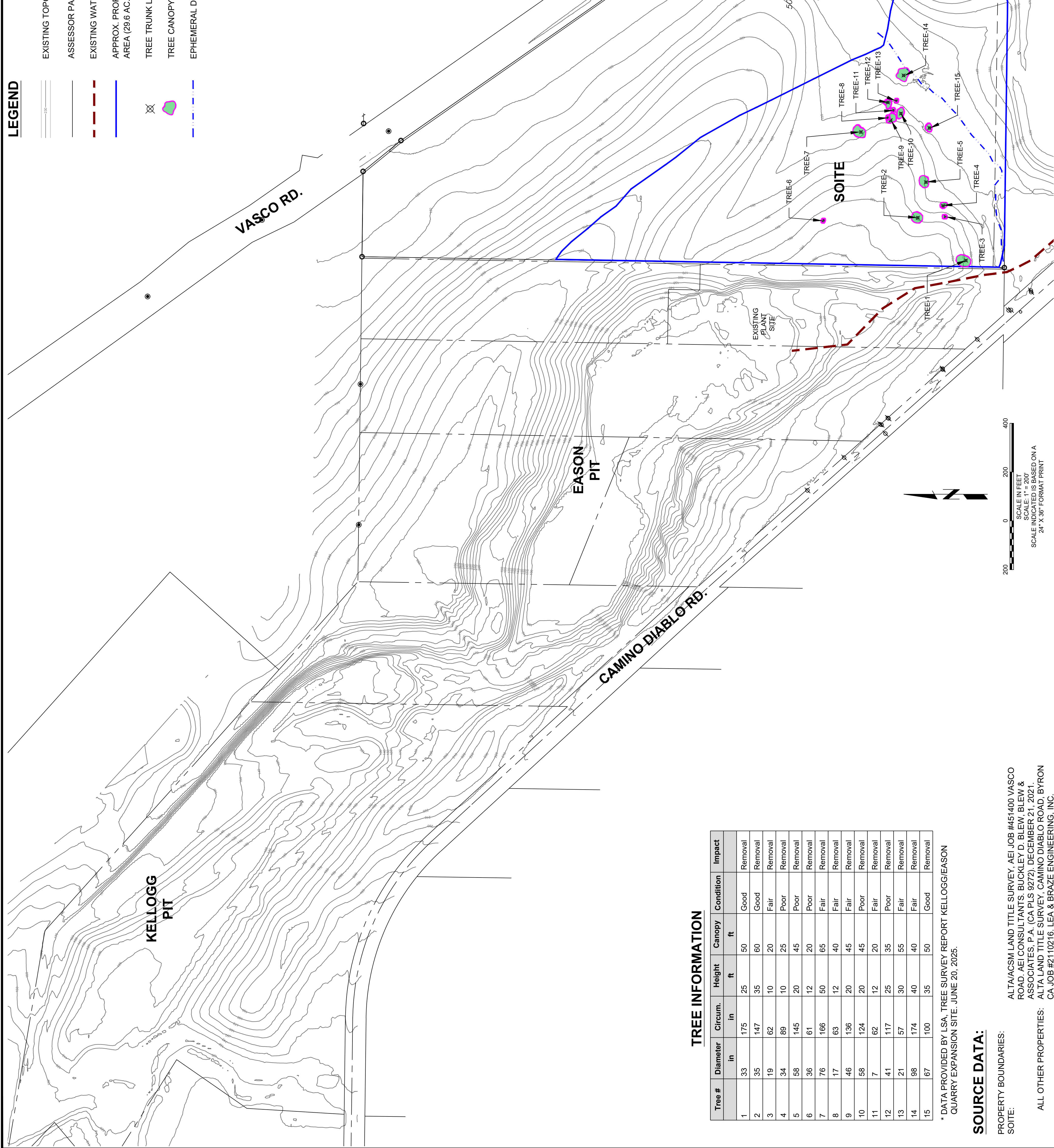
Biological Assessment

ATTACHMENT 10

Tree Survey Report

ATTACHMENT 11

Visual Resources Assessment

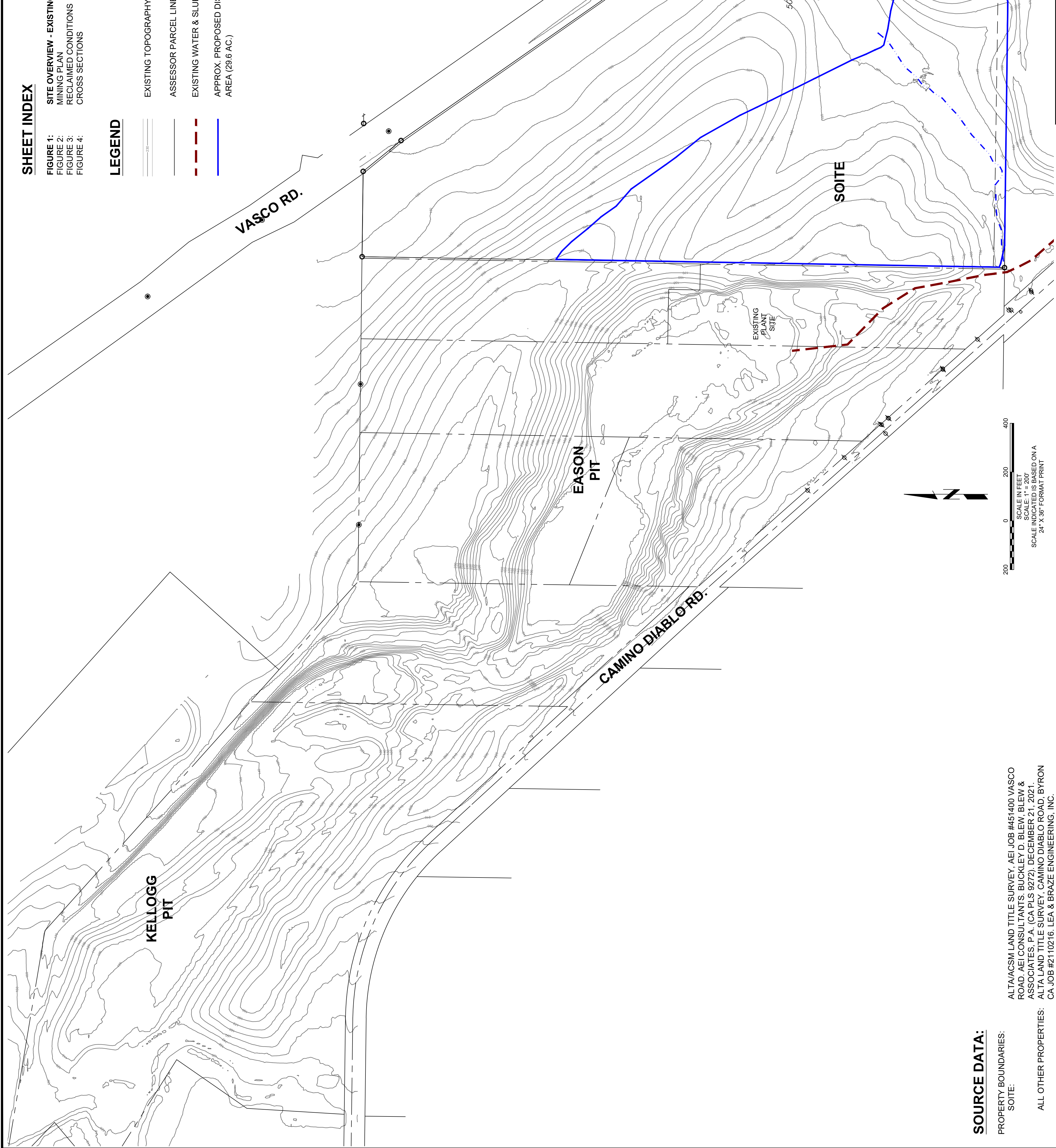


Tree #	Diameter in	Circum. in	Height ft	Canopy ft	Condition	Impact
1	33	175	25	50	Good	Removal
2	35	147	35	60	Good	Removal
3	19	62	10	20	Fair	Removal
4	34	89	10	25	Poor	Removal
5	58	145	20	45	Poor	Removal
6	36	81	12	20	Poor	Removal
7	76	166	50	65	Fair	Removal
8	17	63	12	40	Fair	Removal
9	46	136	20	45	Fair	Removal
10	58	124	20	45	Poor	Removal
11	7	62	12	20	Fair	Removal
12	41	117	25	35	Poor	Removal
13	21	57	30	55	Fair	Removal
14	98	174	40	40	Fair	Removal
15	67	100	35	50	Good	Removal

* DATA PROVIDED BY LSA, TREE SURVEY REPORT KELLOGG/EASON QUARRY EXPANSION SITE, JUNE 20, 2025.

SOURCE DATA:

PROPERTY BOUNDARIES:
SOITE:
ALTA/ACSM LAND TITLE SURVEY, AEI JOB #451400 VASCO ROAD, AEI CONSULTANTS, BUCKLEY D. BLEW, BLEW & ASSOCIATES, P.A. (CA PLS 9272), DECEMBER 21, 2021.
ALL OTHER PROPERTIES:
ALTA LAND TITLE SURVEY, CAMINO DIABLO ROAD, BYRON CA JOB #2110216, LEA & BRAZE ENGINEERING, INC., GREGORY F. BRAZE (CA PLS 7623), AUGUST 17, 2011.
TOPOGRAPHY:
SOITE
BYRON SOITE, JOB# D0211, ENVIROMINE, INC. FLIGHT DATE APRIL 7, 2022.
ALL OTHER AREAS:
CONTOUR INTERVAL:
DATUM:
ENVIROMINE, INC. FLIGHT DATE 2018.
10 FEET
HORIZ= NAD83, CALIFORNIA ZONE 3, US FOOT
VERT= NAVD88



SHEET INDEX

FIGURE 1:
FIGURE 2:
FIGURE 3:
FIGURE 4:

SITE OVERVIEW - EXISTING
MINING PLAN
RECLAIMED CONDITIONS
CROSS SECTIONS

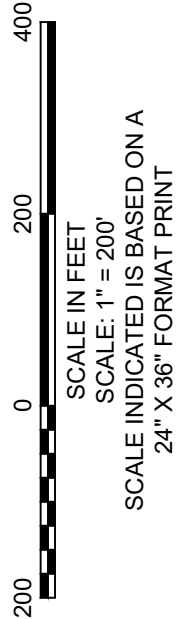
LEGEND

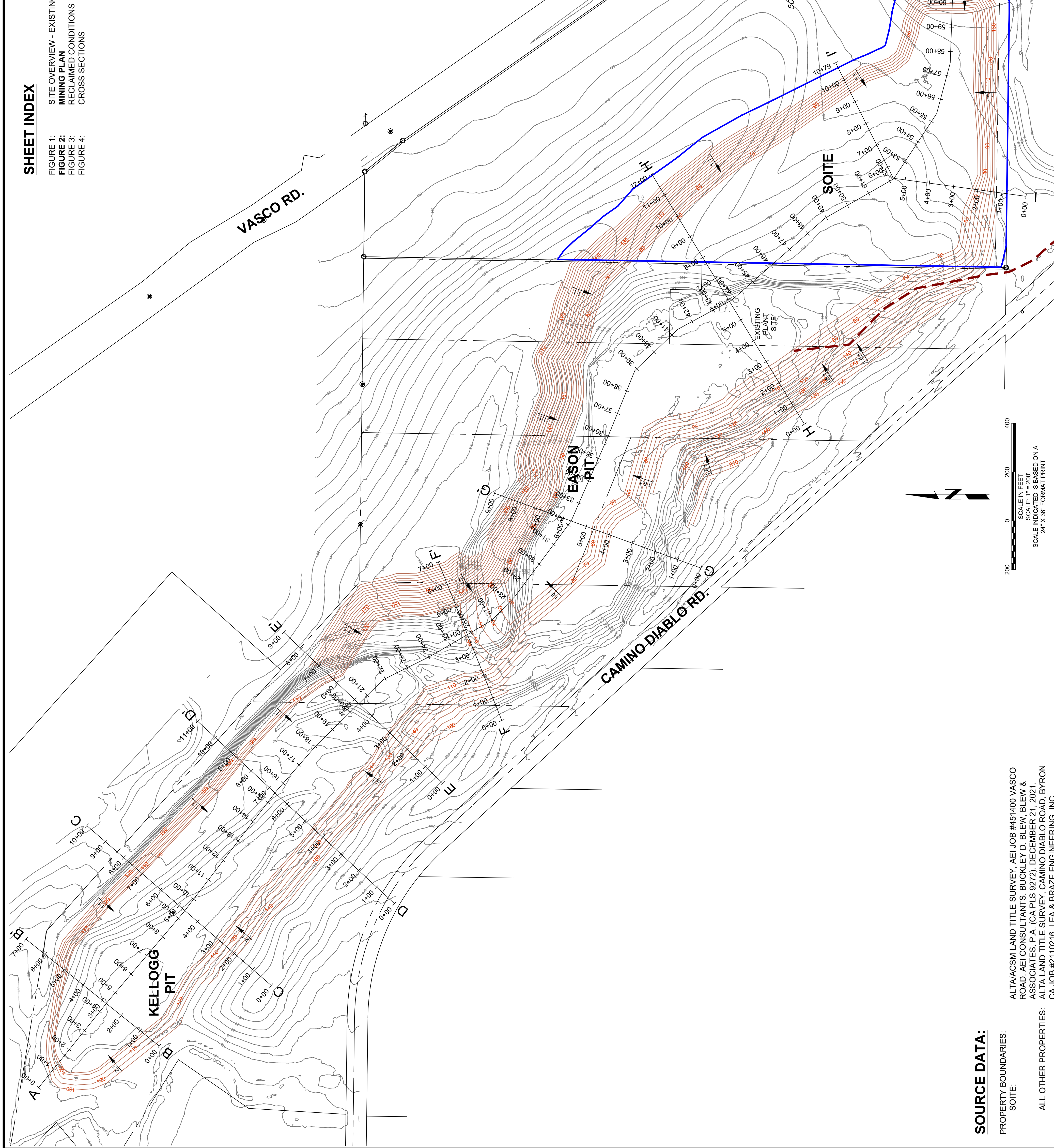
- EXISTING TOPOGRAPHY
- ASSESSOR PARCEL LINE
- EXISTING WATER & SLURRY
- APPROX. PROPOSED DIKE AREA (29.6 AC.)

SOURCE DATA:

PROPERTY BOUNDARIES:
SOITE:
ALL OTHER PROPERTIES:
TOPOGRAPHY:
SOITE
ALL OTHER AREAS:
CONTOUR INTERVAL:
DATUM:

ALTA/ACSM LAND TITLE SURVEY, AEI JOB #451400 VASCO ROAD, AEI CONSULTANTS, BUCKLEY D. BLEW, BLEW & ASSOCIATES, P.A. (CA PLS 9272), DECEMBER 21, 2021.
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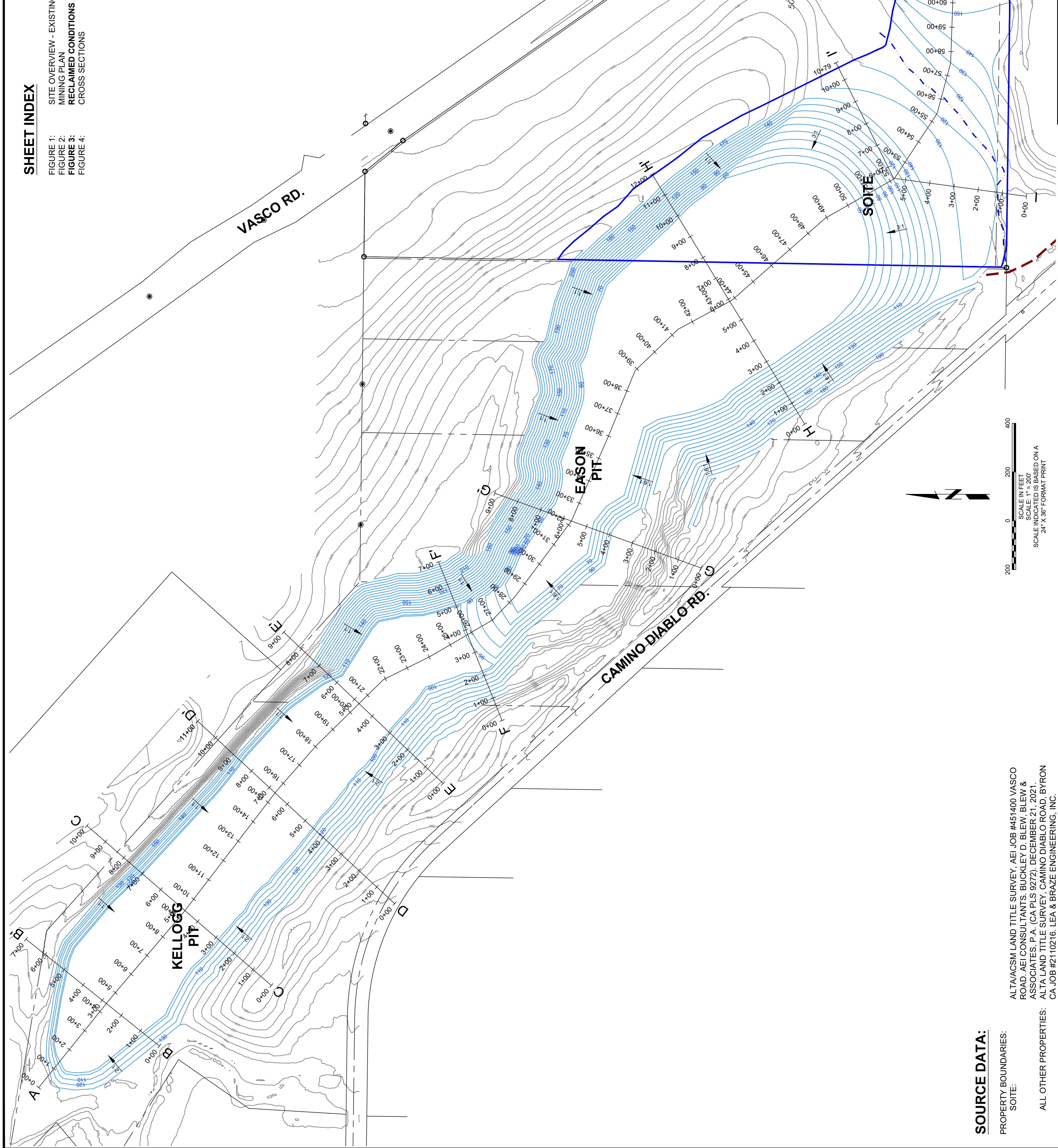
FIGURE 1: SITE OVERVIEW - EXISTING
FIGURE 2: MINING PLAN
FIGURE 3: RECLAIMED CONDITIONS
FIGURE 4: CROSS SECTIONS

SOURCE DATA:

PROPERTY BOUNDARIES:
SOITE:
ALL OTHER PROPERTIES:
TOPOGRAPHY:
SOITE
ALL OTHER AREAS:
CONTOUR INTERVAL:
DATUM:

ALTA/ACSM LAND TITLE SURVEY, AEI JOB #451400 VASCO ROAD, AEI CONSULTANTS, BUCKLEY D. BLEW, BLEW & ASSOCIATES, P.A. (CA PLS 9272) DECEMBER 21, 2021
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ENVIROMINE, INC. FLIGHT DATE 2018.
10 FEET
HORIZ= NAD83, CALIFORNIA ZONE 3, US FOOT
VERT= NAVD88

SCALE IN FEET
SCALE: 1" = 200'
SCALE INDICATED IS BASED ON A
24" X 36" FORMAT PRINT



SHEET INDEX

- FIGURE 1: SITE OVERVIEW - EXISTING
- FIGURE 2: MINING PLAN
- FIGURE 3: RECLAIMED CONDITIONS
- FIGURE 4: CROSS SECTIONS

SOURCE DATA:

PROPERTY BOUNDARIES:
SOITE:

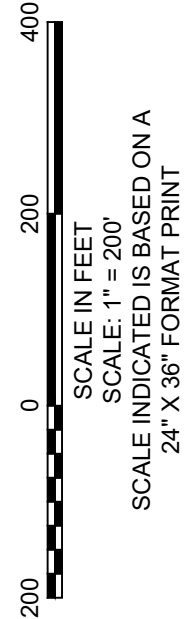
ALL OTHER PROPERTIES:
SOITE

TOPOGRAPHY:
SOITE

ALL OTHER AREAS:
CONTOUR INTERVAL:
DATUM:

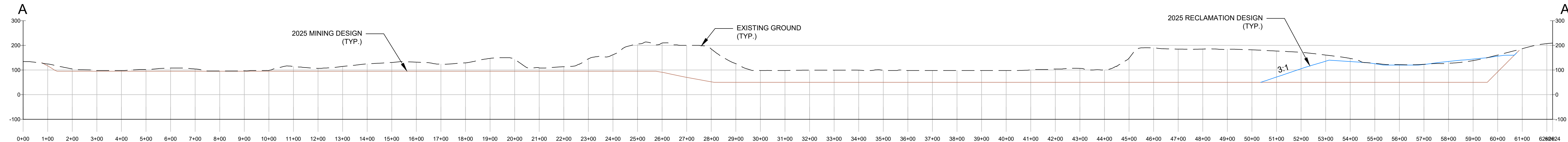
ALTA/ACSM LAND TITLE SURVEY, AEI JOB #451400 VASCO ROAD, AEI CONSULTANTS, BUCKLEY D. BLEW, BLEW & ASSOCIATES, P.A. (CA PLS 9272), DECEMBER 21, 2021.
ALTA LAND TITLE SURVEY, CAMINO DIABLO ROAD, BYRON CA JOB #2110216, LEA & BRAZE ENGINEERING, INC., GREGORY F. BRAZE (CA PLS 7623), AUGUST 17, 2011.

BYRON SOITE, JOB# D0211, ENVIROMINE, INC. FLIGHT DATE APRIL 7, 2022.
ENVIROMINE, INC. FLIGHT DATE 2018.
10 FEET
HORZ= NAD83, CALIFORNIA ZONE 3, US FOOT
VERT= NAVD88

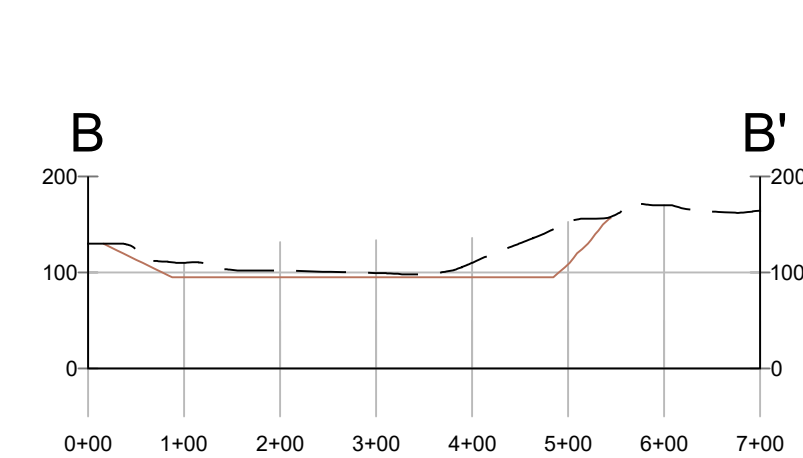


SHEET INDEX

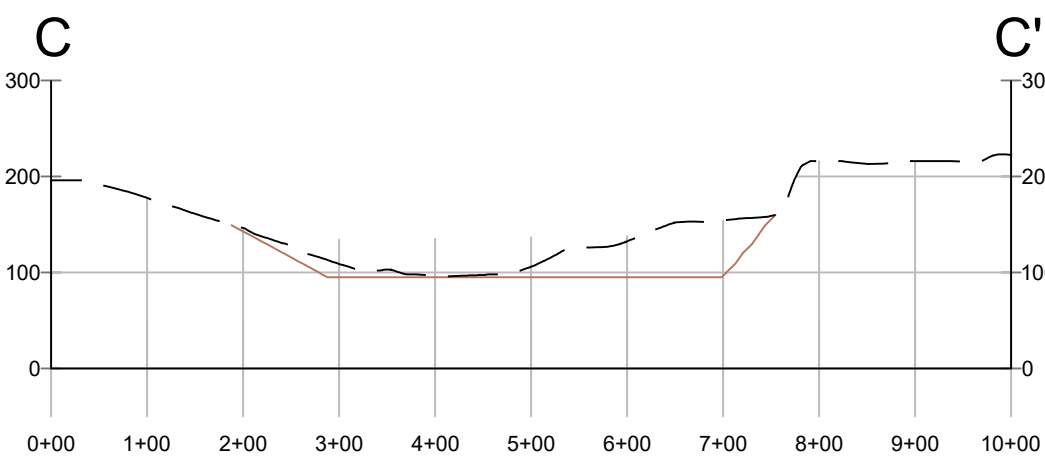
- FIGURE 1:
- SITE OVERVIEW - EXISTING CONDITIONS
- FIGURE 2:
- MINING PLAN
- FIGURE 3:
- RECLAIMED CONDITIONS
- FIGURE 4:
- CROSS SECTIONS



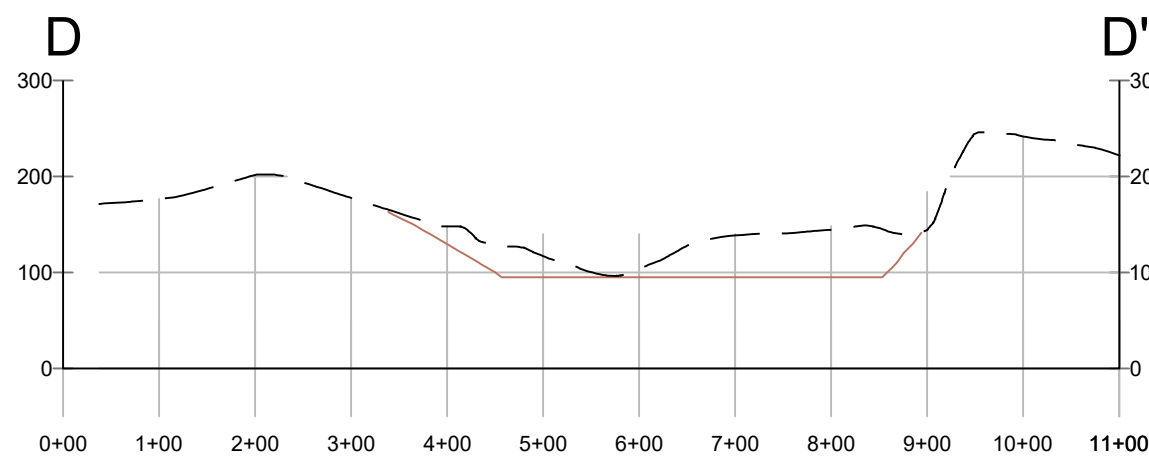
SCALE:
HORZ: 1" = 200'
VERT: 1" = 200'



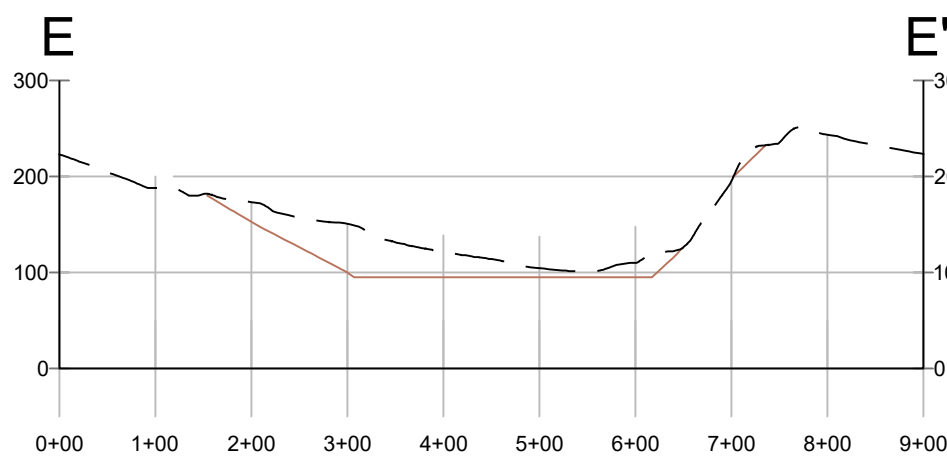
SCALE:
HORZ: 1" = 200'
VERT: 1" = 200'



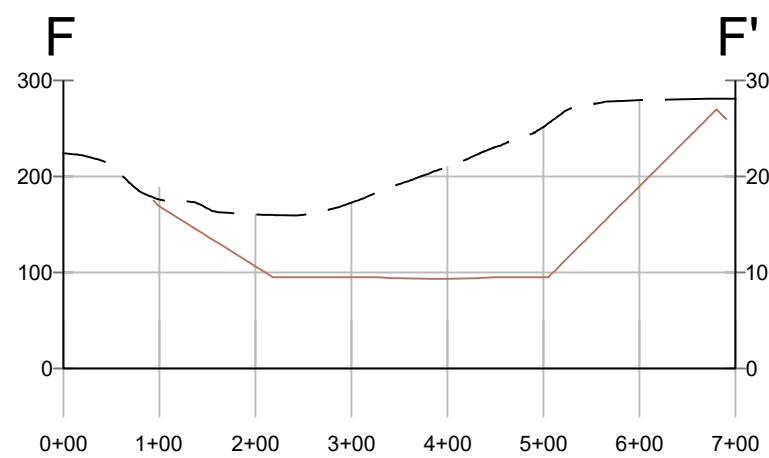
SCALE:
HORZ: 1" = 200'
VERT: 1" = 200'



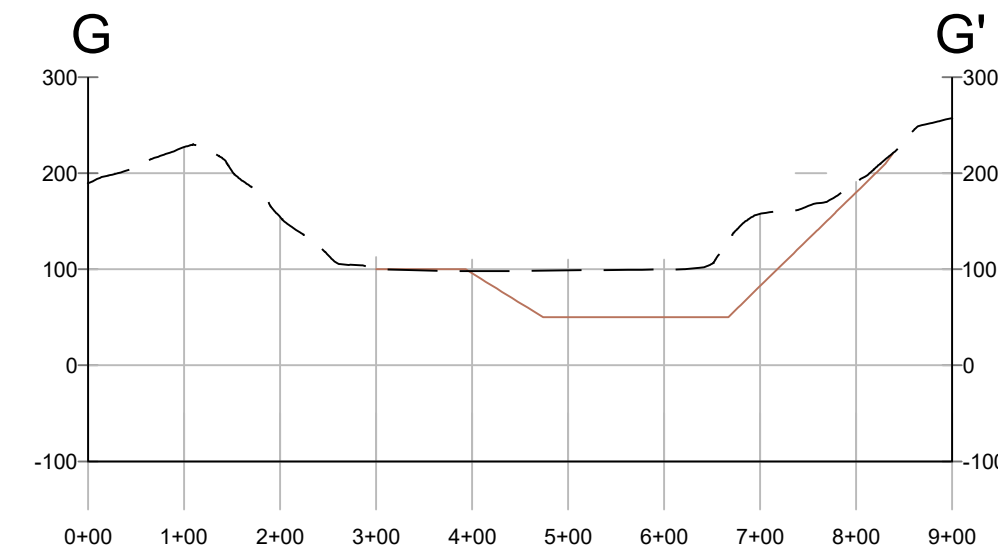
SCALE:
HORZ: 1" = 200'
VERT: 1" = 200'



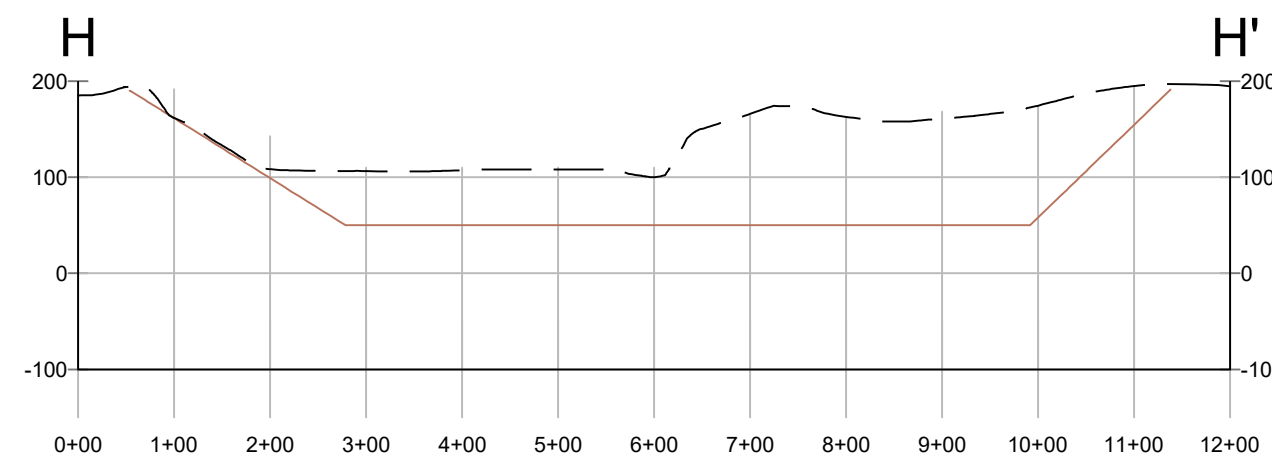
SCALE:
HORZ: 1" = 200'
VERT: 1" = 200'



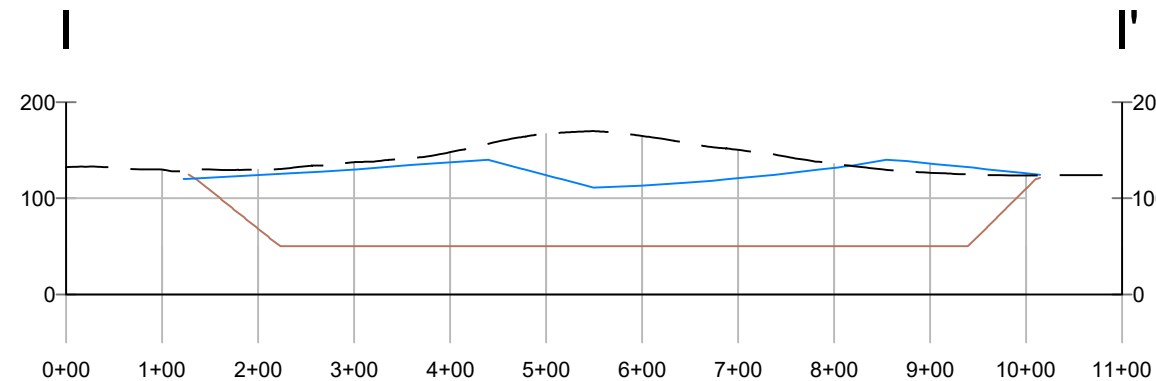
SCALE:
HORZ: 1" = 200'
VERT: 1" = 200'



SCALE:
HORZ: 1" = 200'
VERT: 1" = 200'



SCALE:
HORZ: 1" = 200'
VERT: 1" = 200'



SCALE:
HORZ: 1" = 200'
VERT: 1" = 200'

LEGEND

- EXISTING GROUND
- 2025 MINING DESIGN
- 2025 RECLAMATION DESIGN

SESPE

CONSULTING, INC.

A Trinity Consultants Company

374 Poli Street, Suite 200 • Ventura, CA 93001

(805) 275-1515 • www.sespeconsulting.com

OWNER / APPLICANT	
G3 ENTERPRISES, INC.	
502 EAST WHITMORE AVENUE	
MODESTO, CALIFORNIA 95358	
LAND USE CONSULTANT	
SESPE CONSULTING, INC.	
374 POLI STREET, SUITE 200	
VENTURA, CALIFORNIA 93001	
(805) 275-1515	

REVISIONS			
MARK	DATE	DESCRIPTION	BY
	03/25/25	SUBMITTAL	GLC
REVIEWED BY:			
		DATE	
		DATE	

G3 ENTERPRISES, INC.

BYRON - KELLOGG/EASON EXTENSION

CA MINE ID # 91-07-0012

BYRON, CA

PROPOSED MINING PLAN EXTENSION

CROSS - SECTIONS

SCALE: HORZ: AS SHOWN

VERT: AS SHOWN

DRAWN BY: G. CAMIUS

CHECKED BY: APS

Aerial



Map Legend

-  County Border
-  Assessment
Parcels

Planning Layers (DCD)

-  Unincorporated
Board of
Supervisors'
Districts

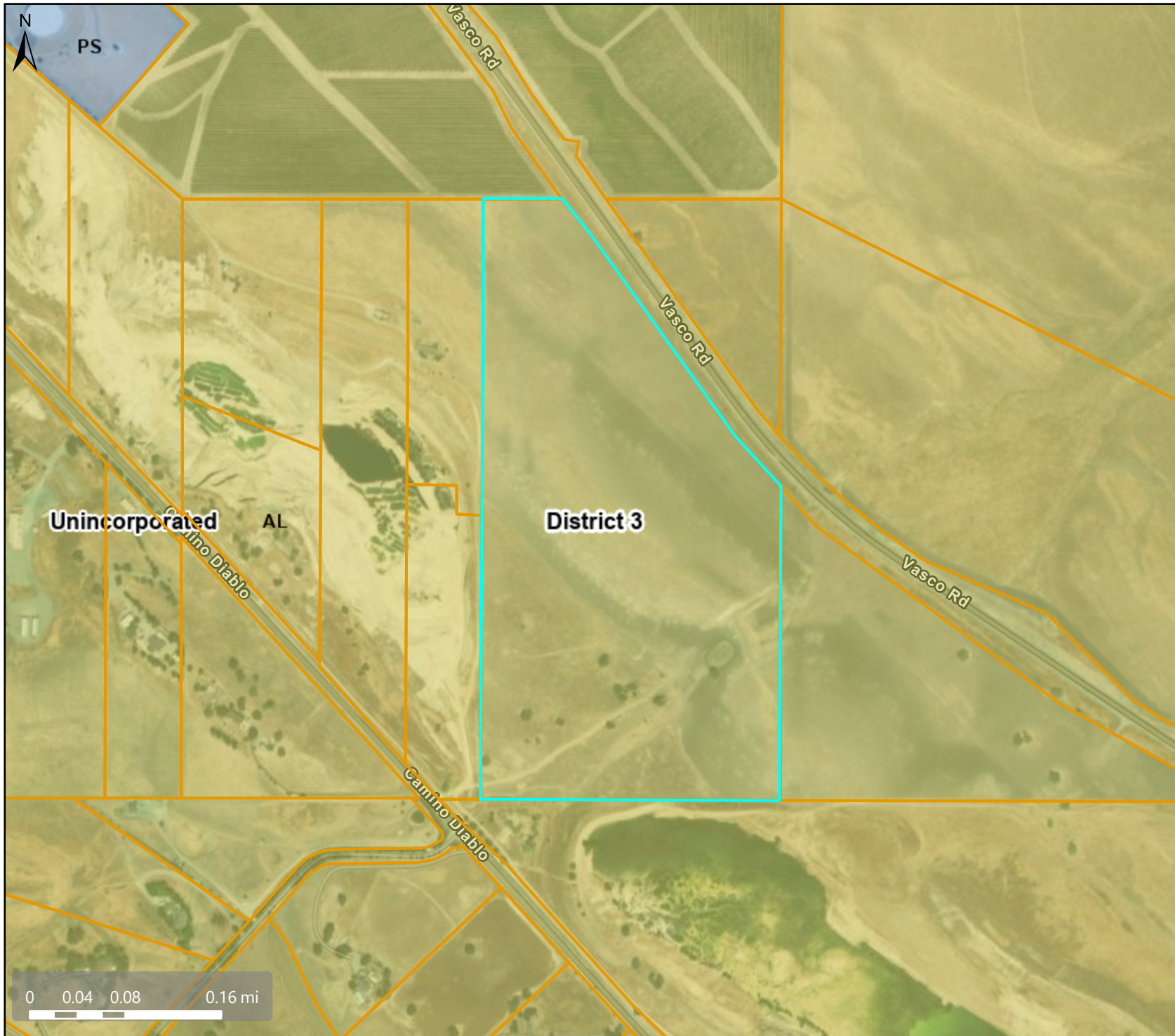
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Spatial Reference
PCS: WGS 1984 Web Mercator Auxiliary Sphere
Datum: WGS 1984

GP - AL



Map Legend

- County Border
- Assessment
Parcels

Planning Layers (DCD)

General Plan

- PS (Public and
Semi-Public)
- AL (Agricultural
Lands) (1 du/10
ac) (1 du/20 ac
in DPZ)
- Unincorporated
- Board of
Supervisors'
Districts

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Spatial Reference
PCS: WGS 1984 Web Mercator Auxiliary Sphere
Datum: WGS 1984

Zoning - A-3



Map Legend

- County Border
- Assessment
Parcels
- Planning Layers
(DCD)
- Zoning
- ZONE_OVER
 - A-3 (Heavy
Agriculture)
 - A-4
(Agricultural
Preserve)
 - Unincorporated
- Board of
Supervisors'
Districts

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