CITY OF COALINGA
The Sunny Side of the Valley

AGENDA
PLANNING COMMISSION

TUESDAY JUNE 8, 2021

The Mission of the City of Coalinga is to provide for the preservation of the community character by delivering quality, responsive City services, in an efficient and cost-effective manner, and to develop, encourage, and promote a diversified economic base in order to ensure the future financial stability of the City for its citizens.

Notice is hereby given that the Planning Commission will hold a Regular Meeting, on June 8, 2021 in the City Council Chambers, 155 West Durian Avenue, Coalinga, CA. Persons with disabilities who may need assistance should contact the City Clerk at least 24 hours prior to the meeting at 935-1533 x113. Anyone interested in translation services should contact the City Clerk at least 24 hours prior to the meeting at 935-1533 x113. The Meeting will begin at 6:00 p.m. and the Agenda will be as follows:

ZOOM WEBINAR INFORMATION

DESKTOP OR APP
https://us02web.zoom.us/j/83235464138?pwd=a2h0ajgxckVrWm1QOEdkaTRURkF6QT09
Passcode:004040

TELEPHONE

Dial: 669 900 9128
Webinar ID: 832 3546 4138
Passcode: 004040

CALL MEETING TO ORDER (6:00 PM)

Pledge of Allegiance

CHANGES TO THE AGENDA

ROLL CALL

Commissioners: *Chairman Sailer*
Vice Chairman Jacobs

Commissioner Helmar
Commissioner Garza
Commissioner Pruitt

Staff: *Sean Brewer, Assistant City Manager*
Marissa Trejo, City Manager

PUBLIC COMMENTS

Under Government Code 54954.3 members of the audience may address the Commission on any item of interest to the public or on any agenda item before or during the Commission's consideration of the item. State law prohibits the Planning Commission from acting on non-agenda items.

INFORMATION/CONSENT CALENDAR

1. Approve Minutes - 4-27-2021
2. Approve Minutes - 5-25-2021

PUBLIC HEARINGS

1. Conditional Use Permit Application CUP 21-05 - Granite Construction Mining Expansion

DISCUSSION AND/OR POTENTIAL ACTION ITEMS

DEPARTMENT REPORTS

COMMUNICATIONS

1. Staff Announcements
2. Commissioner Announcements
3. Chairman Announcements

ADJOURN

CITY OF COALINGA
The Sunny Side of the Valley

Staff Report- Chairman and Planning Commission

Subject: ZOOM Info
Meeting Date June 8, 2021
Project Location:
Applicant:
Owner:
Prepared By:

I. RECOMMENDATION:

DESKTOP OR APP
https://us02web.zoom.us/j/83235464138?pwd=a2h0ajgxckVrWm1QOEdkaTRURkF6QT09
Passcode:004040

TELEPHONE

Dial: 669 900 9128
Webinar ID: 832 3546 4138
Passcode: 004040

II. BACKGROUND:

III. PROPOSAL AND ANALYSIS:

IV. FISCAL IMPACT:

V. REASONS FOR RECOMMENDATION:

CITY OF COALINGA
The Sunny Side of the Valley

Staff Report- Chairman and Planning Commission

Subject:	Approve Minutes - 4-27-2021
Meeting Date	June 8, 2021
Project Location:	155 W Durian Ave., Coalinga, CA
Applicant:	N/A
Owner:	N/A
Prepared By:	

I. RECOMMENDATION:

II. BACKGROUND:

III. PROPOSAL AND ANALYSIS:

IV. FISCAL IMPACT:

V. REASONS FOR RECOMMENDATION:

ATTACHMENTS:

Description

4-27-2021 PC

MINUTES
PLANNING COMMISSION
155 W. Durian Avenue, Coalinga, CA 93210
Tuesday, April 27, 2021

The Mission of the City of Coalinga is to provide for the preservation of the community character by delivering quality, responsive City services, in an efficient and cost-effective manner, and to develop, encourage, and promote a diversified economic base in order to ensure the future financial stability of the City for its citizens.

CALL MEETING TO ORDER (6:01PM)

Meeting also conducted via Zoom webinar for the public's participation.

Pledge of Allegiance

CHANGES TO THE AGENDA

None

ROLL CALL

Commissioners:	*Chairman Sailer* *Vice Chairman Jacobs* *Commissioner Helmar* *Commissioner Garza* *Commissioner Pruitt*
Staff:	*Assistant City Manager, Sean Brewer* *Public Works and Utilities Coordinator, Larry Miller* *City Clerk, Shannon Jensen*

PUBLIC COMMENTS

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None

INFORMATION/CONSENT CALENDAR

1. Approve Minutes – 3/23/2021

Motion by Helmar, Second by Garza to Approve Information/Consent Calendar. Motion ***Approved*** *by 5/0 Majority Voice Vote.*

PUBLIC HEARINGS

1. Planning Commission Adoption of Resolution No. 021P-005, Approving Conditional Use Permit Application CUP 21-04 with Conditions for the Development of a New Cannabis Cultivation Distribution and Manufacturing Facility to be Located at 1951 Mercantile Lane

Assistant City Manager Sean Brewer gave a brief overview of the item.

Chairman Sailer opened the Public Hearing for comment.

Chairman Sailer closed the Public Haring.

Motion by Garza, Second by Helmar to Approve Resolution No. 021P-005, Approving Conditional Use Permit CUP 21-04 with Conditions for the Development of a New Cannabis Cultivation Distribution and Manufacturing Facility to be Located at 1951 Mercantile Lane. Motion ***Approved*** *by a Roll-Call 4/1 Majority Vote. (Sailer voted "No").*

DISCUSSION AND/OR POTENTIAL ACTION ITEMS

1. Discussion Regarding Public Attendance at Planning Commission Meetings

Assistant City Manager Sean Brewer gave a brief overview of the item.

Consensus of the Commission is to reopen the Planning Commission meetings to the public under the same regulations as the City Council Meetings.

DEPARTMENT REPORTS

1. Update on Zoom Meeting Chat Feature

Assistant City Manager Sean Brewer announced the Chat feature has been disabled for both the Planning Commission and the City Council meetings.

COMMUNICATIONS

1. Staff Announcements

Assistant City Manager Sean Brewer gave a brief overview of current and upcoming projects throughout town. Operation and use of the splash pad will be dictated by any drought regulations that may need to be in place.

2. Commissioner Announcements

None

3. Chairman Announcements

Assistant City Manager Sean Brewer indicated he did not anticipate having the next Planning Commission meeting.

ADJOURN 6:36PM

_____
Chairman/Vice Chairman

_____
Shannon Jensen, City Clerk

_____
Date

CITY OF COALINGA
The Sunny Side of the Valley

Staff Report- Chairman and Planning Commission

Subject:	Approve Minutes - 5-25-2021
Meeting Date	June 8, 2021
Project Location:	155 W Durian Ave., Coalinga, CA
Applicant:	N/A
Owner:	N/A
Prepared By:	

I. RECOMMENDATION:

II. BACKGROUND:

III. PROPOSAL AND ANALYSIS:

IV. FISCAL IMPACT:

V. REASONS FOR RECOMMENDATION:

ATTACHMENTS:

Description

5-25-2021 PC

MINUTES
PLANNING COMMISSION
155 W. Durian Avenue, Coalinga, CA 93210
Tuesday, May 25, 2021

The Mission of the City of Coalinga is to provide for the preservation of the community character by delivering quality, responsive City services, in an efficient and cost-effective manner, and to develop, encourage, and promote a diversified economic base in order to ensure the future financial stability of the City for its citizens.

CALL MEETING TO ORDER (6:16PM)

Meeting also conducted via Zoom webinar for the public's participation.

Pledge of Allegiance

CHANGES TO THE AGENDA

None

ROLL CALL

Commissioners:	*Chairman Sailer* *Vice Chairman Jacobs - Absent* *Commissioner Helmar* *Commissioner Garza* *Commissioner Pruitt*
Staff:	*Assistant City Manager, Sean Brewer* *Public Works and Utilities Coordinator, Larry Miller* *City Clerk, Shannon Jensen*

PUBLIC COMMENTS

Under Government Code 54954.3 members of the audience may address the Commission on any item of interest to the public or on any agenda item before or during the Commission's consideration of the item. State law prohibits the Planning Commission from acting on non-agenda items.

None

INFORMATION/CONSENT CALENDAR

None

PUBLIC HEARINGS

1. Planning Commission Review and Approval of City Planning Application CDA 20-01 and further adopting Resolution No. 021P-006 Recommending to the City Council approval of a Tentative Subdivision Map,

General Plan Amendment, Re-zone, Site Plan Review and Certification of an Initial Study Mitigated Negative Declaration for the Heritage at Coalinga Alzheimer's and Assisted Care Community Located at the Northwest Corner of Phelps Ave and Gregory Way

Assistant City Manager Sean Brewer gave a brief overview of the item.

Chairman Sailer opened the Public Hearing for comment.

Chairman Sailer closed the Public Haring.

Motion by Helmar, Second by Garza to Approve City Planning Application CDA 20-01 and further Adopting Resolution No. 021P-006 Recommending to the City Council Approval of a Tentative Subdivision May, General Plan Amendment, Re-Zone, Site Plan Review and Certification of an Initial Study Mitigated Negative Declaration for the Heritage at Coalinga Alzheimer's and Assisted Care Community Located at the Northwest Corner of Phelps Ave and Gregory Way. Motion ***Approved*** *by a Roll-Call 4/0 Majority Vote. (Jacobs – Absent).*

DISCUSSION AND/OR POTENTIAL ACTION ITEMS

None

DEPARTMENT REPORTS

None

COMMUNICATIONS

1. Staff Announcements

None

2. Commissioner Announcements

None

3. Chairman Announcements

None

ADJOURN 6:50PM

_____

Chairman/Vice Chairman

_____

Shannon Jensen, City Clerk

_____

Date

CITY OF COALINGA
The Sunny Side of the Valley

Staff Report- Chairman and Planning Commission

Subject:	Conditional Use Permit Application CUP 21-05 - Granite Construction Mining Expansion
Meeting Date	June 8, 2021
Project Location:	38940 Highway 33, Coalinga, CA 93210
Applicant:	Granite Construction Company, PO Box 15287, Sacramento, CA 95851
Owner:	Granite Construction Company, PO Box 15287, Sacramento, CA 95851
Prepared By:	Sean Brewer, Assistant City Manager

I. RECOMMENDATION:

Staff recommends that the Planning Commission adopt Resolution No. 021P-007 with conditions for the expansion of Granite Construction Company's ("Granite") existing aggregate mining operation on a 202.54-acre parcel in the City of Coalinga.

II. BACKGROUND:

Granite owns and operates an existing, permitted aggregate mining and processing operation in western Fresno County known as the Coalinga Facility. The Coalinga Facility consists of multiple permitted mining areas under CA Mine ID Nos. 91-10-0005 and 91-10-0007, which are governed by Fresno County Conditional Use Permit ("CUP") and Reclamation Plan Nos. 2320, and 3512. In addition to mining and reclamation, existing permitted uses at the Coalinga Facility include aggregate, asphalt, and concrete processing plants, as well as ancillary uses such as aggregate stockpiling/loading/sales, construction materials recycling, and equipment storage and maintenance. Under CUP 3512, Granite modified County CUP 915 to include a new extraction area that lies west of Los Gatos Creek. There has been no prior mining work done within the portion of the property in the City of Coalinga and this the first time a CUP is being processed for aggregate mining in the City.

On August 13, 2020, the Fresno County Planning Commission adopted an Initial Study/Mitigated Negative Declaration (IS/MND) that studied the entirety of the Granite' mining operation located both in the city and the County (299.11 acres in the County and 202.54 acres in the City), and approved Fresno County CUP 3512, to allow the expansion of Granite's aggregate mining operations on the 299.11-acre parcel in unincorporated Fresno County. The City as a CEQA Responsible Agency, must consider the MND prior to reaching a decision on the project.

On April 19, 2021, the City of Coalinga Community Development Department accepted for processing a CUP application to allow the expansion of Granite's existing aggregate mining operation on the 202.54-acre parcel in the City of Coalinga. The Project requires a CUP for mining and Site Plan Review from the City of

Coalinga to allow future mining operations in the portion of APN# 070-060-89s that lies within the City's jurisdictional limits.

Conditional Use Permit Application: In accordance with Section 9-2.502 of the Coalinga Planning and Zoning Code related to Resource Extraction Activities: Mining and Quarrying, the applicant shall process a CUP as required by the City's Land Use Regulations for mining projects in the Manufacturing and Business Light (MBL) Zone District. In addition, a mining and quarrying conditional use permit is allowed only in areas designated as Resource Extraction Overlay in the General Plan (Chapter 3, Article 6, Resource Extraction Overlay District). The CUP shall run with the land.

A small portion of the northeast corner of the site is in the Service Commercial Zone is not covered by the CUP mining application and is reserved for future commercial uses.

Site Plan Review: Section 9-6.402 of the City of Coalinga Municipal Code requires that all applicable new structures, permanent or temporary, that are erected in the City require a Site Plan Review and approval by the Planning Commission for consistency with all applicable zoning regulations.

The purpose of the site plan review is to enable the Community Development Director or the Planning Commission to make findings that a proposed development is in conformity with the intent and provisions of the Coalinga Municipal Code, and to guide the Building Official in the issuance of permits. The proposed project does not fall under the exempt projects and projects qualifying for Administrative Site Plan Review; therefore, the proposed project requires site plan approval from the Coalinga Planning Commission.

California Environmental Quality Act: This application constitutes a project in accordance with the California Quality Act (CEQA). Accordingly, Fresno County staff prepared an Initial Study (IS) in conformance with CEQA for those portions of the project in unincorporated Fresno County as well as those portions of the proposed project in the City of Coalinga. Based on the IS, County staff determined that a Mitigated Negative Declaration (MND) was the appropriate CEQA document. The Fresno County Planning Commission adopted the IS/MND on August 13, 2020, for those portions of the project in unincorporated Fresno County. As a Responsible Agency under CEQA, the City of Coalinga Planning Commission will need to consider the IS/MND for those portions of the project within the City of Coalinga jurisdiction.

Department Comments: Once the application was deemed complete staff requested comments from the necessary City Departments. This proposal, including conditions of approval, reflect feedback from the necessary City Departments and outside agencies.

III. PROPOSAL AND ANALYSIS:

Development Proposal: The proposed project is a request for a new CUP from the City of Coalinga for aggregate mining and related activities on a 202.54-acre parcel (APN 070-060-89S) that lies within the City limits. Mining operations will be performed in a manner consistent with current practices at the existing Coalinga Facility in unincorporated Fresno County and would be initiated by the removal of vegetation, topsoil/growth media, and overburden materials which lie above marketable sand and gravel deposits. The overlying materials will be removed using scrapers aided by a motor grader and a bulldozer, as needed. After overlying materials are removed, marketable sand and gravel will be excavated using a combination of scrapers, front-end loaders, hydraulic excavators, bulldozers, and other support equipment. New excavation areas will not be closer than 50 feet from the edge of the Los Gatos Creek floodplain.

The maximum anticipated depth of excavation for mining purposes is two hundred (200) feet below ground surface (bgs) to elevation 484 feet above mean sea level (AMSL). The Project does not involve in-stream

mining and includes setbacks from the 100-year floodplain to the mining boundary. No mining is proposed within fifty (50) feet of a property boundary or below the water table. The groundwater elevation at the site is approximately 300 feet bgs.

Following excavation, the sand and gravel will be transported via conveyor and/or internal haul roads to the existing processing plants where it will be processed and/or sold for use in construction materials. Mining methods will be consistent with current operations at the existing Coalinga Facility, and no changes to baseline mining production levels were proposed.

Transport of sand and gravel from the east side of Los Gatos Creek to the west side of the creek will occur via an elevated conveyor system. The portion of the conveyor system crossing of Los Gatos Creek is mainly in unincorporated Fresno County; however, other portions of the conveyor system would be located within the Coalinga jurisdictional boundaries. The elevated conveyor system will consist of a belt conveyor on a steel truss frame supported by two 4-foot diameter columns in the floodplain but outside of the Los Gatos Creek channel and two 4-foot diameter columns outside of the floodplain. The conveyor system will be situated above the 100-year flood elevation, which is approximately 710.17 feet. The belt conveyor will be equipped with water spray nozzles to minimize dust. Conveyor wiper blades will be used to prevent material build-up on the belt and the steel truss frame will be equipped with a spill pan, which will catch any side-cast sand and gravel and prevent sedimentation in Los Gatos Creek.

Mine activities would occur between the hours of 6:00 a.m. to 5:00 p.m. weekdays, except during public emergencies, with maintenance of mobile and plant equipment extending beyond these limits. There will be between 10-20 employees working within the proposed expansion area within the City limits. The applicant anticipates that there will be miscellaneous service and delivery vehicles and occasional point of sale pickup of fill, pit run, or screened material; however, Granite does not anticipate customers and/or visitors within the Project area within the City limits. The majority of customers and visitors will continue to access existing defined areas of the facility.

The mining operation will progress in a phased manner to allow for some concurrent reclamation activities. Final reclamation will consist of slope reclamation and revegetation in support of the approved end use of the site as open space. An estimated time schedule for excavation and reclamation is shown on the table below based on an average production rate of 1.5 million tons/year.

Phase	Acres	Tons (Millions)	Years to Completion
Phase 1	78	19	13
Phase 2	79	22	15
Phase 3	74	20	13
Phase 4	46	6	4
Phase 5	69	9	6
Phase 6	22	6	4
Total	**368**	**82**	**55**

Following completion of Phase 6, the all mined areas will be reclaimed in conformance with the State Mining and Reclamation Act (SMARA) as follows:

- Prior to the initial mining operation that involves stripping of overburden, approximately six-to-twelve inches of topsoil/growth media will be excavated in a separate operation and stockpiled/segregated (with signage as needed) for use in future reclamation activities.

- During reclamation, stockpiled topsoil/growth media will be redistributed in preparation for revegetation.

- Revegetation areas will be ripped, disced and/or scarified as needed to establish a suitable root zone in preparation for plantings.

- Any incidental refuse or garbage will be hauled off-site and disposed of in accordance with state and local standards.

- Facilities, structures, and equipment associated with mining and processing will be removed from the site following final reclamation except for property line fencing, perimeter berms, and perimeter access roads.

- Except for the cut slopes, screening berms, and perimeter access roads, disturbed surfaces will be revegetated with a native seed mix recommended for the site.

General Plan/Zoning Consistency: The General Plan designation for the parcel is (MB) Manufacturing and Business with a Resource Extraction Overlay and a zoning designation of Manufacturing and Business Light (MBL) and Service Commercial Zone in the northeast corner outside the proposed mining areas. The project proposal is consistent with all the development regulations for mining operations with approval of a CUP. Currently, the applicant has an approved CUP for mining operations within the unincorporated Fresno County portion of the site.

Surrounding Land Uses: The Project is in western Fresno County and encompasses a portion of Section 29, Township 20 South, Range 15 East, Mount Diablo Base and Meridian. More specifically, the Project is located south of the Applicant's existing Coalinga Facility, north of Cambridge Avenue, West of State Route 198/33, and east of Monterey Avenue.

Direction	Use
North	Resource extraction/industrial
South	Recreational park, with scattered commercial, residential, and school facilities bordering Cambridge Avenue farther south
East	State Route 198/33, with agriculture and residential uses farther east
West	Monterey Avenue, with undeveloped land and oil fields farther west

Site Plan Review

According to Section 9-6.402 of the City of Coalinga Municipal Code, a site plan review is required for all development projects within the City. The purpose of the site plan review is to enable the Community Development Director or the Planning Commission to make findings that a proposed development is in conformity with the intent and provisions of the Coalinga Municipal Code, and to guide the Building Official in the issuance of permits. The proposed project does not fall under the exempt projects and projects qualifying for Administrative Site Plan Review; therefore, the proposed project requires site plan approval from the Coalinga Planning Commission. In addition to mining operations, the major site improvement would be the elevated conveyor system proposed to transport aggregate material across Los Gatos Creek and other portions of the project site.

<u>Findings for Approval</u>

According to Section 9-6.404 of the Coalinga Municipal Code, the Planning Commission shall consider the

following findings to approve a site plan:

- The proposed construction/alterations are in substantial conformance with the General Plan, zoning ordinance, and any applicable plans adopted by the city.
- The proposed construction/alterations conform to the requirements of the applicable Zoning Districts.
- The proposed construction/alteration conforms to all applicable design standards and guidelines, as adopted by the City Council.
- The construction/alteration will not have significant adverse effects on the public health, safety, and welfare.

Staff Analysis

As described in more detail below, City staff has determined the proposed project is in substantial conformance with the General Plan, zoning ordinance, and any applicable plans adopted by the City.

Manufacturing and Business Development Regulations

There are several development regulations that staff reviews prior to recommending approval of a site plan review application. This site plan application has been reviewed for compliance with the Coalinga Planning and Zoning Code and meets all applicable requirements for the proposed use based on type, location, and site constraints.

Access: The primary access to the Project area will occur via internal access roads from the existing Coalinga Facility, which is accessed via an existing encroachment off of State Route 198/33. With the exception of miscellaneous service and delivery vehicles (electrical, maintenance, industrial deliveries) and occasional point of sale pickup and fill, pit run, or screened material, the applicant does not anticipate customers and visitors within the project area. Occasionally, employees and equipment may access the Phase 4 and 5 mining areas west of Los Gatos Creek utilizing encroachments easements off Monterey Avenue.

The Project site is disturbed with widespread evidence of historical industrial activity and off-road vehicle use. Vegetation cover ranges from very sparse to almost nonexistent. The proposed expansion area will be accessed through internal haul roads with no direct access to state-maintained or local roads, and the subject application proposes no new access or changes to the existing access point to the site. Project access roads will be dirt or gravel roads, and the proposed electric conveyor will be maintained according to Mine Safety and Health Administration (MSHA) and California Occupational Health and Safety (Cal-OSHA) rules, regulations, and standards. No modification to the access roadways or the existing street system is proposed.

A Traffic Impact Study Report (VRPA 2019) was prepared for the project. Turning movement counts were taken in September 2017 and show that the existing project vehicle trips would be the same as the project's trips with the expansion since current production levels, hours of operation, materials to be mined, equipment types, or mining methods will not change. The traffic report (Table 3-2) shows that the SR 33 intersection with project's driveway, SR 33 intersection with SR 198, and I-5 ramp intersections with SR 198 would operate satisfactorily under the modified existing scenario (with expansion) and the cumulative year 2040 scenario. According to City of Coalinga Active Transportation Plan (ATP) SR 33/SR 198 is proposed to be a Class II (buffered) bike lane from El Rancho Boulevard to Polk Street. North of this section, along SR 33 bicycles are allowed in the shoulders.

Caltrans, in a letter dated May 5, 2021, recommends that the Shared Lane Marking be placed in the right-turn lane at the project's entrance to indicate that bicyclists may travel straight through the SR 33 intersection with

the driveway.

According to the Fire Department and City Engineer there is adequate space on-site for public safety maneuvering.

Utilities

All utilities and service systems are within the Fresno County jurisdiction. The sewage systems at the existing Coalinga Facility will be used and may be supplemented with serviced portable toilets within the Project area. The existing sewage systems consist of a city sewer connection at the office building, as well as septic systems at the processing facility, and portable toilets in other locations of the Facility. No new or additional wastewater above existing generation levels are anticipated from the proposed Project.

Water usage associated with mining and reclamation activities in the Project area will be limited to that needed for dust control and will be supplied by on-site wells, and/or by recycled water from on-site settling ponds. Estimated daily water use is 100,000 gallons/day; this amount will vary depending on the weather.

Any additional utility connections shall be shown on the final site plan and approved by the Planning Department and confirmed by the Public Works Department. Improvement plans will be reviewed and approved by the City Engineer.

Storm Runoff: The 100-year floodplain in and around the Project area has been mapped by the Federal Emergency Management Agency ("FEMA"). Mining will not occur within the 100-year floodplain, and setbacks have been incorporated in the engineering design to help ensure that mining will remain outside of the floodplain in the event of future physical changes to the floodplain.

Surface storm runoff is not expected as the Project involves mining below grade with perimeter control berms surrounding most of the excavation area. During initial surface disturbance activities, direct precipitation and drainage will be controlled through a combination of berms, silt fences, fiber rolls, revegetation, and other erosion control measures, as needed, to ensure that land and water resources are protected from erosion, gullying, sedimentation, and potential contamination. Slopes will be vegetated with specified seed mixes once final reclamation grades are achieved.

Upon completion of mining operations, the site will be graded to minimize erosion, revegetated, and left in an open space condition. Direct precipitation may temporarily collect in the pit-bottom before it evaporates, infiltrates, or is used on-site. The floor of each pit will slope to the south to allow positive drainage and to confine the runoff to desired locations in a controlled manner. Due to the Project design elements and site-specific conditions, it is not anticipated that the Project would violate any water quality standards or waste discharge requirements or otherwise degrade water quality, or conflict with or obstruct the implementation of a Water Quality Control Plan or Sustainable Groundwater Management Plan. The Project's Reclamation Plan is consistent with the Central Valley Regional Water Quality Control Board's Water Quality Control Plan guidance for mining operations.

The Project is subject to the following mitigation measures/conditions of approval to ensure no surface water or storm water impacts related to installation of the proposed elevated conveyor system:

- A containment system shall be designed and installed to catch and collect side-cast sand and gravel from the elevated conveyor system to prevent inadvertent fill of the jurisdictional waters (Los Gatos) Creek. The containment system shall be regularly maintained as part of normal operations during the life of the Project.

- Installation of the elevated conveyor system and associated infrastructure in the floodplain shall occur

between April 1 and October 31, when flowing water is absent from the stream or at a minimum flow.

Parking: In accordance with section 9-4.302 Table 4.4 of the zoning code, the parking requirement for the proposed development is 1 stall for every 2 employees on the maximum shift. No change to the existing on-site parking for employees is proposed. Consistent with existing practices, the majority of parking will occur at the shop area, which currently has approximately 50 parking spaces for heavy equipment and 10-20 employees.

Refuse Containers: Any incidental refuse or garbage will be hauled off-site and disposed of in accordance with City requirements.

Landscaping: Existing vegetation cover at the Project site ranges from very sparse and almost nonexistent to small, dense patches of ruderal (weedy) species. As part of reclamation, the Project site will be returned to open space through revegetation with the native seed mix. Final reclamation, consisting of slope reclamation, replacement of growth media, and revegetation will commence as soon as final excavation grades are achieved. During the revegetation establishment period, noxious weeds (as listed by the California Department of Food and Agriculture) will be managed.

Perimeter Fencing and Berms: Perimeter fencing at least 4 feet in height consisting of not less than three 3 strands of barbed wire (or an approved equivalent) will be installed. In each phase, overburden material will be used to build earthen screening berms, which will also serve as noise control berms around the majority of the project boundary. Upon installation of the berms, below-grade excavation will not be visible from surrounding areas. Visual screening of the site will be achieved through the use of noise control/visual screening berms.

The proposed project is located within 200 feet of a state highway and shall provide a landscaped area at least fifteen (15) feet deep between the highway right-of-way and any building or parking area for the length of the site frontage facing toward the highway. The property has adequate setback from the state highway right of way which has the adequate landscaping.

Noise: The installation of noise control berms described above will ensure that the proposed mining operation is in compliance with the standards of the City of Coalinga Noise Element.

Lighting: Consistent with existing practices, portable light towers and permanent light fixtures will be utilized to provide for a safe operating environment. Lighting will be shielded and arranged/controlled so as not to illuminate public rights-of-way or adjacent properties. The nearest residences are located greater than 1,000 feet from the project site and are separated by Route 198/33 and Cambridge Avenue and should not be affected by project lighting. However, to ensure that residents are not affected by lighting a mitigation measure and conditions of approval have been included requiring that all outdoor lighting shall be hooded and directed as not to shine toward adjacent properties and public streets.

Signage: No advertising signage is currently anticipated in the Project area. Granite will post plant identification and safety signage consistent with internal policies and regulatory agency requirements (e.g., on-site speed limits, spill response procedures, no trespassing signs). The signage will be designed/placed consistent with applicable City signage requirements.

Offsite Improvements: Required mitigation measures for off-site transportation improvements include the following:

- Fair-share payments to Caltrans for:
- I-5 northbound off ramp at Jayne Avenue
- SR 33 at Jayne Avenue

- SR 33 at Juniper Ridge Boulevard
- SR 33 at 5th Street
- SR 33 at 3rd Street
- Upgrades to the impacted segments on Phelps Avenue between SR 33 and Calaveras Avenue, Calaveras Avenue between Phelps Avenue and SR 33, and Jayne Avenue between SR 33 and 1-5.

Resource Extraction Overlay District Regulations

The entire Project area covered by the City's Resource Extraction Overlay District. Article 6, Sec. 9-3.603(a)(3) states that permitted uses within this District include "mining, production, handling, processing, storage, extraction, and removal of rock, aggregate, precious metals, sand, and other similar materials…" The operation and reclamation of surface mines are required to be consistent with the State Surface Mining and Reclamation Act (SMARA) and applicable City Zoning Ordinance provisions.

The County of Fresno is the Lead Agency for the purposes of administration of SMARA and therefore, the approved Reclamation Plan under County approved CUP 3512 covers the entire Project area under both the County and City parcels. As part of the Fresno County SMARA review a Reclamation Plan for the project was reviewed by the California Department of Conservation, Division of Mine Reclamation who determined that the expansion mining area mining and reclamation activities comply with all State regulations.

Conditional Use Permit Analysis

The CUP analysis will look at operation criteria such as security, noise, dust, and odor control, hours of operation, etc.

Project Summary

The project applicant proposes an aggregate mining and processing operation as follows:

The proposed project is a new CUP from the City of Coalinga for extraction on a 202.54-acre parcel that lies within the City of Coalinga. Mining operations will be performed in a manner consistent with current practices at the existing Coalinga Facility in unincorporated Fresno County and would be initiated by the removal of vegetation, topsoil/growth media, and overburden materials which lie above marketable sand and gravel deposits.

Location: The project site is located on the north side of Cambridge Avenue, between Monterey Avenue and State Route 198/33, adjacent to and within the city limits of the City of Coalinga (Map & Plans Attached)

Hours of Operation: Mine activities within the expansion area authorized by this permit shall be limited to the hours of 6:00 a.m. to 5:00 p.m. weekdays except during periods of public emergency or public works projects, in which case weekends and nights may be permitted. Maintenance of mobile and plant equipment may extend beyond the 6:00 a.m. to 5:00 p.m. weekday limits.

Estimated Employees: 10-20

Parking: Existing parking area with 50 parking stalls as shown on the site plan.

Fuel Storage and other Potential Hazardous Materials: Consistent with current practices, materials used in association with mining activities include various grades of fuels and lube oils for the site equipment. Storage of the materials will primarily occur at the existing shop and processing plants.

Water Use: Consistent with current practices, water usage associated with mining and reclamation activities in the Project area will be limited to that needed for dust control and will be supplied by on-site wells, and/or by recycled water from on-site settling ponds. Estimated daily water use is 100,000 gallons/day; this amount will vary depending on the weather A water truck will be utilized at the site and water will be applied to unpaved portions of internal haul roads and working areas as frequently as necessary to prevent fugitive dust emissions.

Outdoor Lighting: Consistent with existing practices, portable light towers and permanent light fixtures will be utilized to provide for a safe operating environment. Lighting will be shielded and arranged and controlled so as not to illuminate public rights-of ways or adjacent properties.

Dust: The existing and proposed expansion area mining activities at the Coalinga Facility will comply with the San Joaquin Valley Air Pollution Control District ("SJVAPCD") regulations related to fugitive dust. Specifically, the Project will incorporate applicable control measures outlined in the SJVAPCD Rules related to dust control as follows:

- Prior to removal of topsoil and overburden, the excavation area will be wetted by water trucks if removal occurs during the dry season.

- Conveyors will be equipped with water spray nozzles at appropriate transfer points to minimize dust. A water truck will be utilized at the site and water will be applied to unpaved portions of internal haul roads and working areas as frequently as necessary to prevent fugitive dust emissions. The number of daily applications of water varies depending on factors such as daily surface disturbance activities, temperature, and wind conditions. Alternately, other methods, such as the application of dust palliatives or gravel, may be applied to the internal haul roads to minimize fugitive dust

Odor: Odors have not been an issue during existing mining operations. The San Joaquin Valley Air Pollution Control District regulates objectionable odors on a complaint basis.

Wastewater Disposal: The applicant will not introduce any toxic chemical waste or solvents into the local waste stream and will be required to disclose all products, chemicals, solvents, active ingredients that will be used as part of the extraction and refinement process.

Solid Waste: The applicant will be required to utilize the City of Coalinga's solid waste hauler (Mid-Valley Disposal for all solid waste needs including destroyed product, green waste, typical solid waste and any other cannabis related products or byproducts where the State of California has authorized franchised solid waste haulers to provide said services.

Distance from Sensitive Receptors: The nearest residences are located greater than 1,000 feet from the project site and are separated by Route 198/33 and Cambridge Avenue

Public Notification: On May 27, 2021 public hearing notices were sent to all property owners within 300 feet of the site as required by Local and State law.

Environmental Review: An Initial Study/Mitigated Negative Declaration (IS/MND) was prepared for the project by County staff and approved by the County Planning Commission in conformance with the provisions of the California Environmental Quality Act (CEQA). The City of Coalinga is considered to be a Responsible Agency by CEQA and is required to consider the IS/MND prior to reaching a decision on the project the CUP and Site Plan Review for the portion of the mine expansion area within the City limits.

The IS/MND (Attached) identified potential impacts to aesthetics, biological resources, cultural resources,

noise, transportation, and tribal cultural resources. A summary of potential impacts and mitigation provided below. The City, as a Responsible Agency, has responsibility for mitigating or avoiding only the direct or indirect environmental effects of those parts of the project which it decides to approve. Those impacts and mitigation are described below.

- **Aesthetics.** In order to mitigate potential aesthetics impacts from permanent and temporary lighting sources, all outdoor lighting will be hooded and be directed downward to avoid glare on adjoining properties.

- **Biological Resources.** Preconstruction biological resource surveys for nesting birds, kit fox and blunt-nosed leopard lizard are required to ensure avoidance of impacts to these sensitive species that may occur within the Project area. Mitigation Measures addressing potential impacts to wetlands associated with Los Gatos Creek located, which is located mainly in the unincorporated Fresno County portion of the project, are related to installation and operation of the proposed elevated conveyor system include obtaining all necessary permits from state and federal agencies for the Los Gatos Creek crossing and utilizing a containment system to catch and collect side-casts, and installing the conveyor system when flowing water is absent or at a minimum flow (April 1 through October 31).

- **Cultural Resources.** In accordance with the Cultural Resources Report (Tom Origer & Associates 2015) in order to mitigate potential cultural resource impacts during mining operations, any cultural resources discovered during excavation will require all project-related activities halted until an archeologist evaluates the discovery. Should human remains be discovered, the County Sheriff-Coroner will be notified, and protocols will be followed including the involvement of the Native American Heritage Commission. If paleontological resources are discovered, they will require evaluation by a qualified paleontologist.

- **Noise.** To mitigate potential noise impacts during mining operations, earthen berms will be erected within specified distances from noted sensitive receptors per the July 23, 2015 Noise Assessment Study prepared by Edward L. Pack and Associates.

- **Transportation.** Potential transportation impacts were addressed with fair share cost mitigation for identified road segments as identified by the State of California Department of Transportation. Impacts to local roads will be addressed by completing upgrades to the impacted County and City road segments per their required Traffic Index as detailed in the November of 2019 Traffic Impact Study completed by VRPA.

- **Other CEQA Environmental Issues.** Potential impacts related to air quality, geology and soils, hazards and hazardous materials, and hydrology and water quality are less than significant.

IV. FISCAL IMPACT:

None Determined at this time.

V. REASONS FOR RECOMMENDATION:

<u>Site Plan Findings for Approval</u>

According to Section 9-6.404 of the Coalinga Municipal Code, the Planning Commission shall consider the following findings to approve a site plan:

- The proposed construction/alterations are in substantial conformance with the General Plan, zoning ordinance, and any applicable plans adopted by the city.

- The proposed construction/alterations conform to the requirements of the applicable Zoning Districts.

- The proposed construction/alteration conforms to all applicable design standards and guidelines, as adopted by the City Council.

- The construction/alteration will not have significant adverse effects on the public health, safety, and welfare.

Conditional Use Permit finding of Approval

A Conditional Use Permit shall only be granted if the Planning Commission determines that the project as submitted or as modified conforms to all of the following criteria. If the Planning Commission determines that it is not possible to make all of the required findings, the application shall be denied. The specific basis for denial shall be established for the record.

- General Plan consistency: Approval of the proposed project will advance the goals and objectives of and is consistent with the policies of the General Plan and any other applicable plan that the City has adopted;

- Neighborhood compatibility: The location, size, design, bulk, coverage, density, traffic generation and operating characteristics of the proposed project are consistent with the purposes of the district where it is located, and will not have an adverse effect on the neighborhood and surrounding properties;

- Asset for the neighborhood: The nature, use and architectural/design features of the proposed development make it attractive, functional, and convenient. The proposed development enhances the successful operation of the surrounding area in its basic community functions, or provides an essential service to the community or region.

ATTACHMENTS:

	Description
🗋	Resolution 021P-006
🗋	Exhibit A - Conditions of Approval CDA 21-05
🗋	Operational Statement
🗋	Noise Assessment Study
🗋	Traffic Impact Study
🗋	County of Fresno Staff Report and IS-MND (CEQA)
🗋	Site Plan Sheets
🗋	Reclamation Plan
🗋	Mining and Reclamation Plan Sheets
🗋	Biological Survey

RESOLUTION 021P-006

A RESOLUTION OF THE CITY OF COALINGA PLANNING COMMISSION APPROVING CONDITIONAL USE PERMIT NO. 21-05 FOR AGGREGATE MINING AND RELATED ACTIVITIES ON GRANITE CONSTRUCTION COMPANY'S PROPERTY LOCATED ON 202.54 ACRES AT 38940 HIGHWAY 33

WHEREAS, the City of Coalinga Community Development Department received an application for a Conditional Use Permit, Site Plan Review and Environmental Review for the expansion of an existing aggregate mining operation on a 202.54-acre parcel at the 38940 Highway 33 (Portion of APN: 070-060-89S); and,

WHEREAS, the subject project requires approval of a conditional use permit, site plan review, and environmental review in accordance with Title 9, Chapter 2 of the Coalinga Municipal Code; and

WHEREAS, appropriate applications were filed and deemed complete by the Coalinga Community Development Department on April 19, 2021, and

WHEREAS, an Initial Study/Mitigated Negative Declaration (IS/MND) was prepared for the project by Fresno County staff for portions of the project in unincorporated Fresno County and in the City of Coalinga in conformance with the provisions of the California Environmental Quality Act (CEQA), and

WHEREAS, the Mitigated Negative Declaration MND was considered by the Planning Commission prior to making a decision on approval of the Conditional Use Permit and Site Plan Review; and

WHEREAS, the subject application was reviewed for compliance with all applicable sections of the Coalinga Municipal Code; and

WHEREAS, the Planning Commission held the scheduled and noticed public hearing on June 8, 2021 to take testimony with regard to the proposed application, and

WHEREAS, Public hearing notices were sent to all property owners within 300 feet of the site as required by Local and State law, and

WHEREAS, the Planning Commission completed its review of the proposed development and information contained in the staff report and has considered the testimony received during the public meeting process and comments provided via mail, and

WHEREAS, the Planning Commission has made the following conditional use permit findings based on the development proposal:

General Plan Consistency. Approval of the proposed project will advance the goals and objectives of and is consistent with the policies of the General Plan and any other applicable plan that the City has adopted;

Neighborhood Compatibility. The location, size, design, bulk, coverage, density, traffic generation and operating characteristics of the proposed project are consistent with the purposes of the district where it is located, and will not have an adverse effect on the neighborhood and surrounding properties; and

Asset for the Neighborhood. The nature uses and architectural/design features of the proposed development make it attractive, functional, and convenient. The proposed development enhances the successful operation of the surrounding area in its basic community functions or provides an essential service to the community or region.

WHEREAS, the Planning Commission has made the following site plan review findings based on the development proposal:

- All provisions of the Planning and Zoning Code are complied with;
- The following project is so arranged that traffic congestion is avoided and pedestrian and vehicular safety and welfare are protected, and there will be no adverse effect on surrounding property including but not limited to:
    - Facilities and improvements;
    - Vehicular ingress, egress, and internal circulation;
    - Setback of mining activities;
    - Height of structures (elevated conveyor belt;
    - Location of services;
    - Fences and/or walls;
    - Landscaping.
- Proposed lighting is so arranged as to direct the light away from adjoining properties;
- Proposed signs will not by size, location, color, or lighting interfere with traffic or limit visibility;
- Proposed development has adequate fire and police protection;
- Proposed development can be adequately served by city sewer and water;
- Drainage from the property can be properly handled;
- The proposed development is generally consistent with the Zoning Ordinance, the General Plan, and any other applicable plans.

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NOW THEREFORE BE IT RESOLVED that the Planning Commission does approve the Development Application (CUP 21-05) subject to the conditions attached hereto which are also incorporated by this reference as Exhibit "A".

PASSED AND ADOPTED, by the City of Coalinga Planning Commission at their regularly scheduled meeting held on the 8th Day of June 2021.

AYES:

NOES:

ABSTAIN:

ABSENT:

_____
Planning Commission Chairman/Vice Chairman

ATTEST:

_____
City Clerk/Deputy City Clerk

Exhibit "A"
CONDITIONS OF APPROVAL
CONDITIONAL USE PERMIT APPLICATION NO. 21-05

Administrative

COA-1. *Actions voiding approval.* If the use(s) established on the property are contrary to the project approval, therefore violating any provision of the Zoning Ordinance, or would require additional permits, then the original approval shall be deemed null and void. The approved estimated phased mining operation shall become void if said phases have not occurred within the following estimated timeframes:

Phase	Acres	Tons (Millions)	Years to Completion
Phase 1	78	19	13
Phase 2	79	22	15
Phase 3	74	20	13
Phase 4	46	6	4
Phase 5	69	9	6
Phase 6	22	6	4
Total	**368**	**82**	**55**

This Conditional Use Permit shall only remain valid so long as the applicant maintains, in good standing, an approved regulatory permit issued by the State of California. Without a valid regulatory permit and State issued license, as prescribed by law, this Conditional Use Permit (local approval) is null and void.

COA-2. *Periodic review or monitoring of conditions.* All approvals may be subject to periodic review to determine compliance with the permit and its conditions of approval. If a condition of approval specifies that activities or uses allowed under the permit are subject to periodic reporting, monitoring or assessments, it shall be the responsibility of the permit holder, property owner, or successor property owners to comply with such conditions.

COA-3. *Indemnification.* The applicants/developers shall defend, indemnify, and hold harmless the City or any of its boards, commissions, agents, officers, and employees from any claim, action, or proceeding against the City, its boards, commissions, agents, officers, or employees to attack, set aside, void, or annul the approval of the project when such claim or action is brought within the time period provided for in applicable State and/or local statutes. The City shall promptly notify the applicants/developers of any such claim, action, or proceeding. The City shall coordinate in the defense. Nothing contained in this condition shall prohibit the City from participating in a defense of any claim,

action, or proceeding if the City bears its own attorney's fees and costs, and the City defends the action in good faith.

COA-4. *Fees.* All Community Development Department, City and Engineering fees shall be paid in full prior to the issuance of a building permit. The Developer is responsible for paying all applicable development impact fees as well all regional fees related to the project.

COA-5. *Alterations.* Any minor alternations to the approvals shall be reviewed and approved by the Assistant City Manager, unless under his/her discretion warrants review and approval by the Commission.

COA-6. *Acknowledgement.* Within fifteen (15) days of final approval (expiration of the appeal period) by the Planning Commission, the Applicant shall submit in writing, a statement indicating that he/she has read and agrees to the conditions imposed herein. This approval shall become void, and any privilege, permit, or other authorization granted under these entitlements if compliance with this condition has not been undertaken within the specified time limits.

COA-7. *Revocation of approvals.* Any permit granted may be revoked or modified if any of the terms or conditions of approval are violated, or if any law or City Ordinance is violated in connection. The City Council and Planning Commission, by their own action, or following a recommendation from the Community Development Director, may initiate revocation or modification proceedings. A public hearing shall be held pursuant to Section 9-6.111,

COA-8. *Setback and screening from highways.* At least two (2) fifteen (15) gallon trees shall be provided for every twenty-five (25) feet of site frontage toward the highway.

COA-9. *Water efficient landscaping.* A landscaping plan shall be submitted to the Community Development Department for review and approval. The model Water Efficient Landscaping Ordinance, as published by the California Department of Water Resources, pursuant to California Water Conservation in Landscaping Act (Government Code § 65591, et seq.), was adopted in full, by reference, and effective in the City of Coalinga commencing on January 1, 2010. A copy of the Water Efficient Landscaping Ordinance is retained on file in the Office of the City Manager, the Community Development Department, and the Office of the Coalinga City Clerk at all times. Landscaping plans must be consistent with the adopted Water Efficient Landscaping Ordinance.

Initial Study/Mitigated Negative Declaration Mitigation Measures

COA-10. All outdoor lighting shall be hooded and directed as not to shine toward adjacent properties.

COA-11. If construction or ground-disturbance activities are initiated during the nesting season (typically February 1st to August 31st), a qualified biologist shall conduct a pre-construction survey of the construction areas and the immediate vicinity (0.25 mile radius for Swainson's hawk) for active nests/burrows within 30 days of initiation of Project activities.

COA-12. lf active nests/burrows are observed during pre- construction surveys conducted pursuant to Mitigation Measure No. 25 above, impacts to nests/burrows shall be avoided by establishing a 300-foot construction-free buffer around the nest/burrow until the nest/burrow becomes inactive as determined by a qualified biologist. If an active Swainson's hawk nest is identified, a 750-foot buffer shall be established. With prior approval of the California Department of Fish & Wildlife, work may occur within the buffer zone(s).

COA-13. Preconstruction/pre-activity surveys for kit fox dens shall be conducted by a qualified biologist no less than 14 days and no more than 30 days prior to the beginning of construction or ground-disturbance activities within a new phase boundary.

COA-14. If a kit fox den is identified in the Project area, exclusion zones shall be placed in accordance with USFWS recommendations, as follows:

- Potential Den: 50-foot radius
- Known Den: 100-foot radius
- Natal/Pupping Den: (Occupied and Unoccupied) Contact USFWS for guidance
- Atypical Den: 50-foot radius

Work shall not occur within the exclusion zone(s) until approved by USFWS. If a natal/pupping den is discovered within the Project area, USFWS shall be immediately notified and under no circumstances should the den be disturbed or destroyed without prior authorization.

COA-15. The blunt-nosed leopard lizard (BNLL) is listed as federally and state endangered and is a state fully-protected species. Since CDFW is not able to issue any form of "take" permit for the blunt-nosed leopard lizard due to its status as a fully-protected animal under the California Fish Lizard and Game Code §5050, detection of species presence on a Project site is crucial. Protocol surveys for blunt-nose leopard lizard shall be conducted by a qualified biologist in the Project area no more than one (1) year prior to the initiation of ground disturbance activities. The biologist(s) shall identify and clearly mark the location of areas where any BNLL were observed. A 50 ft. buffer will be established around all sightings with highly visible markers. BNLL protocol surveys will be used to help determine the presence/absence of San Joaquin kit fox and burrowing owl, and the suitability of the site to support these species well before project-related disturbance activities.

COA-16. If the presence of a blunt-nosed leopard lizard is detected, 50-ft buffer zones shall be established from any observed blunt-nosed leopard lizard location. The buffer zones shall be demarcated by construction fencing (or similar) to ensure that construction crews do not enter the avoidance zone. CDFW and USFWS shall be notified immediately in the event of a detection of the species, and work shall not occur within the buffer zone until approved by both agencies and any other Mitigation Measures recommended by the agencies have been fully implemented.

COA-17. Prior to installation of the crossing over Los Gatos Creek, all necessary permits shall be obtained for conducting work in and adjacent to jurisdictional waters, and may include an Army Corps of Engineers Section 404 permit, Regional Water Quality Control Board Section 401 Water Quality Certification, and California Department of Fish and Wildlife (CDFW) (Section 1602 Streambed Alteration Agreement) agreement.

COA-18. If an elevated conveyor system is utilized spanning Los Gatos Creek, a containment system shall be designed and installed to catch and collect side-cast sands and gravels to prevent inadvertent fill of the jurisdictional waters. The containment system shall be regularly maintained as part of normal operations during the life of the Project.

COA-19. Installation of the elevated conveyor system and associated infrastructure in the floodplain shall occur between April 1 – October 31 when flowing water is absent from the stream or at a minimum flow.

COA-20. If cultural resources are unearthed during ground-disturbing activities, all work shall be halted in the area of the find. A professional archeologist shall be called to evaluate the findings and make any necessary mitigation recommendations. If human remains are unearthed during ground-disturbing activities, no further disturbance is to occur until the Fresno County Sheriff-Coroner has made the necessary findings as to origin and disposition. All normal evidence procedures shall be followed by photos, reports, video, etc. If such remains are determined to be Native American, the Sheriff-Coroner must notify the Native American Commission within 24 hours.

COA-21. In the event archaeological materials are encountered during grading or construction, the operator shall cease all ground-disturbing activities within 50 feet of the find. A professional archaeologist shall evaluate the significance of the resources and recommend appropriate treatment measures. Per CEQA Guidelines §15126.4(b)(3)(A). Consistent with CEQA Guidelines §15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the professional archaeologist shall develop additional treatment measures in consultation with the County, which may include data recovery or other appropriate measures.

COA-22. If paleontological resources are discovered during Project related activities, all work shall be stopped in the area of the find and a qualified paleontologist shall be called to assess the find. The paleontologist shall make any necessary recommendations, including any procedures to further investigate or mitigate impacts to the find as required by law.

COA-23. Prior to any production mining in the project area or County project area as identified in County CUP 35-12, the Applicant shall be responsible for completing upgrades to the impacted segments on Phelps Avenue between SR 33 and Calaveras Avenue (SR33 to the City Limits). No less than one (1) year prior to production mining in the project area, the Applicant shall provide plans for review and approval by the City of Coalinga Public Works Department. Upon receipt of approval of the plans, the Applicant shall immediately obtain all necessary permits and construct the necessary upgrades. The Applicant is responsible for all permits and fees including staff time. If improvements have been completed by the City prior to project area production, the applicant shall pay a fair share maintenance fee determined by the City Engineer based on the VRPA traffic analysis one (1) year or less prior to production mining.

COA-24. Prior to mining within 2,300 ft. of the Elks Lodge property line, 6 ft. high earthen berms shall be constructed along the Project mine boundary in the eastern pit. (See July 23, 2015 Noise Assessment Study Prepared by Edward L. Pack and Associates, Inc., Figure 4, for the approximate locations of the noise control berms.

COA-25. Prior to mining within 2,200 ft. of the school/residential property lines on the south side of Cambridge Avenue, 6 ft. high earthen berms shall be constructed along the expansion boundary to the south parallel with Cambridge Avenue. The berms will extend from the west boundary and turn along the flood plain/mining boundary to the west of Los Gatos Creek to terminate at a distance of 2,200 ft. from the school/residential property lines on the south side of Cambridge Avenue. (See July 23, 2015 Noise Assessment Study Prepared by Edward L. Pack and Associates, Inc., Figure 4, for the approximate locations of the noise control berms).

COA-26. If tribal cultural materials (i.e., flaked stone artifacts, ground stone, historical glass, bone, etc.) or features (e.g., hearths, structural foundations, privies, etc.) are discovered during Project-related activities, all work will stop in the area of the find and a professional archeologist shall assess and make any necessary recommendations, including any procedures to further investigate or mitigate impacts to the find as required by law. If the cultural resource is associated with the past lifeways of California Native Americans, evaluation, recommendations for further investigation, and/or mitigation shall be determined in consultation with the most likely descendent.

COA-27. If unanticipated human remains are discovered:

- Work will immediately stop at the discovery location and any nearby area reasonably suspected to overlie adjacent human remains. The Fresno County Sheriff-Coroner shall immediately be contacted to determine if the cause of death must be investigated. If the Sheriff-Coroner has reason to believe that the remains are of Native American origin, he or she will contact NAHC by telephone within 24 hours (PRC § 7050.5).

- The NAHC and landowner will follow prescribed steps in PRC Section 5097.98, which include, but are not limited to, the following: The NAHC will notify those persons it believes to be the most likely descended from the deceased Native American. The most likely descendant may recommend to the landowner the means of treating and disposing of, with appropriate dignity, the human remains and any associated grave goods. The landowner shall ensure the immediate vicinity of the Native American human remains is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations. The Applicant shall work with the NAHC to develop and execute an agreement between themselves and the most likely descendant(s) of Native Americans who may be buried in the vicinity by which the human remains and associated burial items will be treated or disposed, with appropriate dignity.

OPERATIONAL STATEMENT
FOR THE
COALINGA MINE EXPANSION PROJECT

Prepared for:

Granite Construction Company
2716 Granite Court
Fresno, CA 93706

Prepared by:

Compass Land Group
3140 Peacekeeper Way, Suite 102
McClellan, CA 95652

March 2021

TABLE OF CONTENTS

INTRODUCTION

On August 13, 2020, the Fresno County Planning Commission adopted a Mitigated Negative Declaration (Initial Study Application No. 7029) and approved a Conditional Use Permit (Unclassified Conditional Use Permit Application No. 3512) to allow the expansion of Granite Construction Company's ("Granite") existing aggregate mining operation on a 299.11-acre parcel in the unincorporated area of the County of Fresno and a 202.54-acre parcel in the in the City of Coalinga ("Project") (see Figure 1, Site and Vicinity Map and Sheet 1, Title Sheet).

The Project will require a use permit for mining[1] from the City of Coalinga in the portion of APN# 07006089s that lies within the City of Coalinga jurisdictional limits. This Operational Statement has been prepared in support of the use permit application, and provides an overview of key Project elements.

OPERATIONAL STATEMENT CHECKLIST

1. Nature of the operations.

Granite owns and operates an existing, permitted aggregate mining and processing operation in western Fresno County known as the Coalinga Facility. The Coalinga Facility consists of multiple permitted mining areas under CA Mine ID Nos. 91-10-0005 and 91-10-0007, which are governed by Fresno County Conditional Use Permit ("CUP") and Reclamation Plan Nos. 2320, and 3512 (which superseded CUP 915 in areas of overlap), respectively. In addition to mining and reclamation, existing permitted uses at the Coalinga Facility include aggregate, asphalt and concrete processing plants, as well as ancillary uses such as aggregate stockpiling/loading/sales, construction materials recycling, and equipment storage and maintenance. The Coalinga Facility is a regionally important source of high-quality construction aggregate material that has helped serve the building and infrastructure needs of the local market for approximately fifty (50) years.

The Project parcels total approximately 502 acres, and straddle two jurisdictions: 1) County of Fresno (APN# 07006086s, 299.11 acres); and, 2) City of Coalinga (APN# 07006089s, 202.54 acres). Under CUP 3512, Granite modified CUP 915 to include a new extraction area that lies west of Los Gatos Creek on APN# 07006086s in the County of Fresno. *Note: CUP/Reclamation Plan 2320 will not be modified by the Project.*

Mining and related project activities will be conducted on approximately 368 acres of the Project parcels, with the remainder left undisturbed (e.g., the majority of the Los Gatos Creek floodplain) or reserved for alternative uses (e.g., commercially zoned property in the northeast corner) (see Figure 2, Site Overview Map and Sheet 2, Existing Site Features). The

[1] The County of Fresno is the Lead Agency for the purposes of administration of the Surface Mining and Reclamation Act (SMARA) and thus, the approved Reclamation Plan under CUP 3512 covers the entire Project area under both the County and City parcels. However, a use permit for mining activities on APN# 07006089s is required from the City of Coalinga (see Figure 3, Existing and Proposed Entitlements Map).

Project area contains an estimated eighty-two (82) million tons of aggregate reserves, which would allow for greater than fifty (50) years of additional operational life at historical average production levels.

Mining operations will be performed in a manner consistent with current practices at the existing Coalinga Facility and would be initiated by the removal of vegetation, topsoil/growth media, and overburden materials which lie above marketable sand and gravel deposits. The overlying materials will be removed using scrapers aided by a motor grader and a bull dozer, as needed. After overlying materials are removed, marketable sand and gravel will be excavated using a combination of scrapers, front-end loaders, hydraulic excavators, bulldozers and other support equipment. In new excavation areas, mining will not occur within 50 feet of the Los Gatos Creek floodplain, consistent with the Project's hydraulic analysis. Following excavation, the sand and gravel will be transported via conveyor and/or internal haul roads to the existing processing plants where it will be processed and/or sold for use in construction materials. *Note that the Project involves only mining/reclamation and transportation of mined aggregates to the existing processing plants. Beyond construction materials recycling (current practice) and potentially limited initial screening of aggregates, no processing is anticipated in the Project area.* Mining methods will be consistent with current operations at the existing Coalinga Facility, and no changes to baseline mining production levels were proposed[2].

Transport of sand and gravel from the east side of Los Gatos Creek (Phase 4 and Phase 5) to the west side of Los Gatos Creek will occur via an elevated conveyor system (see Sheet 4, Mining Plan). The elevated conveyor system will consist of a belt conveyor on a steel truss frame supported by two 4-foot diameter columns in the floodplain (but outside of the Creek channel) and two 4-foot diameter columns outside of the floodplain. The conveyor system will be situated above the 100-year flood elevation, which is approximately 710.17 feet. The belt conveyor will be equipped with water spray nozzles to minimize dust. Conveyor wiper blades will be used to prevent material build-up on the belt and the steel truss frame will be equipped with a spill pan, which will catch any side-cast sand and gravel and prevent sedimentation in Los Gatos Creek (reference Mitigation Measure 9 for CUP 3512). The elevated conveyor crossing will be constructed to the appropriate scale and intensity of use (see Figure 7, Conceptual Bridge Conveyor Schematic).

The elevated conveyor crossing will be installed in the non-rainy season and will not involve removal of riparian species, or removal, filling, or hydrological interruption of Los Gatos

[2] An operational baseline was determined by averaging the annual aggregate production totals between 2003 and 2014, which resulted in an average annual production of approximately 1.5 million tons per year. A 12-year average was determined to be an appropriate range for an accurate baseline, as it captures economic changes as a result of fluctuating market demands that directly affect sales and production of material.

Creek. Proper permits will be obtained, as necessary, prior to installation of the crossing (reference Mitigation Measure 8 for CUP 3512).

Mining will progress in a phased manner to allow for concurrent reclamation (to the extent practicable) (see Sheet 3, Mining Phasing Overview). Final reclamation, consisting of slope reclamation, replacement of growth media, and revegetation will commence as soon as final excavation grades are achieved. The approved end use for the site following reclamation will be open space, consistent with the existing reclamation plans for the Coalinga Facility. An estimated time schedule for reclamation of the areas disturbed by mining activities is provided in Table 1, below.

TABLE 1
APPROVED PROJECT PHASING

Phase	Est. Acres	Est. Tons (millions)	Est. Years to Completion
Phase 1	78	19	13
Phase 2	79	22	15
Phase 3	74	20	13
Phase 4	46	6	4
Phase 5	69	9	6
Phase 6	22	6	4
Total	**368**	**82**	**55**

Notes:

1. *Actual phasing depths, boundaries, quantities and timelines may be affected by unforeseen changes in geology and market conditions.*
2. *Estimated years to completion calculated using historical average production rate of 1.5 million tons/year.*

See accompanying Reclamation Plan and supportive technical studies for additional details regarding the proposed Project.

2. Operational time limits.

No change to the permitted hours of operation as described in CUP 3512 (Condition of Approval #3) is requested:

"3. Mine activities within the expansion area authorized by this permit shall be limited to the hours of 6:00 a.m. to 5:00 p.m. weekdays except during periods of public emergency or public works projects, in which case weekends and nights may be permitted. Maintenance of mobile and plant equipment may extend beyond the 6:00 a.m. to 5:00 p.m. weekday limits."

3. Number of customers or visitors.

With the exception of miscellaneous service and delivery vehicles (e.g., electrical, maintenance, industrial deliveries) and occasional point of sale pickup of fill, pit run, or

screened material, Granite does not anticipate customers and/or visitors within the Project area. The majority of customers and visitors will continue to access defined areas of the Coalinga Facility, consistent with existing practices.

4. Number of employees.

Consistent with current practices at the existing Coalinga Facility, Granite estimates 10-20 employees associated with mining in the expansion area.

5. Service and delivery vehicles.

As mentioned above, Granite anticipates only occasional access by service and delivery vehicles (e.g., electrical, maintenance, industrial deliveries) within the Project area. Granite may, from time to time, utilize subcontract haulers to transport aggregate internally from the Project area to the existing processing plants. Access to the site

6. Access to the site.

Primary access to the Project area will occur via internal access roads from the existing Coalinga Facility (which itself is accessed via an existing encroachment off of State Route 198/33) (see Figure 2, Site Overview Map and Sheet 2, Existing Site Features). From time to time, employees and equipment may access the Phase 4 and 5 mining areas west of Los Gatos Creek utilizing encroachment(s) off of Monterey Avenue (see Sheet 3, Mine Phasing Overview).

7. Number of parking spaces.

Consistent with existing practices, the majority of parking will occur at the shop area of the Coalinga Facility, which currently has ~50 parking spaces for heavy equipment and employee/vendor vehicles. Availability of parking space is not a concern, as the Project area and the existing Coalinga Facility have sufficient space to accommodate parking for employees, customers, and service/delivery drivers.

8. Are any goods to be sold on-site? If so, are these goods grown or produced on-site or at some other location?

With the exception of occasional point of sale pickup of fill, pit run, or screened material, Granite does not anticipate direct sales from the Project area. Instead, Granite will transport mined material to the existing processing plants for processing and sale. Mining methods and intensity will be consistent with operations at the existing Coalinga Facility, and no changes to baseline mining production levels were proposed.

9. What equipment is used?

Mining and construction equipment will be similar to that currently in use at the Coalinga Facility, including: scrapers, bulldozers, motor graders, excavators, loaders, backhoes, water trucks, haul trucks, conveyor belts, and miscellaneous support equipment (e.g., service trucks, forklifts, cranes).

Vehicle idling will be limited to less than 5 minutes unless a longer time is necessary for safety, equipment will be maintained in good condition and in proper tune per manufacture specifications, and equipment maintenance records and equipment design specification data sheets will be kept on-site. The off-road mining and construction equipment will have Tier 4 final engines or better.

10. What supplies or materials are used and how are they stored?

Consistent with current practices, materials used in association with mining activities include various grades of fuels and lube oils for the site equipment. Storage of the materials will primarily occur at the existing shop and processing plants, and will be performed in accordance with local, state and federal regulations (see Figure 2, Site Overview Map and Sheet 2, Existing Site Features). Materials stored onsite are maintained in accordance with requirements of the Certified Unified Program Agency under a Hazardous Materials Business Plan ("HMBP") and Spill Prevention, Control, and Countermeasure Plan ("SPCCP"). In the event that additional materials storage occurs within the Project area, the HMBP and SPCCP will be updated accordingly.

11. Does the use cause an unsightly appearance? Noise? Glare? Dust? Odor? If so, how will this be eliminated?

Granite completed a number of technical studies to analyze the potential impacts of the Project and incorporated measures into the Project design to prevent or minimize adverse effects on the environment and surrounding uses.

Appearance

The Project area is highly disturbed with widespread evidence of historical industrial activity (e.g., former airport landing strip and existing mining pits) and off-road vehicle use. Existing vegetation cover ranges from very sparse and almost nonexistent to small, dense patches of weedy species. Aside from Los Gatos Creek, no evidence of wetlands or other aquatic features exist within the Project area.

A portion of the Project area includes existing permitted mining pits, and the entire Project area is designated by the City of Coalinga for resource extraction (mining). Surrounding land uses include Granite's existing Coalinga Facility to the north, undeveloped land and industrial uses to the west, and scattered commercial, recreational and residential uses to the east and south. The closest residences are greater than 1,000 feet from the Project area and are separated by Highway 198/33 and Cambridge Avenue.

The Project will involve the phased removal of vegetation, topsoil/growth media, and overburden materials. After stripping the overlying materials, marketable sand and gravel will be excavated below-grade using a combination of loaders, excavators, etc. In each phase, overburden material will be used to build earthen screening berms, which also serve as noise control berms (see Noise section below), around the majority of the Project boundary (see Sheet 4, Mining Plan). Once the proposed berm is built in each phase, the below-grade excavation will not be visible at eye-level from the surrounding areas. As a result, the Project will not impact the visual quality of the area.

Noise

A site-specific noise study was prepared for the Project. The noise analysis indicated that, absent noise mitigation, the Project has the potential to result in exceedances of the applicable City/County noise standards. These exceedances would occur once stripping operations are within 2,200 feet of a residential or school receptor location or within 2,300 feet of the Elks Lodge property line. However, the Project design incorporates noise control/visual screening berms six feet in height along the eastern and southern mining boundaries, which serve to decrease noise levels for compliance with the applicable noise standards (reference Mitigation Measure 14 and 15 for CUP 3512).

With the installation of the noise control berms, the project-generated noise levels and noise exposures will be in compliance with the standards of the City of Coalinga Noise Element and the Fresno County Noise Element and Noise Ordinance.

Glare

Consistent with existing practices, portable light towers and permanent light fixtures will be utilized to provide for a safe operating environment. Lighting will be shielded and arranged/controlled so as not to illuminate public rights-of-way or adjacent properties (reference Mitigation Measure 1 for CUP 3512).

Dust

Consistent with activities at the existing Coalinga Facility, the Project will comply with the San Joaquin Valley Air Pollution Control District ("SJVAPCD") regulations related to fugitive dust. More specifically, the Project will incorporate applicable control measures outlined within SJVAPCD's Rules related to control of fugitive dust during excavation and earthmoving activities (Regulation VIII), including the following:

1. Prior to removal of topsoil and overburden, the excavation area will be wetted by water trucks if removal occurs during the dry season.

2. Conveyors will be equipped with water spray nozzles at appropriate transfer points to minimize dust.

3. A water truck will be utilized at the site and water will be applied to unpaved portions of internal haul roads and working areas as frequently as necessary to prevent fugitive dust emissions. The number of daily applications of water varies depending on factors such as daily surface disturbance activities, temperature, and wind conditions. Alternately, other methods, such as the application of dust palliatives or gravel, may be applied to the internal haul roads to minimize fugitive dust (reference CUP 3512, Condition of Approval #5).

It should be noted that the Project involves only mining/reclamation and transportation of mined aggregates to the existing processing plants. Beyond potentially limited initial screening of aggregates in the mining area, no processing is anticipated in the expansion area. Therefore, the above measures will be sufficient to address potential dust generating activities associated with the Project.

Odor

Odors have not historically been a concern with the operations at the existing Coalinga Facility. The Project did not involve modification to the site's production levels, hours of operation, materials to be mined, equipment types, or mining methods. In addition, odors dissipate with distance and the nearest sensitive receptor is located greater than 1,000 feet from the Project area. Furthermore, the nearest receptor to the site will be separated from the Project area by perimeter berms, fencing, and either State Highway 33 or Cambridge Avenue.

It should be noted that the SJVAPCD regulates objectionable odors on a complaint basis. If complaints are received, the SJVAPCD investigates the complaint and determines a solution for the source of the complaint, which could include operational modifications. Thus, although not anticipated, if odor complaints are made, the operator and/or the SJVAPCD would ensure that such odors are addressed and any potential odor effects reduced to less than significant.

12. List any solid or liquid wastes to be produced.

Consistent with current operations, mining and reclamation activities in the Project area are expected to produce the following solid/liquid wastes:

a. Refuse: Any incidental refuse or garbage will be hauled off-site and disposed of in accordance with local and state standards.
b. Mine waste rock: Overburden materials consist of material not suitable for use in aggregate production. Approximately 4.4 million cubic yards (cy) of overburden material is anticipated within the Project area. Overburden will either be sold as a product (e.g., fill) or used in reclamation.
c. Used equipment: Used equipment such as heavy equipment parts, conveyor belts, tires and other replacement or extra equipment pieces will be kept within a designated area

for reuse or recycling. Used parts potentially containing petroleum products (i.e., lubricants, hydraulic oil, etc.) will be stored using Best Management Practices to prevent contamination of soil or storm water runoff. Used equipment storage areas may change location during the life of the operation.

d. Domestic sewage: Granite's sewage systems at the existing Coalinga Facility will be utilized, and may be supplemented with serviced portable toilets within the Project area.
e. Used oil/antifreeze: Used petroleum products and antifreeze will be managed in accordance with applicable local, State, and Federal regulations, and will be picked up by approved haulers for recycling and/or disposal.

13. Estimated volume of water to be used (gallons per day); source of water?

Consistent with current practices, water usage associated with mining and reclamation activities in the Project area will be limited to that needed for dust control and will be supplied by on-site wells, and/or by recycled water from on-site settling ponds. Estimated daily water use is 100,000 gallons/day; this amount will vary depending on the weather.

14. Describe any proposed advertising including size, appearance, and placement.

No advertising signage is currently anticipated in the Project area. Granite will post plant identification and safety signage consistent with internal policies and regulatory agency requirements (e.g., no trespassing signs, Proposition 65 signs). The signage will be designed/placed consistent with applicable County/City signage requirements (see Site Plan Review Sheet 2, #2 and #3).

15. Will existing buildings be used or new buildings be constructed?

Within the Project area, Granite will continue to utilize the existing shop and associated structures, and the existing portable trailer (see Site Plan Review Sheet 2, #1 and #8). No additional permanent buildings are anticipated. Granite may utilize conex boxes (or similar) for miscellaneous on-site storage (e.g., parts, materials).

16. Explain which building or what portion of buildings will be used in the operation.

See answer to Question 15, above.

17. Will any outdoor lighting or outdoor sound amplification systems be used?

Consistent with existing practices, portable light towers and permanent light fixtures will be utilized to provide for a safe operating environment (see Site Plan Review Sheet 2, #4 and #5). Lighting will be shielded and arranged/controlled so as not to illuminate public rights-of-

way or adjacent properties. Mining and reclamation activities will not involve the use of any sound amplification system.

18. Landscaping or fencing proposed?

Perimeter fencing at least four (4) feet in height consisting of not less than three (3) strands of barbed wire (or an approved equivalent) will be installed consistent with Mining and Reclamation Standard H.4, Section 858 of Fresno County's Ordinance Code (reference CUP 3512, Condition of Approval #6). Visual screening of the site will be achieved through the use of noise control/visual screening berms consistent with Mining and Reclamation Standard H.5, Section 858 of Fresno County's Ordinance Code.

See Sheet 4, Mining Plan.

19. Any other information that will provide a clear understanding of the project or operation.

See accompanying Reclamation Plan and supportive technical studies for additional details regarding the proposed Project.

EDWARD L. PACK ASSOCIATES. INC.

1975 HAMILTON AVENUE
SUITE 26
SAN JOSE, CA 95125

Acoustical Consultants

TEL: 408-371-1195
FAX: 408-371-1196
www.packassociates.com

NOISE ASSESSMENT STUDY

GRANITE CONSTRUCTION COMPANY

COALINGA MINE EXPANSION PROJECT

CITY OF COALINGA

COUNTY OF FRESNO

Prepared by
Jeffrey K. Pack

July 23, 2015
Project No. 47-022

TABLE OF CONTENTS

I. Executive Summary

This report presents the results of a noise assessment study for the proposed Coalinga Mine Expansion Project ("Project") located along Highway 198/33 in Coalinga.

This study analyzes and evaluates the Project's potential noise effects on the closest receptors to the Project site, which include residences to the east and south of the Project area as well as an Elks Lodge and schools to the south.

For the purposes of evaluation, the measured noise levels and noise exposures were compared to the City of Coalinga Noise Element of the General Plan, the County of Fresno Noise Element of the General Plan and the County of Fresno Noise Ordinance.

The results of this study reveal that the stripping of the surface overburden materials will generate the highest noise levels as the noise generating equipment will be working at the surface. The noise analysis indicates that, absent noise mitigation, the Project has the potential to result in exceedances of the applicable City/County noise standards. These exceedances would occur once stripping operations are within 2,200 ft. of a residential or school receptor location or within 2,300 ft. of the Elks Lodge property line. However, the Project design incorporates perimeter berms six feet in height along the eastern and southern mining boundaries, which serve to decrease noise levels for compliance with the applicable noise standards.

With the installation of the noise control berms, the project-generated noise levels and noise exposures will be in compliance with the standards of the City of Coalinga Noise Element and the Fresno County Noise Element and Noise Ordinance. No further noise mitigation measures are required.

II. Background Information on Acoustics

Noise is defined as unwanted sound. Airborne sound is a rapid fluctuation of air pressure above and below atmospheric pressure. Sound levels are usually measured and expressed in decibels (dB) with 0 dB corresponding roughly to the threshold of hearing. The decibel scale is logarithmic, whereby a sound 10 dB higher than another contains 10 times the sound energy. Decibels are combined using the equation,

$$\textbf{sum} = 10\log_{10}(10^{SL/10} + 10^{SL/10}).$$

The sum of two sound sources of the same level is 3 dB higher than the sound level of one of the sources. For example, 60 dB + 60 dB = 63 dB. The sum of two sound levels that are 10 dB apart is merely the higher of the two levels, that is, the lower level does not add to the higher level. For example, 50 dB + 60 dB = 60 dB.

Most of the sounds which we hear in our normal environment do not consist of a single frequency, but rather a broad range of frequencies. As humans do not have perfect hearing, environmental sound measuring instruments have a built-in electrical filter that allows the instrument's detector to replicate human hearing. This filter is called the "A-weighting" network which filters out low and very high frequencies. All environmental noise is reported in terms of A-weighted decibels, notated as dBA. All sound levels used in this report are A-weighted unless otherwise noted. Table I provides the typical noise levels for common noise sources.

Although the A-weighted noise level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a mixture of noise from distant sources which create a relatively steady background noise in which no particular source is identifiable. To describe the time-varying character of environmental noise, the statistical noise descriptors, L_n, are commonly used. They are the A-weighted noise levels exceeded during n% of a stated time period. Common L_n values are the L_1, L_{10}, L_{50} and L_{90}, i.e., those levels of noise exceeded 1%, 10%, 50% and 90% of the time.

The continuous equivalent-energy level (L_{eq}) is also a common noise descriptor and is the level of a steady state noise which has the same sound energy as a time varying noise. It is often considered the average noise level.

TABLE I

The A-Weighted Decibel Scale and Common Noise Sources

Noise Level, dBA	Noise Source	Sound Level
120-150+	Sonic Boom	140 dBA
100-120	Fast Motorcycle at 20 ft.	110 dBA
	Nightclub Music	105 dBA
	Train Horn at 50 ft.	104 dBA
	Power Mower	100 dBA
70-100	Diesel Pump at 100 ft.	95 dBA
	Freight Train at 50 ft.	90 dBA
	Jet Aircraft at 1000 ft.	85 dBA
	Freeway at 100 ft.	80 dBA
50-70	Average Traffic at 100 ft.	70 dBA
	Vacuum Cleaner	70 dBA
	Passing Car 30 mph at 25ft.	65 dBA
	Television	53 dBA
0-50	Normal Conversation	50 dBA
	Light Traffic at 100 ft.	45 dBA
	Refrigerator	43 dBA
	Desktop Computer	38 dBA
	Whispering	35 dBA
	Leaves Rustling	20 dBA
	Threshold of Hearing	0 dBA

In determining the daily level of environmental noise, it is important to account for the difference in response of people to daytime and nighttime noises. During the nighttime, exterior background noises are generally lower than the daytime levels. However, most household noise also decreases at night and exterior noise becomes very noticeable. Further, most people sleep at night and are very sensitive to noise intrusion. To account for human sensitivity to nighttime noise levels, the Day-Night Level (DNL) noise descriptor was developed. The DNL is also called the L_{dn}. Either is acceptable, however, DNL is the more popular descriptor. The DNL divides the 24-hour day into the daytime period of 7:00 AM to 10:00 PM and the nighttime period of 10:00 PM to 7:00 AM. The nighttime noise levels are penalized by 10 dB to account for the greater sensitivity to noise at night. The Community Noise Equivalent Level (CNEL) is another 24-hour average which includes a 5 dB evening (7:00 PM - 10:00 PM) penalty and a 10 dB nighttime (10:00 PM to 7:00 AM) penalty. Both the DNL and the CNEL average the daytime, evening and nighttime noise levels over a 24-hour period to attain a single digit *noise exposure*. The proper notations for the Day-Night Level and the Community Noise Equivalent Level are dB DNL and dB CNEL, respectively, as they can only be calculated using A-weighted decibels. It is, therefore, considered redundant to notate dB(A) DNL or dB(A) CNEL.

The effects of noise on people can be listed in three general categories:

- subjective effects of annoyance, nuisance, dissatisfaction;
- interference with activities such as speech, sleep, learning, relaxing;
- physiological effects such as startling, hearing loss.

The levels associated with environmental noise, in almost every case, produce effects only in the first two categories. Workers in industrial plants, airports, etc., can experience noise in the last category. There is, as yet, no completely satisfactory way to measure the subjective effects of noise, or of the corresponding reactions of annoyance and dissatisfaction. This is primarily due to the wide variation in individual thresholds of annoyance and differing individual past experiences with noise.

An important way to determine a person's subjective reaction to a new noise is to compare it to the existing environment to which one has adapted, i.e., the "ambient". In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by the receivers.

With regard to increases in A-weighted noise levels, the Environmental Protection Agency has determined the following relationships that will be helpful in understanding this report.

- Except in carefully controlled laboratory experiments, a change of 1 dB cannot be perceived.
- Outside of the laboratory, a 3 dB change is considered a just-perceptible difference.
- A change in level of at least 5 dB is required before any noticeable change in community response would be expected.
- A 10 dB change is subjectively heard as approximately a doubling in loudness, and would almost certainly cause an adverse change in community response.

The adding or subtracting of sound levels is not simply arithmetic. The sound levels, in decibels, must be converted to Bels, the anti-log's of which are then calculated. The manipulation is then performed (arithmetic addition or subtraction), the logarithm of the sum or difference is calculated. The final number is then multiplied by 10 to convert Bels to decibels. The formula for adding decibels is as follows:

$\text{Sum} = 10\log(10^{SL/10} + 10^{SL/10})$ where, SL is the Sound Level in decibels.

For example, 60 dB + 60 dB = 63 dB, and 60 dB + 50 dB = 60 dB. Two sound sources of the same level are barely noisier than just one of the sources by itself. When one source is 10 dB higher than the other, the less noisy source does not add to the noisier source.

III. Noise Standards

City of Coalinga Noise Element of the General Plan

The Noise Element of the City of Coalinga General Plan 2025, Ref. (a), utilizes the Day-Night Level (DNL) descriptor to define acceptable noise exposures for various land uses. The DNL is a 24-hour time-weighted average descriptor commonly used to describe community noise environments. The Noise Element does not specifically address noise exposure impacts from industrial or commercial uses impacting noise sensitive uses. However, in Table 5-6 of the Noise Element, the Normally Acceptable noise exposure limits for residential, transient lodging and school land uses is 55 dB DNL. For commercial uses, such as the nearby Elks Lodge, the Noise Element indicates a Normally Acceptable limit of 60 dB DNL. The DNL is defined further in Appendix B.

City of Coalinga Municipal Code

The City of Coalinga Municipal Code does not contain standards that limit the noise levels at noise sensitive land uses from noise generated by an industrial facility or commercial facility, including mining operations.

Fresno County Noise Element of the General Plan

The Noise Element of the Fresno County General Plan 2000, Ref. (b), adopted in December of 1975, establishes maximum acceptable noise levels for various land use categories. The Noise Element utilizes both the DNL and L_{50} and specifies exterior noise limits for urban residential and noise sensitive receivers (including transient lodging) of 60 dB DNL, 55 dBA L_{50} daytime and 50 dBA L_{50} nighttime. Note that the urban residential noise standards are used in this study as the residential areas near the quarry are mostly tract homes and closely spaced characterizing a more urban/suburban environment rather than a rural environment.

Fresno County Noise Ordinance

The Fresno County Noise Element of the General Plan includes the noise standards outlined in the Fresno County Noise Ordinance. The Noise Ordinance standards are designed to be consistent with the noise standards of the General Plan's L_{50} guidelines. For urban residential areas with the baseline noise level of 55 dBA L_{50}, table 10-10a of the Noise Ordinance limits the short-term (dBA) noise levels to various levels depending upon the time of day and the duration of the noise, as shown below. The stripping operations are anticipated only during daytime hours.

Fresno County Noise Ordinance Standards		
	Noise Level Limit, dBA	
Duration of Noise Event	Daytime (7:00 AM – 10:00 PM)	Nighttime (10:00 PM – 7:00 AM)
30 min./hr. (L_{50})	55	50
15 min./hr. (L_{25})	60	55
5 min./hr. (L_8)	65	60
1 min./hr. (L_2)	70	65
Maximum (L_{max})	75	70

IV. Acoustical Setting and Existing Noise Environments

The current land uses surrounding the Project area include the existing Granite Construction mining and aggregate processing facility to the north, Highway 198/33 to the east and mostly vacant land with a facility associated with oil production to the west. Land immediately adjacent to the south of the Project area is either vacant or part of a City of Coalinga recreational facility that was under construction, but is apparently in a hold status. There are two completed soccer fields along the north side of Cambridge Avenue. At the southeast are the Elks Lodge, the Cambridge Inn Motor Lodge (currently vacant) and Key Energy Services. The nearest residences are across Cambridge Avenue to the south and across Highway 198/33 to the east. West Hills College, Coalinga Middle School and Bishop (Elementary) School are also across Cambridge Avenue to the south.

The primary source of noise in the area is traffic on Highway 198/33. Traffic on Cambridge Avenue and activities at the schools are secondary sources of noise in the area. Figure 1, below, provides an overview of the quarry and vicinity.

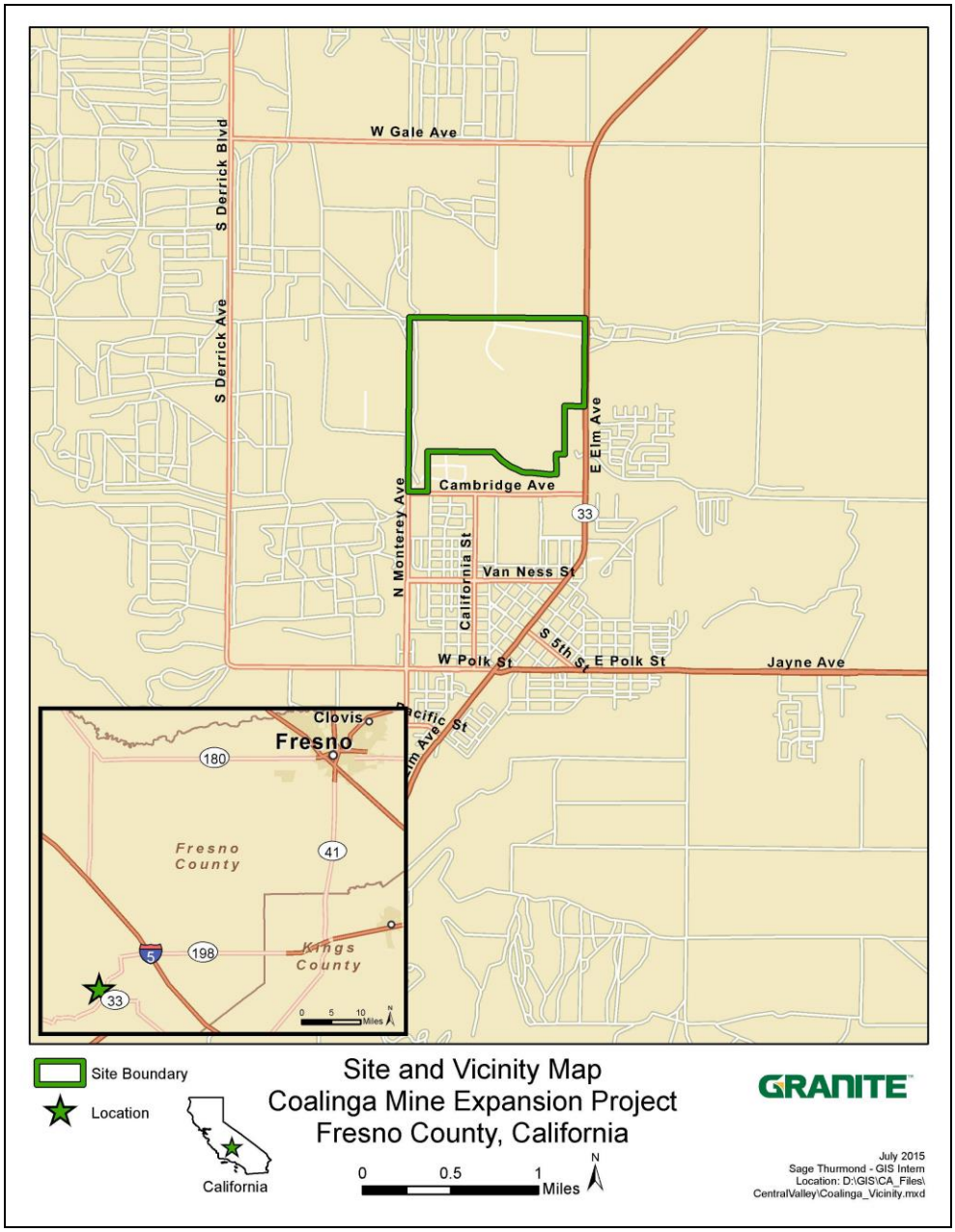


FIGURE 1 – Site and Vicinity Overview

Atmospheric Effects on Sound Propagation

Sound from a single stationary source typically attenuates at a rate of $20\log_{10}(r_1/r_2)$, where r_1 is the measurement distance and r_2 is the distance to the receptor. This equates to a 6 dB reduction for every doubling of the distance and is accurate for conditions where the distances are within approximately 1,000 ft. and the intervening ground surface is flat and somewhat porous, such as a vacant field.

Since sound is merely a fluctuation of air pressure, a sound barrier must be an air tight structure. Solid walls, earthen berms or topography are the most common sound barriers. Vegetation does little for blocking sound unless the vegetation is a thick forest of high density planting a minimum of 100 ft. thick. Over great distances, heavy vegetation can cause excess scattering of sound waves, which reduces sound slightly more than the normal attenuation rate.

With variations in elevation and large separation distances, topography, vegetation and the atmosphere can affect the attenuation of sound. Topographic elements provide some barrier effect. Vegetation may provide excess air particle (sound wave) scattering. The remaining atmospheric affects include; pressure gradients, humidity, temperature gradients, atmospheric turbulence, wind and atmospheric absorption.

Sound slows down with lower temperatures. Thus, over a large distance where temperature gradients occur and inversions occur in the evening, sound travels slower along the ground and bends toward the ground rather than bending upward as it does during the day under superadiabatic conditions. Temperature inversions occur as the warm daytime air close to the ground is absorbed into the ground faster than the normal cooling rate. Thus, the air close to the ground is cooler than the air at higher elevations.

It has been well documented that sound generated in the valleys and canyons near the Coastal Mountain Range along the Pacific Ocean is less pronounced on warm evenings and sound tends to travel farther on cool evenings. Because of the far distance from Coalinga to the Pacific Ocean, the effects of temperature inversions are minimal.

The effect of wind can be two-fold. Under one condition, the prevailing wind from the north/northeast blows across the low hills to the south/southwest toward the Cambridge Avenue residential area. Upper atmosphere winds travel faster than wind at low elevation. The higher winds bend sound down toward the ground increasing the sound levels at locations relatively close to the quarry. Under the second condition, wind noise through trees and shrubbery can produce a sound masking effect by raising the natural noise floor. Vegetation is sparse in the area such that wind noise through vegetation is minimal.

Atmospheric absorption occurs as air molecules carrying the sound waves collide with relatively static air molecules and the loss of energy (converted to heat) during these molecular collisions result in a reduction of sound. Typically, a 1 kHz sound wave will be absorbed at a rate of 1 dB/650 ft. At 2,500 ft., the excess attenuation due to absorption is 4 dB for 1 kHz. At 4,700 ft., the excess attenuation due to absorption is 7 dB for 1 kHz. However, at 125 Hz the sound level reduction values are approximately 1/10th of those at 1 kHz. At the receptor locations to the south and east, excess absorption for the frequencies produced by the mining operations are in the 1 to 2 dB range, which is considered negligible.

The effects of the atmosphere are relatively negligible over long periods of time and occur during specific times of the day and times of year. The variation in the noise levels at receptor locations due to atmospheric conditions will be minimal.

Existing Noise Environments

To determine the existing noise environment at the closest noise sensitive receptor locations, continuous recordings of the sound levels were made at three representative locations. Location 1 was at the northwest corner of the Elks Lodge property closest to the Project area. Location 2 was at the west (rear) residential property line of a currently vacant lot at the terminus of Cabrillo Drive to the east of the site. Location 3 was at the back of sidewalk along Cambridge Avenue across the street from the residences. This location corresponds to the distance from the centerline of the road to the residential property lines, thus, representing the noise environment at the residential properties. The measurements were made on April 8-10, 2015 for a continuous period of 24 hours and included measurements during representative hours of the daytime and nighttime periods of the DNL index.

The ambient sound levels were recorded and analyzed using Larson-Davis Model 812 Precision Integrating Sound Level Meters. The meters yield, by direct readout, a series of descriptors of the sound levels versus time, which include the L_1, L_{10}, L_{50}, and L_{90}, i.e., those levels that are exceeded 1%, 10, 50%, and 90% of the time. The meters also yield the maximum and minimum levels, and the continuous equivalent-energy levels (L_{eq}), which are used to calculate the DNL. The measured L_{eq}'s are shown in the data tables in Appendix C.

On the first day of measurements, the L_{eq}'s at measurement Location 1 behind the Elks Lodge ranged from 42.4 to 52.5 dBA during the daytime and from 38.8 to 48.8 dBA at night. On day 2, the L_{eq}'s ranged from 43.7 to 51.3 dBA during the daytime and from 37.8 to 50.0 dBA at night.

At measurement Location 2 at the end of Cabrillo Drive, the L_{eq}'s on Day 1 ranged from 40.9 to 53.9 dBA during the daytime and from 42.1 to 53.6 dBA at night. On day 2, the L_{eq}'s ranged from 39.6 to 54.5 dBA during the daytime and from 40.7 to 55.4 dBA at night.

At measurement Location 3 along Cambridge Avenue, the L_{eq}'s on Day 1 ranged from 52.0 to 58.4 dBA during the daytime and from 35.1 to 56.1 dBA at night. On day 2, the L_{eq}'s ranged from 50.2 to 62.1 dBA during the daytime and from 31.8 to 55.2 dBA at night.

The ambient sound level measurement locations are shown on Figure 2, below.

FIGURE 2 – Ambient Sound Level Measurement Locations

To calculate the baseline noise exposures at the receptors for the determination of project-related noise impacts, the DNL's for the survey locations were calculated by decibel averaging of the L_{eq}'s as they apply to the daytime and nighttime time periods of the DNL index. A 10 decibel nighttime weighting factor was applied and the DNL was calculated using the formula shown in Appendix B. The measured L_{eq}'s and DNL calculations are shown in the data tables in Appendix C.

The results of the calculations indicate that the noise exposures at measurement Location 1 behind the Elks Lodge were 51 dB DNL on each day of measurements.

The noise exposures at Location 2 at the end of Cabrillo Drive were 55 dB DNL on each day of measurements.

The noise exposures at Location 3 along Cambridge Avenue were 58 dB DNL on each day of measurements.

V. Project Description

Granite Construction Company owns and operates an existing, permitted aggregate mining and processing operation in western Fresno County known as the Coalinga Facility. In addition to mining and reclamation, existing permitted uses at the Coalinga Facility include aggregate, asphalt and concrete processing plants, as well as ancillary uses such as aggregate stockpiling/loading/sales, construction materials recycling, and equipment storage and maintenance.

Under the proposed project, Granite Construction Company would entitle a new mining area on Granite Construction-owned property directly south and southeast of the existing Coalinga Facility. Project parcels total approximately 502 acres, and straddle two jurisdictions: 1) the West Pit in the County of Fresno (APN# 07006086s, 299.11 acres); and, 2) the East Pit partially in the City of Coalinga (APN# 07006089s, 202.54 acres). Mining and related project activities would be conducted on a portion of those Project parcels, with the remainder in avoidance and setback areas.

Mining operations will be performed in a manner consistent with existing practices at the Coalinga Facility, and would be initiated by the removal of vegetation, topsoil/growth media, and overburden materials which lie above marketable sand and gravel deposits. The overlying materials will be removed using scrapers aided by a motor grader and a bull dozer, as needed.

After overlying materials are removed, marketable sand and gravel will be excavated using a combination of scrapers, front-end loaders, hydraulic excavators, bulldozers and other support equipment. Following excavation, the sand and gravel will be transported via conveyor and/or internal haul roads to the existing Coalinga Facility where it will be processed and/or sold for use in construction materials. Mining methods will be consistent with existing operations at the Coalinga Facility, and no changes to permitted mining production levels are proposed. The proposed project involves only mining/reclamation and transportation of mined aggregates to the existing Coalinga Facility. Beyond potentially limited initial screening of aggregates in the mining area, no processing is anticipated in the Project area.

Figure 3 on page 15 shows an overview of the site and proposed expansion area, Ref. (c).

Typically, mining activities occur during daytime hours and occur primarily below grade. Mined materials are conveyed to the existing aggregate processing plant. The aggregate processing plant is not proposed to be relocated in the Project area. Information on mining operations was provided by Granite Construction Company personnel, Ref. (d).

FIGURE 3 – Granite Construction Quarry Property and Expansion Area

VI. Project-Generated Noise

Noise Levels

To determine the levels of noise generated by typical stripping and mining operations, on-site noise level recordings were made on April 8, 2015 using a Larson Davis LDL 812 Precision Integrating Sound Level Meter and a Tascam DR40 Linear PCM Digital Audio Recorder. The sound meter was programmed to measure the L_2, L_8, L_{25} and L_{50} noise levels to correspond to the standards of the Fresno County Noise Ordinance. Stripping operations were being performed near the northerly boundary of the existing mine off of West Gale Avenue. The three Cat 651 scrapers and one Cat D10 push dozer were operating in a pit 27 ft. deep. The sound meter was placed at the edge of the pit 250 ft. to 310 ft. from the scraping operation. The average distance to the operation was 275 ft.

The stripping operation is the highest noise generating activity as the sources are at the ground surface during the operation. Mining occurs below grade and the mining pit walls create a noise barrier. Therefore, the noise levels and noise exposures presented in this section are considered worst-case.

Table II provides the measured (adjusted) sound levels of the stripping operations at an average of 275 ft. from the mining equipment and over a 12 minute duration. The sound levels of the scrapers exiting the pit and driving behind the noise monitor were removed from the data as scrapers will not operate behind the receptor locations. Note that the stripping operations and the mining operations involve the use of similar equipment. In addition, noise level measurements of conveyor operations were made. When adjusted for similar distances, the conveyor noise levels are more than 10 dB below the equipment noise levels. Thus, the conveyor noise becomes insignificant in relation to the equipment noise.

TABLE II							
Stripping/Mining Noise Levels, dBA							
Operation	Distance	L_{max}	L_2	L_8	L_{25}	L_{50}	L_{eq}
Stripping/Mining	275 ft.	91	80	79	76	75	76
Conveying	20 ft.	92	82	78	77	76	77

The Elks Lodge property is located approximately 1,110 ft. from the proposed mining operations. The residential area to the east, south of El Rancho Boulevard, is located approximately 1,200 ft. from the proposed mining operation. The residential area to the east, north of El Rancho Boulevard, is located approximately 1,400 ft. from the proposed mining operation. The schools on the south side of Cambridge Avenue are approximately 1,500 ft. from the proposed mining area. The residences on the south side of Cambridge Avenue are approximately 1,400 ft. from the proposed mining area. The topography in the area is generally flat.

The attenuation rate used for sound propagation is $20\log_{10}(r_1/r_2)$, where r_1 is the reference distance and r_2 is the distance to the receiver. Wave scattering was not included due to the sparse vegetation in the area.

Table III on page 18 provides the results of the short-term noise level analysis and evaluations against the standards of the City of Coalinga Noise Element and the Fresno County Noise Ordinance. The noise levels shown in Table IV do not include the noise reduction provided by the noise control berms.

TABLE III						
Unmitigated Short Term Noise Level Analysis						
		Lmax	L2	L8	L25	L50
Limits=	Fresno	75	70	65	60	55
	Coalinga					55
	Dist					
Reference Data	275	91	80	79	76	75
Residences to East	1200	78	67	66	63	62
Excess		3	-3	1	3	7
Elks Lodge	1100	NA	NA	NA	NA	63
Excess						8
Residences to South	1400	77	66	65	62	61
Excess		2	-4	0	2	6

As shown in Table III, without the benefit of a noise control berm, the short-term noise levels during stripping (worst-case) operations could exceed the limits of the City of Coalinga Noise Element and the Fresno County Noise Ordinance at the most impacted residential receptor locations. The short-term noise levels at the Elks Lodge will exceed the limits of the City of Coalinga Noise Element. The Fresno County Noise Ordinance is not applicable to the Elks Lodge property.

The Project will incorporate noise mitigation measures that serve to lower the noise levels for compliance with the applicable standards. The planned noise reduction measures are described in Section VI of this report.

Noise Exposures

The project-generated noise exposures (dB DNL) were calculated as a decibel average of the L_{eq}'s as they apply to the daily time periods of the DNL index. Since the stripping operational average noise level is fairly consistent, the measured 12 minute L_{eq} (adjusted to remove the scraper passbys) can be extrapolated to a one hour L_{eq}. The hourly L_{eq} is then incorporated into the DNL formula, as shown in Appendix B.

The adjusted L_{eq} of 76 dBA at 275 ft. over the 12 minute measurement period is extrapolated to an hourly noise level of 76 dBA $L_{eq(h)}$. For operational hours of 7:00 AM to 5:00 PM, the DNL was calculated to be 73 dB DNL at 275 ft.

Table IV, below, provides the calculated project-generated noise exposures for each receptor location, the noise limits and evaluations of the noise exposures against the applicable standards. These noise exposures are worst-case values when the stripping operations would be at the closest distance to the receptor locations and do not include the effects of the noise control berms.

TABLE IV

Unmitigated Project-Generated Noise Exposures, dB DNL

Location	Dist.	DNL	Noise Evaluation	
			Coalinga Limit (55-60 dB DNL)	Fresno Co. Limit (60 dB DNL)
Residence to East, North of El Rancho	1,400 ft.	59	+4 dB	-1 dB
Residence to East, South of El Rancho	1,200 ft.	60	+5 dB	0 dB
Elks Lodge	800 ft.	65	+5 dB	+5 dB
Schools	1,500 ft.	59	+4 dB	-1 dB
Residences South of Cambridge Ave.	1,400 ft.	59	+4 dB	-1 dB

As in Table IV, without the benefit of the planned noise reduction measures, the noise exposures generated during worst-case stripping operations could exceed the limits of the City of Coalinga Noise Element and the Fresno County Noise Element at the most impacted residences, schools and Elks Lodge.

VII. Description of Noise Reduction Measures

To reduce Project noise levels and noise exposures for compliance with the standards of the City of Coalinga Noise Element, the Fresno County Noise Element and Fresno County Noise Ordinance, the following noise control measures have been incorporated into the Project design.

- Prior to mining within 2,300 ft. of the Elks Lodge property line, 6 ft. high earthen berms will be constructed along the Project mine boundary in the eastern pit, as shown in Figure 4.

- Prior to mining within 2,200 ft. of the school/residential property lines on the south side of Cambridge Avenue, 6 ft. high earthen berms will be constructed along the expansion boundary to the south parallel with Cambridge Avenue. The berms will extend from the west boundary and turn along the flood plain/mining boundary to the west of Los Gatos Creek to terminate at a distance of 2,200 ft. from the school/residential property lines on the south side of Cambridge Avenue.

Please see Figure 4 for the approximate locations of the noise control berms. The blue lines on the figures represent the distances at which the noise control berms will be necessary.

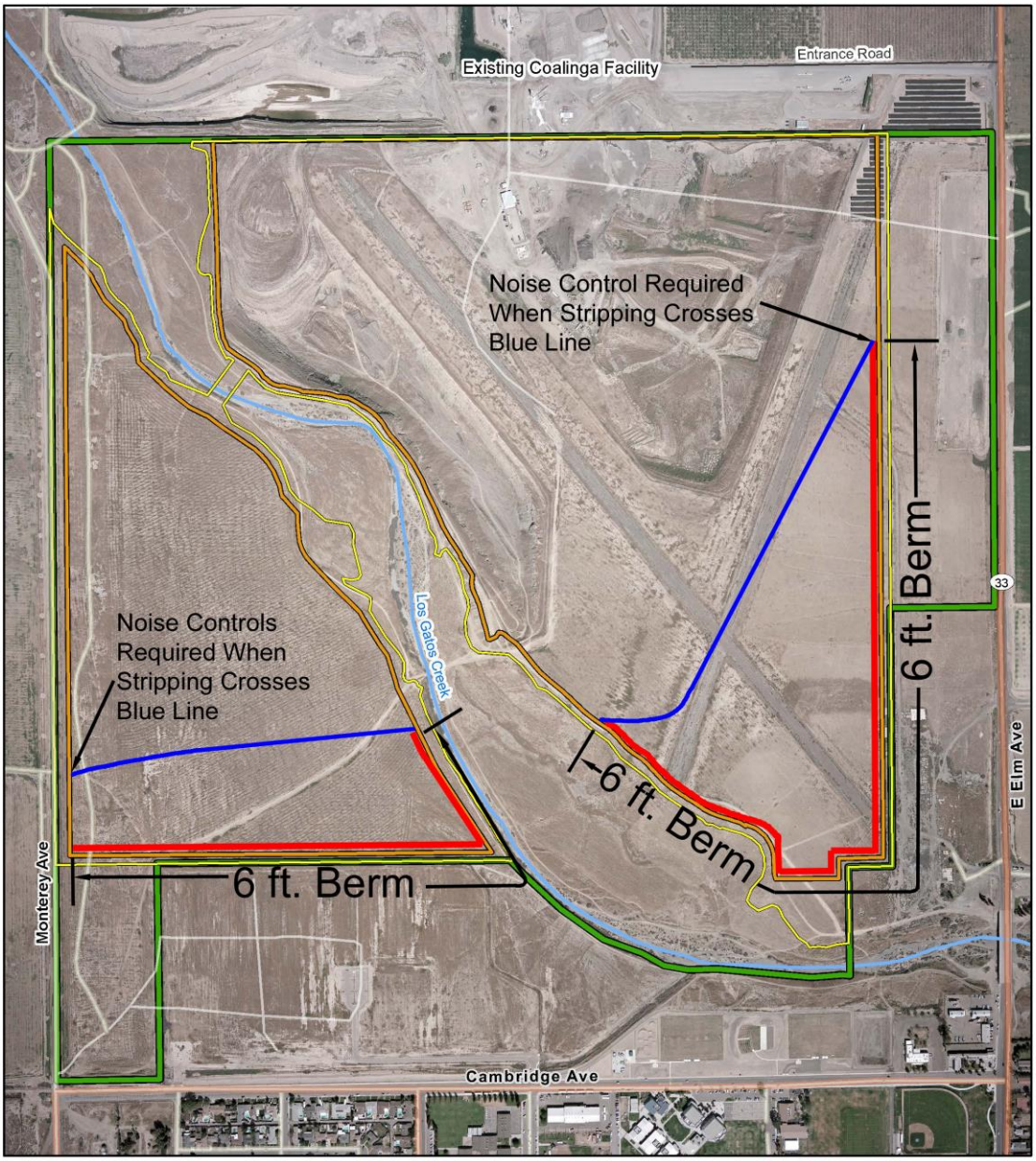


FIGURE 4

Locations of the recommended 6 ft. high noise control berms

Locations of the distance limits when the berms will be required

The construction of the noise control berms will reduce the Project noise levels for compliance with the applicable noise standards of the City of Coalinga and County of Fresno. Table V, below, provides the resulting short-term noise levels with the construction of the berms. Table VI provides the resulting noise exposures with the construction of the berms.

TABLE V						
Mitigated Short Term Noise Level Analysis						
		Lmax	L2	L8	L25	L50
Limits=	Fresno	75	70	65	60	55
	Coalinga					55
	Dist					
Reference Data	275	91	80	79	76	75
Residences to East	1200	70	59	58	55	54
Excess		-5	-11	-7	-5	-1
Elks Lodge	1100	NA	NA	NA	NA	55
Excess						0
Residences to South	1400	68	56	56	53	52
Excess		-7	-14	-9	-7	-3

TABLE VI				
Mitigated Project-Generated Noise Exposures, dB DNL				
Location	Dist.	DNL	Noise Evaluation	
			Coalinga Limit (55-60 dB DNL)	Fresno Co. Limit (60 dB DNL)
Residence to East, North of El Rancho	1,400 ft.	51	-4 dB	-9 dB
Residence to East, South of El Rancho	1,200 ft.	52	-3 dB	-8 dB
Elks Lodge	800 ft.	58	-2 dB	-2 dB
Schools	1,500 ft.	51	-4 dB	-9 dB
Residences South of Cambridge Ave.	1,400 ft.	51	-4 dB	-9 dB

As shown in the Tables, with the installation of the noise control berms, the project-generated noise levels and noise exposures will be in compliance with the standards of the City of Coalinga Noise Element and the Fresno County Noise Element and Noise Ordinance. No further noise mitigation measures will be required.

The above report presents the results of a noise assessment study for the proposed mining expansion area application for Granite Construction Company Coalinga Quarry along Highway 198/33 in Coalinga. The noise levels presented herein were from on-site and near-site measurements and other data and are correct to the best of our knowledge. However, changes in equipment, operations, activities, quarrying technology, noise regulations or other future changes beyond our control may produce long-range noise results different from our estimates. If you have any questions or would like an elaboration on this report, please call me.

Report Prepared By,

EDWARD L. PACK ASSOC., INC.

Jeffrey K. Pack
President

Attachments: Appendices A, B, and C

APPENDIX A

References

(a) City of Coalinga General Plan, Chapter 5, Safety, Air Quality and Noise Element, Adopted June 2009

(b) Fresno County General Plan Background Report, Chapter 10: Noise, pp.10-1 through 10-32, Adopted October 3, 2000

(c) Coalinga Expansion Plan, Granite Construction, July 2015

(d) Information on Granite Construction Company Quarry Operations Provided by Ms. Candice Longnecker, by email to Edward L. Pack Associates, Inc., February 26 and March 27, 2015

APPENDIX B

Noise Standards, Terminology and Instrumentation

1. Noise Standards

A. City of Coalinga Noise Element Standards

NOISE - BACKGROUND AND SETTING

Noise sources in Coalinga fall into three basic categories: motor vehicle and farm equipment, aircraft, and stationary sources. Motor vehicle and farm equipment noise sources include automobiles, trucks, and motorcycles. Motor vehicle noise is of concern due to the high number of individual events which often create a sustained noise level and proximity to areas sensitive to noise exposure. Historically, due to the relatively small amount of traffic in Coalinga, traffic-related noise has not generally been significant problem. However, the traffic mix includes an unusually high percentage of large trucks on the City's major roadways, including Polk Street east of Elm Avenue, Elm Avenue and Phelps Avenue. It is possible that residences near the right-of-way of these streets may be exposed to excessive noise levels.

A comprehensive assessment of aircraft noise was undertaken as part of planning for the new Coalinga Municipal Airport. The future 60 and 65 Community Noise Equivalent Level (CNEL) contours (a measurement of the cumulative noise exposure in a community) do not extend past the airport boundaries. No significant adverse noise impacts are anticipated from operation of the new airport.

Stationary noise sources are generally larger facilities such as power plants, sewage treatment plants, oil production facilities, agricultural operations and heavy industrial uses. No major heavy industrial uses are located within the City; however, agricultural operations occurring in the area generate noise from tractors, irrigation and crop-dusting. The existing sewage treatment plant is located just east of the City; however, the treatment plant is planned to be relocated further east of the City, near the Pleasant Valley State Prison. According to the Environmental Impact Report (EIR) prepared for the relocation of the plant (City of Coalinga WWTP EIR prepared by Morro Group April 2006), the nearest sensitive noise receptor (residence) is located approximately 2,100 feet from the plant site. Based on comparative noise readings, the new treatment plant is not expected to produce significant noise impacts at the nearest sensitive receptor. Due to the uncertainties of the final treatment plant design, the EIR recommends as mitigation that a qualified acoustical engineer verify that the plant can maintain a maximum noise level of 60 dBA or lower

General Plan
Page 5-28

City of Coalinga
June 2009

at the nearest sensitive receptor. Gravel mining operations are to remain more than ½-mile from any current or potential residential development.

The most common noise sensitive land uses include residential uses, schools, hospitals, nursing and personal care facilities, churches, places of public assembly and entertainment, libraries, museums, hotels, motels, bed and breakfast facilities, outdoor sports and recreation facilities and offices. **Table 5-6**, presented below**,** specifies noise levels acceptable within each land use. The Community Noise Equivalent Level (CNEL) and Day-Night Noise Level (Ldn) are measures of the 24-hour noise environment. They represent the constant A-weighted noise level (an approximation of human sensitivity to sound) that would be measured if all the sound energy received over the day were averaged. In order to account for the greater sensitivity of people to noise at night, the CNEL weighting includes a five-decibel penalty on noise generated between 7:00 p.m. and 10:00 p.m. and a 10-decibel penalty between 10:00 p.m. and 7:00 a.m. the following day. The Ldn includes only the 10-decibel weighting for late-night noise events. For practical purposes, the two measures are equivalent for typical urban noise environments.

The most noise sensitive land uses in Coalinga are residential areas. Residential development is considered especially noise sensitive because, 1) considerable time is spent by individuals at home, 2) significant activities occur outdoors, and 3) sleep disturbance is most likely to occur in a residential neighborhood. The Coalinga Regional Medical Center, located in the northeast part of town, is also considered a sensitive receptor.

TABLE 5-6
ACCEPTABLE NOISE LEVELS BY LAND USE

Land Use	Community Noise Equivalent Level (CNEL) or Day-Night Level (Ldn), dB							
	50	55	60	65	70	75	80	85
Residential: Low-Density Single-Family, Duplex, Mobile Homes								
Residential: Multi-Family								
Transient Lodging: Motels, Hotels								
Schools, Libraries, Churches, Hospitals, Nursing Homes								
Auditoriums, Concert Halls, Amphitheaters								
Sports Arenas, Outdoor Spectator Sports								
Playgrounds, Neighborhood Parks								
Golf Courses, Riding Stables, Water Recreation, Cemeteries								
Office Buildings, Business, Commercial and Professional								
Normally Acceptable	Specified land use is satisfactory, based on the assumption that any buildings are of normal conventional construction, without any special noise insulation requirements.							
Conditionally Acceptable	New construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features included in design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.							
Normally Acceptable	New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in design.							
Clearly Acceptable	New construction or development should generally not be undertaken.							
Nature of the noise environment where the CNEL or Ldn level is:	Below 55 db: Relatively quiet suburban or urban areas, no arterial streets within one block, no freeways within one-quarter mile.							
	55-65 db: Mostly somewhat noisy urban areas, near but not directly adjacent to high volumes of traffic.							
	65-75 db: Very noisy urban areas near arterials, freeways, or airports.							
	75+ db: Extremely noise urban areas adjacent to freeways or under airport traffic patterns. Hearing damage with constant exposure outdoors.							

Source: Cotton/Beland/Associates, adapted from City of Los Angeles EIR Manual for Private Projects, U.S. Department of Housing and Urban Development and State of California Guidelines and U.S. EPA, Report on Levels of Environmental Noise Requisite to Protect the Public Health and Welfare with an Adequate Margin of Safety, 1974.

Implementation Measure AQ5-2.3
The City shall evaluate the feasibility of constructing new City structures to LEED standards, and will give preference in approval, water and sewer service, to housing developments that meet the LEED neighborhood design standards.

Implementation Measure AQ5-2.4
The City shall give preference in approval and water and sewer service, to housing developments that incorporate photovoltaic and or solar water heating systems.

Implementation Measure AQ5-2.5
Solar water heating and/or photovoltaic systems shall be required for all new single-family residences with more than two (2) baths, multi-family residential developments larger than four (4) units and commercial buildings larger than 20,000 square feet.

Policy AQ5-3
The City shall encourage sustainable employee commuting and municipal transportation practices.

Implementation Measure AQ5-3-1
Encourage alternatives to employees commuting as occupants of individual vehicles powered by non-sustainable fuels.

Implementation Measure AQ5-3-2
As feasible, offer free parking for alternative fuel vehicles and fuel-efficient cars.

Implementation Measure AQ5-3-3
Retire old and under-used municipal vehicles, as feasible, and promote replacement purchases of compact and hybrid vehicles.

Implementation Measure AQ5-3.4
Create car-pooling, van-pooling, and transit programs for municipal employees.

Implementation Measure AQ5-3.5
Implement telecommuting policy for municipal employees where feasible and appropriate

Goal N1
A community free from the harmful and annoying effects of excessive noise.

Policy N1-1
The City shall ensure noise mitigation measures and techniques are incorporated into site planning, architecture, design and construction projects.

Implementation Measure N1-1.1
Within one (1) year of adoption of the General Plan, the City shall develop and adopt a comprehensive noise ordinance that regulates hours of operation and controls excessive

noise from construction activity, lawn blowers, trimmers, street sweepers, machinery and other disturbances. The City shall restrict construction activities to the hours between 7 am and 9 pm Monday through Friday and 8 am and 5 pm on Saturday and Sunday for all development projects, unless it can be shown that longer construction hours would not increase noise impacts to sensitive receptors.

Implementation Measure N1-1.2
Require development proposals to conform with the policies of the City's Noise Element ensuring compatibility with the existing noise environment.

Implementation Measure N1-1.3
The City shall require an acoustical analysis for new development that may result in noise that exceeds specified levels.

Implementation Measure N1-1.4
Develop procedures that monitor and ensure implementation of noise mitigation measures pursuant to an acoustical analysis.

Implementation Measure N1-1.5
Require the construction of barriers to shield noise-sensitive uses from excessive noise.

Implementation Measure N1-1.6
Reduce noise generated by construction activities by requiring sound attenuation devices on construction vehicles and equipment.

Implementation Measure N1-1.7
Reduce noise generated by building equipment (e.g., HVAC, exhaust fans) by requiring buffering techniques including sound attenuation walls and berms.

Policy N1-2
The City shall ensure acceptable noise levels near sensitive noise receptors including schools, hospitals, convalescent homes and other noise-sensitive areas.

Implementation Measure N1-2.1
Periodically review and update the Noise Element to ensure policies are consistent with changing conditions in the City's noise environment. Current standards are what the City will use.

Implementation Measure N1-2.2
Enforce City, State and Federal traffic noise standards.

Implementation Measure N1-2.3
Require a landscaped buffer between commercial, industrial or mixed uses and any adjoining noise sensitive receptor.

Implementation Measure N1-2.4
Require automobile and truck access to commercial properties be the maximum practical distance from any adjoining noise sensitive receptor.

Implementation Measure N1-2.5
The City shall prohibit truck deliveries to commercial and industrial properties abutting residential uses before 7 a.m. and after 9 p.m. unless there is no feasible alternative.

Policy N1-3
The City shall discourage the use of soundwalls to be used as noise buffering.

Implementation Measure N1-3.1
*Consistent with **Implementation Measure LU2.2-2**, the use of soundwalls is discouraged, and should only be used if other techniques such as landscaping, setbacks and screening are proved infeasible or inadequate.*

B. Fresno County Noise Element and Noise Ordinance Standards

The Fresno County General Plan Background Report, Adopted October 3, 2000 contains a Noise Element in Chapter 10. The Noise Element standards utilized the Day-Night Level (DNL) noise descriptor. The County noise standards are shown below:

Current Fresno County Noise Element

The *Fresno County General Plan Noise Element*, adopted in December of 1975, establishes maximum acceptable noise levels for various land use categories (see Table 10-9).

TABLE 10-9

EXISTING NOISE ELEMENT: MAXIMUM ACCEPTABLE NOISE LEVELS

Land Use	L_{50}		L_{dn}	
	Daytime	Nighttime	Exterior	Interior
Rural Residential	50	45	55	45
Urban Residential & Noise Sensitive Receivers[1]	55	50	60	45
Urban Commercial	65	60		
Urban Industrial	70	70		

Source: EIP Associates

[1] Schools, parks, hospitals and rest homes

The Fresno County Noise Element also contains the standards of the Fresno County Noise Ordinance.

Fresno County Noise Ordinance

The standards of the *Fresno County Noise Ordinance* incorporate a structure similar to that presented in the ONC's *Model Noise Ordinance* (Tables 10-6 and 10-7) and include baseline exterior noise standards that are consistent with the General Plan's L_{50} guidelines (Table 10-9) for rural residential areas. County standards apply specifically to noise exposure at residences, schools, hospitals, churches, and libraries; these standards are shown in Tables 10-10a and 10-10b:

TABLE 10-10a

FRESNO COUNTY NOISE CONTROL ORDINANCE: EXTERIOR NOISE STANDARDS

Category	Cumulative Number of Minutes in any One-Hour Time Period	Noise Level Standards (dBA)	
		Daytime (7 a.m.-10 p.m.)	Nighttime (10 p.m.-7 a.m.)
1	30	50	45
2	15	55	50
3	5	60	55
4	1	65	60
5	0	70	65

Source: Fresno County Noise Control Ordinance, July 1978

2. Terminology

A. Statistical Noise Levels

Due to the fluctuating character of urban traffic noise, statistical procedures are needed to provide an adequate description of the environment. A series of statistical descriptors have been developed which represent the noise levels exceeded a given percentage of the time. These descriptors are obtained by direct readout of the Community Noise Analyzer. Some of the statistical levels used to describe community noise are defined as follows:

L_1 - A noise level exceeded for 1% of the time.

L_{10} - A noise level exceeded for 10% of the time, considered to be an "intrusive" level.

L_{50} - The noise level exceeded 50% of the time representing an "average" sound level.

L_{90} - The noise level exceeded 90 % of the time, designated as a "background" noise level.

L_{eq} - The continuous equivalent-energy level is that level of a steady-state noise having the same sound energy as a given time-varying noise. The L_{eq} represents the decibel level of the time-averaged value of sound energy or sound pressure squared and is used to calculate the DNL and CNEL.

B. Day-Night Level (DNL)

Noise levels utilized in the standards are described in terms of the Day-Night Level (DNL). The DNL rating is determined by the cumulative noise exposures occurring over a 24-hour day in terms of A-Weighted sound energy. The 24-hour day is divided into two subperiods for the DNL index, i.e., the daytime period from 7:00 a.m. to 10:00 p.m., and the nighttime period from 10:00 p.m. to 7:00 a.m. A 10 dB weighting factor is applied (added) to the noise levels occurring during the nighttime period to account for the greater sensitivity of people to noise during these hours. The DNL is calculated from the measured L_{eq} in accordance with the following mathematical formula:

$$DNL = \left[[(10\log_{10}(10^{\Sigma Leq(7\text{-}10)})) \times 15] + [((10\log_{10}(10^{\Sigma Leq(10\text{-}7))})+10) \times 9]\right]/24$$

C. A-Weighted Sound Level

The decibel measure of the sound level utilizing the "A" weighted network of a sound level meter is referred to as "dBA". The "A" weighting is the accepted standard weighting system used when noise is measured and recorded for the purpose of determining total noise levels and conducting statistical analyses of the environment so that the output correlates well with the response of the human ear.

3. Instrumentation

The on-site field measurement data were acquired by the use of one or more of the sound analyzer listed below. The instrumentation provides a direct readout of the L exceedance statistical levels including the equivalent-energy level (L_{eq}). Input to the meters were provided by microphones extended to a height of 5 ft. above the ground. The "A" weighting network and the "Fast" response setting of the meters were used in conformance with the applicable standards. The Larson-Davis meters were factory modified to conform with the Type 1 performance standards of ANSI S1.4. All instrumentation was acoustically calibrated before and after field tests to assure accuracy.

Bruel & Kjaer 2231 Precision Integrating Sound Level Meter
Larson Davis LDL 812 Precision Integrating Sound Level Meter
Larson Davis 2900 Real Time Analyzer
Tascam DR-40 Linear PCM Digital Audio Recorder

APPENDIX C

Noise Measurement Data and Calculation Tables

DNL CALCULATIONS

CLIENT: GRANITE CONSTRUCTION CO.
FILE: 47-022
PROJECT: COALINGA QUARRY EXPANSION
DATE: 4/8-10/2015
SOURCE: EXISTING AMBIENT

LOCATION 1 Elks Lodge Prop. Line

TIME	Wed.-Thurs. Leq	10^Leq/10		
7:00 AM	49.3	85113.8		
8:00 AM	46.7	46773.5		
9:00 AM	49.4	87096.4		
10:00 AM	46.9	48977.9		
11:00 AM	47.0	50118.7		
12:00 PM	46.7	46773.5		
1:00 PM	46.6	45708.8		
2:00 PM	52.5	177827.9		
3:00 PM	50.2	104712.9		
4:00 PM	50.5	112201.8		
5:00 PM	50.1	102329.3		
6:00 PM	49.6	91201.1		
7:00 PM	49.0	79432.8		
8:00 PM	45.4	34673.7		
9:00 PM	42.4	17378.0	SUM=	1130320.2
10:00 PM	41.7	14791.1	Ld=	60.5
11:00 PM	40.2	10471.3		
12:00 AM	38.8	7585.8		
1:00 AM	41.6	14454.4		
2:00 AM	38.8	7585.8		
3:00 AM	40.7	11749.0		
4:00 AM	41.3	13489.6		
5:00 AM	46.2	41686.9		
6:00 AM	48.8	75857.8	SUM=	197671.6
			Ln=	53.0

Daytime Level=	60.5
Nighttime Level=	63.0
DNL=	**51**
24-Hour Leq=	47.4

LOCATION 1 Elks Lodge Prop. Line

TIME	Thurs.-Fri. Leq	10^Leq/10		
7:00 AM	51.3	134896.3		
8:00 AM	47.9	61659.5		
9:00 AM	47.6	57544.0		
10:00 AM	47.1	51286.1		
11:00 AM	48.3	67608.3		
12:00 PM	45.7	37153.5		
1:00 PM	46.8	47863.0		
2:00 PM	48.4	69183.1		
3:00 PM	49.0	79432.8		
4:00 PM	48.2	66069.3		
5:00 PM	49.5	89125.1		
6:00 PM	47.0	50118.7		
7:00 PM	47.1	51286.1		
8:00 PM	45.8	38018.9		
9:00 PM	43.7	23442.3	SUM=	924687.2
10:00 PM	42.7	18620.9	Ld=	59.7
11:00 PM	41.2	13182.6		
12:00 AM	39.9	9772.4		
1:00 AM	37.8	6025.6		
2:00 AM	39.4	8709.6		
3:00 AM	39.2	8317.6		
4:00 AM	42.0	15848.9		
5:00 AM	44.9	30903.0		
6:00 AM	50.0	100000.0	SUM=	211380.6
			Ln=	53.3

Daytime Level=	59.7
Nighttime Level=	63.3
DNL=	**51**
24-Hour Leq=	46.8

DNL CALCULATIONS

CLIENT: GRANITE CONSTRUCTION CO.
FILE: 47-022
PROJECT: COALINGA QUARRY EXPANSION
DATE: 4/8-10/2015
SOURCE: EXISTING AMBIENT

LOCATION 2	Residential PL @ Cabrillo Dr.			
TIME		10^Leq/10		
7:00 AM	52.1	162181.0		
8:00 AM	47.8	60256.0		
9:00 AM	41.9	15488.2		
10:00 AM	48.1	64565.4		
11:00 AM	40.9	12302.7		
12:00 PM	43.3	21379.6		
1:00 PM	51.9	154881.7		
2:00 PM	53.9	245470.9		
3:00 PM	43.5	22387.2		
4:00 PM	44.2	26302.7		
5:00 PM	45.1	32359.4		
6:00 PM	45.9	38904.5		
7:00 PM	47.6	57544.0		
8:00 PM	46.5	44668.4		
9:00 PM	44.3	26915.3	SUM=	985606.9
10:00 PM	44.5	28183.8	Ld=	59.9
11:00 PM	45.9	38904.5		
12:00 AM	42.1	16218.1		
1:00 AM	46.7	46773.5		
2:00 AM	44.9	30903.0		
3:00 AM	45.6	36307.8		
4:00 AM	46.0	39810.7		
5:00 AM	51.0	125892.5		
6:00 AM	53.6	229086.8	SUM=	592080.7
		1.0	Ln=	57.7
	Daytime Level=	59.9		
	Nighttime Level=	67.7		
	DNL=	**55**		
	24-Hour Leq=	48.2		

LOCATION 2	Residential PL @ Cabrillo Dr.			
TIME	Leq			
7:00 AM	54.5	281838.3		
8:00 AM	48.0	63095.7		
9:00 AM	45.6	36307.8		
10:00 AM	41.4	13803.8		
11:00 AM	47.3	53703.2		
12:00 PM	41.7	14791.1		
1:00 PM	52.6	181970.1		
2:00 PM	53.6	229086.8		
3:00 PM	43.4	21877.6		
4:00 PM	40.6	11481.5		
5:00 PM	41.8	15135.6		
6:00 PM	39.6	9120.1		
7:00 PM	44.6	28840.3		
8:00 PM	47.7	58884.4		
9:00 PM	46.7	46773.5	SUM=	1066709.9
10:00 PM	44.8	30199.5	Ld=	60.3
11:00 PM	44.3	26915.3		
12:00 AM	44.2	26302.7		
1:00 AM	41.3	13489.6		
2:00 AM	40.7	11749.0		
3:00 AM	44.8	30199.5		
4:00 AM	45.7	37153.5		
5:00 AM	50.9	123026.9		
6:00 AM	55.4	346736.9	SUM=	645772.9
			Ln=	58.1
	Daytime Level=	60.3		
	Nighttime Level=	68.1		
	DNL=	**55**		
	24-Hour Leq=	48.5		

DNL CALCULATIONS

CLIENT: GRANITE CONSTRUCTION CO.
FILE: 47-022
PROJECT: COALINGA QUARRY EXPANSION
DATE: 4/8-10/2015
SOURCE: EXISTING AMBIENT

LOCATION 3	Cambridge Ave			
	Wed.-Thurs.			
TIME	Leq	10^Leq/10		
7:00 AM	58.4	691831.0		
8:00 AM	57.3	537031.8		
9:00 AM	52.7	186208.7		
10:00 AM	55.2	331131.1		
11:00 AM	53.7	234422.9		
12:00 PM	54.3	269153.5		
1:00 PM	54.1	257039.6		
2:00 PM	57.7	588843.7		
3:00 PM	57.1	512861.4		
4:00 PM	58.2	660693.4		
5:00 PM	57.4	549540.9		
6:00 PM	57.6	575439.9		
7:00 PM	55.0	316227.8		
8:00 PM	54.9	309029.5		
9:00 PM	52.0	158489.3	SUM=	6177944.5
10:00 PM	51.5	141253.8	Ld=	67.9
11:00 PM	47.2	52480.7		
12:00 AM	41.4	13803.8		
1:00 AM	47.5	56234.1		
2:00 AM	35.1	3235.9		
3:00 AM	38.9	7762.5		
4:00 AM	42.9	19498.4		
5:00 AM	54.1	257039.6		
6:00 AM	56.1	407380.3	SUM=	958689.2
			Ln=	59.8
	Daytime Level=	67.9		
	Nighttime Level=	69.8		
	DNL=	**58**		
	24-Hour Leq=	54.7		

LOCATION 3	Cambridge Ave			
	Thurs.-Fri.			
TIME	Leq	10^Leq/10		
7:00 AM	58.4	691831.0		
8:00 AM	57.1	512861.4		
9:00 AM	59.5	891250.9		
10:00 AM	54.2	263026.8		
11:00 AM	56.2	416869.4		
12:00 PM	54.2	263026.8		
1:00 PM	54.7	295120.9		
2:00 PM	62.1	1621810.1		
3:00 PM	57.4	549540.9		
4:00 PM	55.5	354813.4		
5:00 PM	56.5	446683.6		
6:00 PM	55.8	380189.4		
7:00 PM	56.2	416869.4		
8:00 PM	52.4	173780.1		
9:00 PM	50.2	104712.9	SUM=	7382386.9
10:00 PM	51.6	144544.0	Ld=	68.7
11:00 PM	45.7	37153.5		
12:00 AM	47.3	53703.2		
1:00 AM	42.5	17782.8		
2:00 AM	43.2	20893.0		
3:00 AM	31.8	1513.6		
4:00 AM	40.2	10471.3		
5:00 AM	50.2	104712.9		
6:00 AM	55.2	331131.1	SUM=	721905.3
			Ln=	58.6
	Daytime Level=	68.7		
	Nighttime Level=	68.6		
	DNL=	**58**		
	24-Hour Leq=	55.3		

Granite Construction Company's Coalinga Mine Expansion Project

Traffic Impact Study Report
November 2019

Prepared for:
Candice Longnecker
Valley Region Environmental Manager
4001 Bradshaw Road
Sacramento, CA 95827

Prepared by:
VRPA Technologies, Inc.
4630 W. Jennifer, Suite 105
Fresno, CA 93722
Project Manager: Jason Ellard

Granite Construction Company's Coalinga Mine Expansion Project
Traffic Impact Study

Study Team

- ✓ Georgiena Vivian, President, VRPA Technologies, Inc., gvivian@vrpatechnologies.com, (559) 259-9257
- ✓ Erik Ruehr, Dir. of Traffic Engineering, VRPA Technologies, Inc., eruehr@vrpatechnologies.com, (858) 566-1766
- ✓ Jason Ellard, Transportation Engineer, VRPA Technologies, Inc., jellard@vrpatechnologies.com, (559) 271-1200

Table of Contents

List of Tables

List of Figures

1.0 Introduction

1.1 Description of the Region/Project

This Traffic Impact Study (TIS) has been prepared for the purpose of analyzing traffic conditions related to the proposed Granite Construction Company Coalinga Mine Expansion Project ("Project") in the County of Fresno. The Project is located to the west of State Route (SR) 33 and approximately ¾ miles north of Phelps Avenue.

The Project's primary purpose is a change (expansion) to the geographic area allowed for mining and reclamation at the Project site. The Project would not modify the current production levels, hours of operation, materials to be mined, equipment types, or mining methods. Sand and gravel mined within the Project area will be transported via conveyor and/or internal haul roads to the existing processing plants where it will be processed and/or sold for use in construction materials. Figures 1-1 and 1-2 show the location of the Project along with major roadways.

1.1.1 *Project Access*

Access to the site is provided along SR-33 via one (1) driveway located approximately ¾ miles north of Phelps Avenue. The lone driveway along SR-33 is a full access driveway with a one-way stop sign for vehicles exiting the site.

1.1.2 *Study Area*

The study intersections and street and highway segments included in this TIS are listed below. The study area outline below was developed in consultation with Fresno County and California Department of Transportation (Caltrans) staff. VRPA prepared a Traffic Scoping document that included the proposed methodology for the traffic analysis as well as the study area.

Intersections

- ✓ SR-33 / Project Driveway
- ✓ SR-33 / SR-198
- ✓ I-5 NB Off Ramp / SR-198
- ✓ I-5 SB Off Ramp / SR-198
- ✓ I-5 NB Off Ramp / Jayne Avenue (Trip Trace Only)
- ✓ SR-33 / Jayne Avenue (Trip Trace Only)
- ✓ SR-33 / Juniper Ridge Boulevard (Trip Trace Only)
- ✓ SR-33 / 5th Street (Trip Trace Only)
- ✓ SR-33 / 3rd Street (Trip Trace Only)

Roadway Segments

- ✓ SR-198 between the I-5 NB and SB off ramps

1.1.3 *Study Scenarios*

The TIS completed for the Project includes level of service (LOS) analysis for the following traffic scenarios:

- ✓ Existing Conditions
- ✓ Modified Existing Scenario 1 (omitting actual Granite Construction trips included in existing counts)
- ✓ Modified Existing Scenario 2 (including current Granite Construction operations of 1.5 million tons of sales)
- ✓ Cumulative Year 2040 Scenario 1 (omitting actual Granite Construction trips included in existing counts)
- ✓ Cumulative Year 2040 Scenario 2 (including Granite Construction trips associated with operations of 1.5 million tons of sales)

1.2 Methodology

When preparing a TIS, guidelines set by affected agencies are followed. In analyzing street and intersection capacities the Level of Service (LOS) methodologies are applied. LOS standards are applied by transportation agencies to quantitatively assess a street and highway system's performance. In addition, safety concerns are analyzed to determine the need for appropriate mitigation resulting from increased traffic near sensitive uses, the need for dedicated ingress and egress access lanes to the project, and other evaluations such as the need for signalized intersections or other improvements.

1.2.1 *Intersection Analysis*

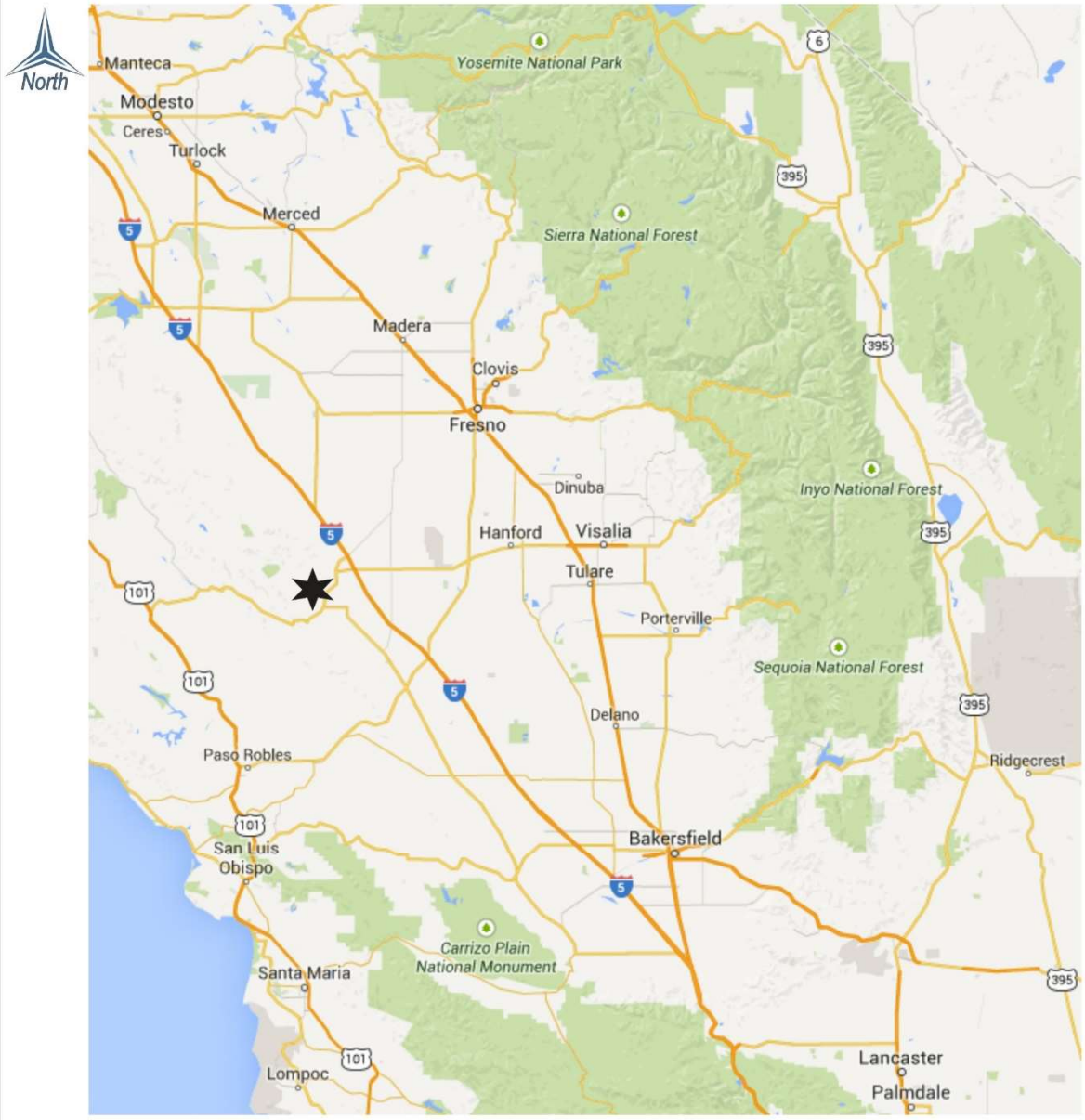
Intersection LOS analysis was conducted using the Synchro 9 software program. Synchro 9 supports the Highway Capacity Manual (HCM) 2010 and 2000 methodologies and is an acceptable program by City of Visalia and Caltrans staff for assessment of traffic impacts. Levels of Service can be determined for both signalized and unsignalized intersections. Seven (7) of the existing study intersections are currently signalized while ten (10) of the intersections are currently unsignalized.

Tables 1-1 and 1-2 indicate the ranges in the amounts of average delay for a vehicle at signalized and unsignalized intersections for the various levels of service ranging from LOS "A" to "F".

The signalized LOS standards applied to calculate intersection LOS are in accordance with the current edition of the Highway Capacity Manual (HCM). Intersection turning movement counts and roadway geometrics used to develop LOS calculations were obtained from field review findings and count data provided from the traffic count sources identified in Section 2.1.

Granite Construction Company Coalinga Mine Expansion
Regional Location

Figure 1-1



LEGEND

★ Project Location

Granite Construction Company Coalinga Mine Expansion
Project Location

Figure 1-2

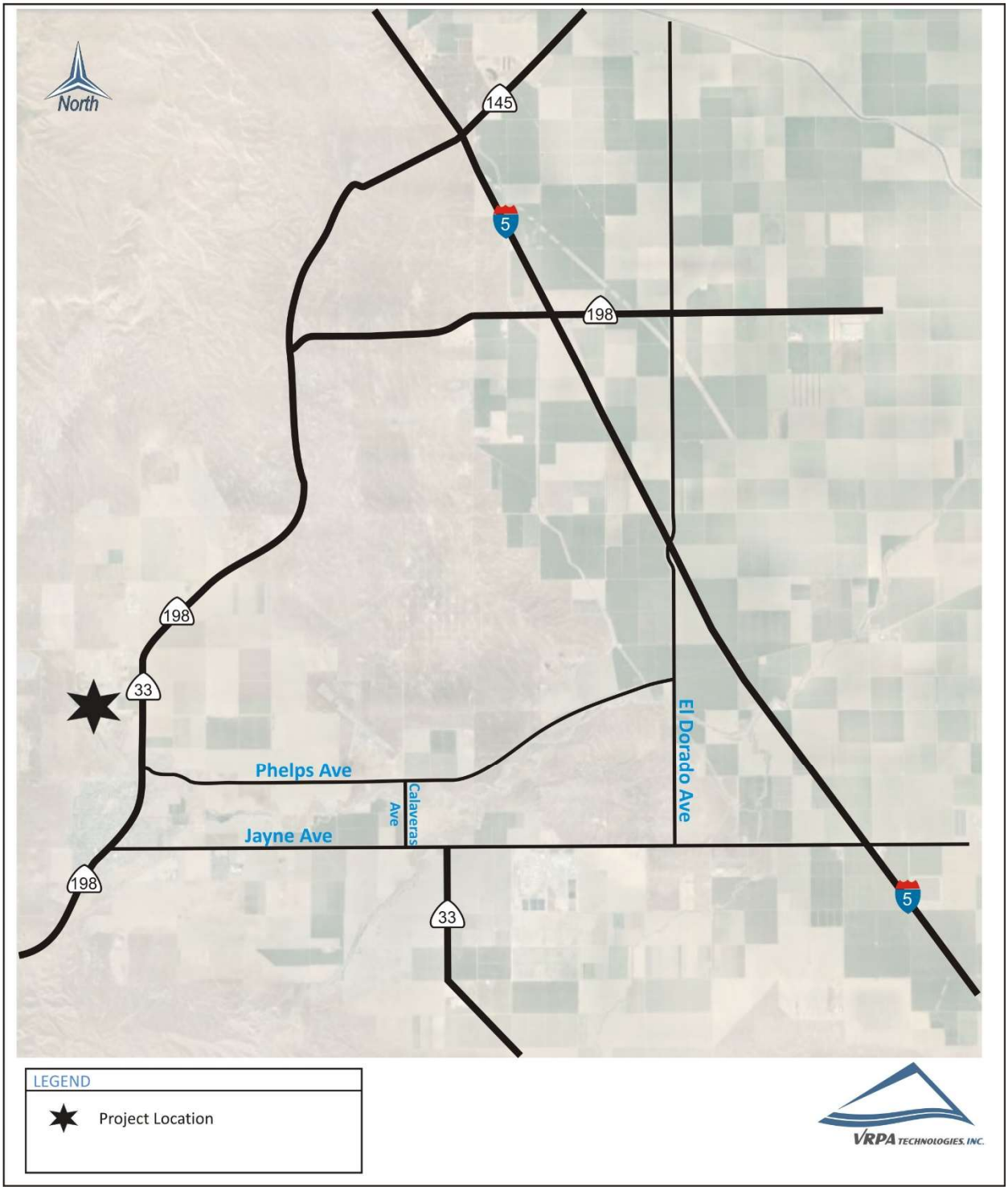


Table 1-1
Signalized Intersections
Level of Service Definitions
(Highway Capacity Manual)

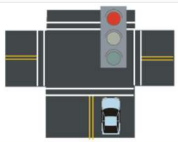
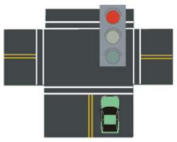
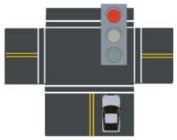
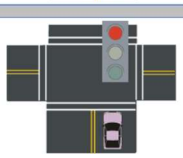
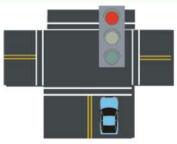
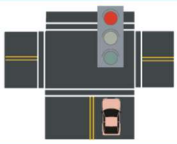
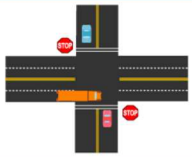
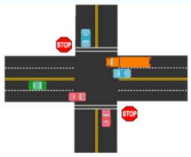
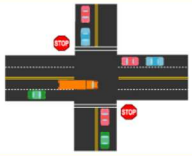
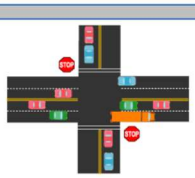
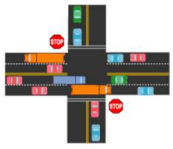
LEVEL OF SERVICE	DEFINITION		AVERAGE TOTAL DELAY (sec/veh)
A	Describes operations with very low delay. This level of service occurs when there is no conflicting traffic for a minor street.		≤ 10.0
B	Describes operations with moderately low delay. This level generally occurs with a small amount of conflicting traffic causing higher levels of average delay.		> 10.0 - 20.0
C	Describes operations with average delays. These higher delays may result from a moderate amount of minor street traffic. Queues begin to get longer.		> 20.0 - 35.0
D	Describes a crowded operation, with below average delays. At level D, the influence of congestion becomes more noticeable. Longer delays may result from shorter gaps on the mainline and an increase of minor street traffic. The queues of vehicles are increasing.		> 35.0 - 55.0
E	Describes operations at or near capacity. This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor gaps for the minor street to cross and large queues.		> 55.0 - 80.0
F	Describes operations that are at the failure point. This level, considered to be unacceptable to most drivers, often occurs with over- saturation, that is, when arrival flow rates exceed the capacity of the intersection. Insufficient gaps of suitable size exist to allow minor traffic to cross the intersection safely.		> 80.0

Table 1-2
Unsignalized Intersections
Level of Service Definitions
(Highway Capacity Manual)

LEVEL OF SERVICE	DEFINITION		AVERAGE TOTAL DELAY (sec/veh)
A	No delay for stop-controlled approaches.		0 - 10.0
B	Describes operations with minor delay.		> 10.0 - 15.0
C	Describes operations with moderate delays.		> 15.0 - 25.0
D	Describes operations with some delays.		> 25.0 - 35.0
E	Describes operations with high delays and long queues.		> 35.0 - 50.0
F	Describes operations with extreme congestion, with very high delays and long queues unacceptable to most drivers.		> 50.0

When an unsignalized intersection does not meet acceptable LOS standards, the investigation of the need for a traffic signal shall be evaluated. The California Manual on Uniform Traffic Control Devices for Streets and Highways (California MUTCD) dated November 7, 2014 introduces standards for determining the need for traffic signals. The California MUTCD indicates that the satisfaction of one or more traffic signal warrants does not in itself require the installation of a traffic signal. In addition to the warrant analysis, an engineering study of the current or expected traffic conditions should be conducted to determine whether the installation of a traffic signal is justified. The California MUTCD Peak Hour Warrant (Warrant 3) was used to determine if a traffic signal is warranted at unsignalized intersections that fall below current LOS standards.

1.2.2 *Roadway Segment Analysis*

According to the HCM, LOS is categorized by two parameters of traffic: uninterrupted and interrupted flow. Uninterrupted flow facilities do not have fixed elements such as traffic signals that cause interruptions in traffic flow. Interrupted flow facilities do have fixed elements that cause an interruption in the flow of traffic, such as stop signs and signalized intersections along arterial roads. A roadway segment is defined as a stretch of roadway generally located between signalized or controlled intersections.

Segment LOS is important in order to understand whether the capacity of a roadway can accommodate future traffic volumes. Table 1-3 provides a definition of segment LOS. The performance criteria used for evaluating volumes and capacities on the road and highway system for this study were estimated using the Modified HCM-Based LOS Tables (Florida Tables). The tables consider the capacity of individual road and highway segments based on numerous roadway variables (design speed, passing opportunities, signalized intersections per mile, number of lanes, saturation flow, etc.). These variables were identified and applied to reflect segment LOS conditions. Additional information is included in Appendix A. Street segment capacity was determined using information shown in Table 1-4, which comes from the Modified Arterial Level of Service Tables included in Appendix A.

1.3 Policies to Maintain Level of Service

An important goal is to maintain acceptable levels of service along the highway, street, and road network. To accomplish this, affected agencies adopt minimum levels of service in an attempt to control congestion that may result as new development occurs. As noted previously, LOS standards are applied by transportation agencies to quantitatively assess a street and highway system's performance. The affected level of service standards applicable to the traffic analysis are described below.

Fresno County

The Transportation and Circulation Element of the Fresno County General Plan guides the continued development and improvement of the circulation system to support existing and

planned development. The Circulation Element addresses the circulation improvements needed to provide adequate capacity for future land uses. The Element establishes a hierarchy of transportation routes with typical development standards described for each roadway category. The County also includes additional standards, plans and programs that apply to the evaluation of transportation impacts of the Project. These standards cover the primary aspects of the transportation system.

Fresno County's 2000 General Plan, policy number TR-A.2, identifies a minimum LOS standard of D on urban roadways within the spheres of influence of the cities of Fresno and Clovis and LOS C on all other roadways in the county.

Caltrans

Caltrans is responsible for planning, designing, building, operating, and maintaining California's State highway system, including rail and mass transit. Within the Project study area, Caltrans is responsible for State Route (SR) 33, SR 145, SR 198, and Interstate (I) 5.

Based on guidance from Caltrans, the LOS for operating State highway facilities is based on Measures of Effectiveness (MOE) identified in the Highway Capacity Manual (HCM). Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities; however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing State highway facility is operating at less than this target LOS, the existing MOE should be maintained. In general, the region-wide goal for an acceptable LOS on all freeways, roadways segments, and intersections is "D". For undeveloped or not densely developed locations, the goal may be to achieve LOS "C".

Table 1-3
Roadway Segment
Level of Service Definitions
(Highway Capacity Manual)

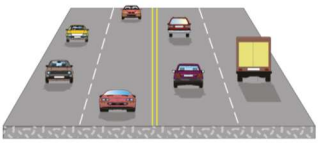
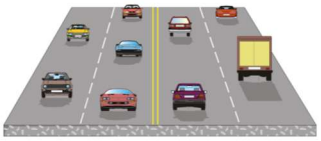
LEVEL OF SERVICE	DEFINITION	
A	Represents free flow. Individual vehicles are virtually unaffected by the presence of others in the traffic stream.	
B	Is in the range of stable flow, but the presence of other vehicles in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver.	
C	Is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual vehicles becomes significantly affected by interactions with other vehicles in the traffic stream.	
D	Is a crowded segment of roadway with a large number of vehicles restricting mobility and a stable flow. Speed and freedom to maneuver are severely restricted, and the driver experiences a generally poor level of comfort and convenience.	
E	Represents operating conditions at or near the level capacity. All speeds are reduced to a low, but relatively uniform value. Small increases in flow will cause breakdowns in traffic movement.	
F	Is used to define forced or breakdown flow (stop-and-go gridlock). This condition exists when the amount of traffic approaches a point where the amount of traffic exceeds the amount that can travel to a destination. Operations within the queues are characterized by stop and go waves, and they are extremely unstable.	

Table 1-4
Peak Hour Two-Way Volumes

Level of Service					
Lanes	Divided	B	C	D	E
Freeways					
4	Divided	3,020	4,510	5,490	6,300
6	Divided	4,510	6,720	8,220	9,720
8	Divided	6,040	8,970	10,960	12,970
State Class I Roadways					
2	Undivided	**	1,220	1,350	**
4	Divided	**	2,790	2,890	**
6	Divided	**	4,300	4,350	**
Non-State Class I Roadways					
2	Undivided	**	1,098	1,215	**
2	Divided	**	1,159	1,283	**
4	Undivided	**	2,372	2,457	**
4	Divided	**	2,511	2,601	**
6	Divided	**	3,870	3,915	**

** Not applicable for that level of service letter grade. Volumes greater than level of service D become F because intersection capacities have been reached.

2.0 Existing Conditions

2.1 Existing Traffic Counts and Roadway Geometrics

The first step toward assessing Project traffic impacts is to assess existing traffic conditions. Existing AM and PM peak hour turning movements were collected at each study intersection by National Data and Surveying Services. Intersection turning movement counts were conducted for the peak hour periods of 7:00-9:00 AM and 4:00-6:00 PM for all key intersections on Thursday, September 7th, 2017. Twenty-four (24) hour classification counts along Phelps Avenue, Calaveras Avenue, and Jayne Avenue, were taken on Thursday, September 19th, 2019. It should also be noted that 24-hour turning movement counts at the facility driveway were also collected on September 19th. The 24-hour driveway data was used to distinguish Project traffic from the traffic counts collected as described above.

Existing lane geometry is shown in Figure 2-1. Existing 2017 AM and PM peak hour traffic volumes are shown in Figures 2-2 and 2-3. Existing Daily Traffic segment volumes are shown in Figure 2-4. Figure 2-5 identifies the types of trucks observed during the 24-hour counts. Figures 2-6, 2-7, 2-8, and 2-9 represent Granite Construction Company truck trips at the Granite Construction Driveway along SR 33.

2.2 Affected Streets and Highways

Street and highway intersections and segments near and adjacent to the Project site were analyzed to determine levels of service utilizing HCM-based methodologies described previously. The study intersections and street and highway segments included in this TIS are listed below. The study area outline below was developed in consultation with Fresno County and Caltrans staff. VRPA prepared a scoping document that included the proposed methodology for the traffic analysis as well as the study area.

Intersections

- ✓ SR-33 / Project Driveway
- ✓ SR-33 / SR-198
- ✓ I-5 NB Off Ramp / SR-198
- ✓ I-5 SB Off Ramp / SR-198
- ✓ I-5 NB Off Ramp / Jayne Avenue (Trip Trace Only)
- ✓ SR-33 / Jayne Avenue (Trip Trace Only)
- ✓ SR-33 / Juniper Ridge Boulevard (Trip Trace Only)
- ✓ SR-33 / 5th Street (Trip Trace Only)
- ✓ SR-33 / 3rd Street (Trip Trace Only)

Roadway Segments

- ✓ SR-198 between the I-5 NB and SB off ramps

2.3 Modified Existing Scenario 1

A Modified Existing Scenario 1 was evaluated to assess existing conditions without trips generated by the Granite Construction facility. The travel surveys described above were used to identify Project trips and to develop Scenario 1 volumes. Scenario 1 AM and PM peak hour traffic volumes are shown in Figures 2-10 and 2-11 and daily volumes are shown in Figure 2-12.

2.4 Level of Service

2.4.1 *Intersection Capacity Analysis*

All intersection LOS analyses were estimated using Synchro 9 Software. Various roadway geometrics, traffic volumes, and properties (peak hour factors, storage pocket length, etc) were input into the Synchro 9 Software program in order to accurately determine the travel delay and LOS for each Study scenario. The intersection LOS and delays reported represent the 2010 HCM outputs.

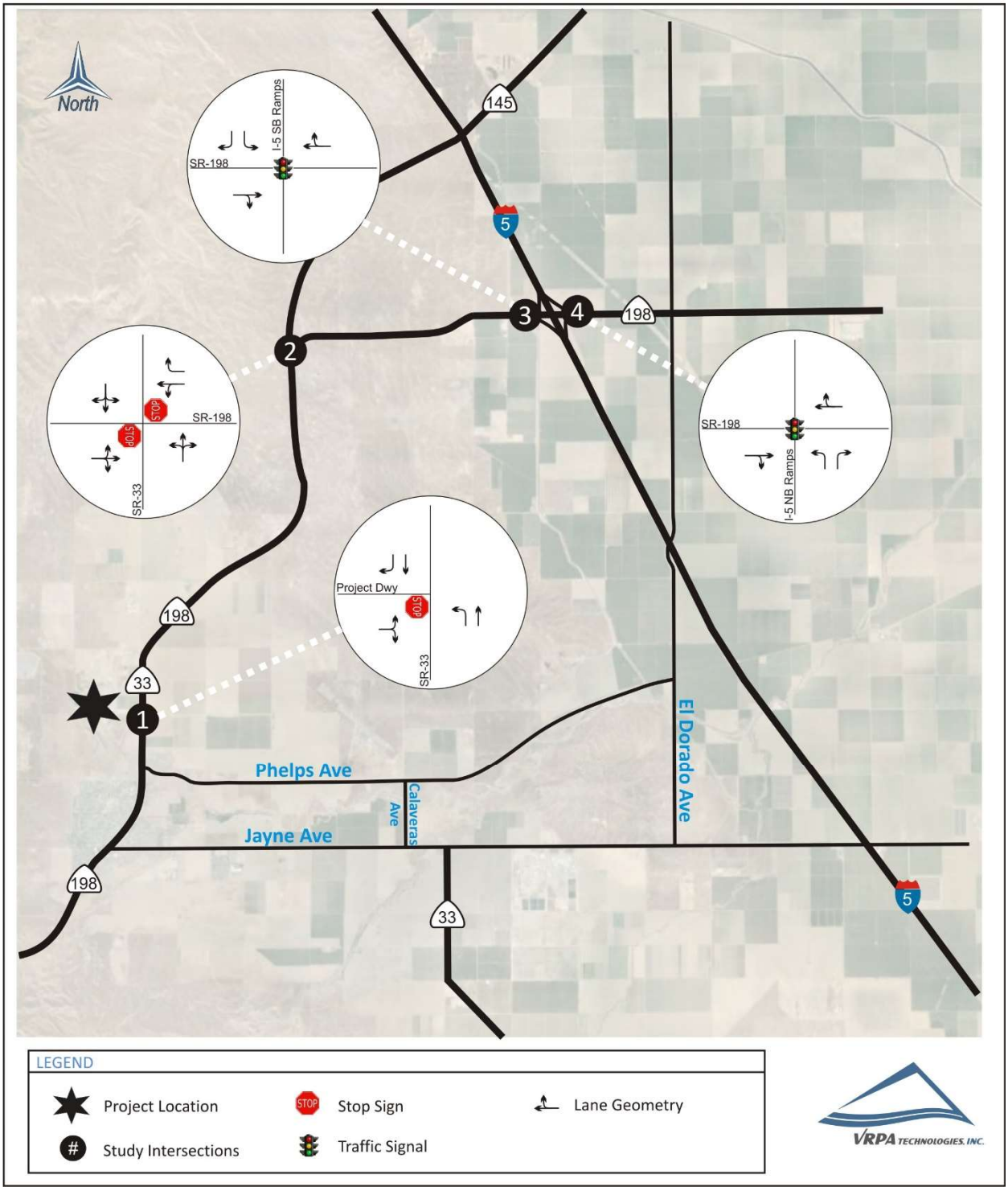
Results of the analysis show that study intersections are operating at or below the minimum level of service. Table 2-1 shows the intersection LOS for Existing conditions and the Modified Existing Scenario 1. Synchro Worksheets are provided in the appendices.

2.4.2 *Roadway Segment Capacity Analysis*

Results of the segment analysis along the existing street and highway system are reflected in Table 2-2. The performance criteria used for evaluating volumes and capacities on the road and highway system for this study were estimated using the Modified Arterial Level of Service Tables included in Table 1-4. Results of the analysis show that the study roadway segment is currently operating at acceptable levels of service.

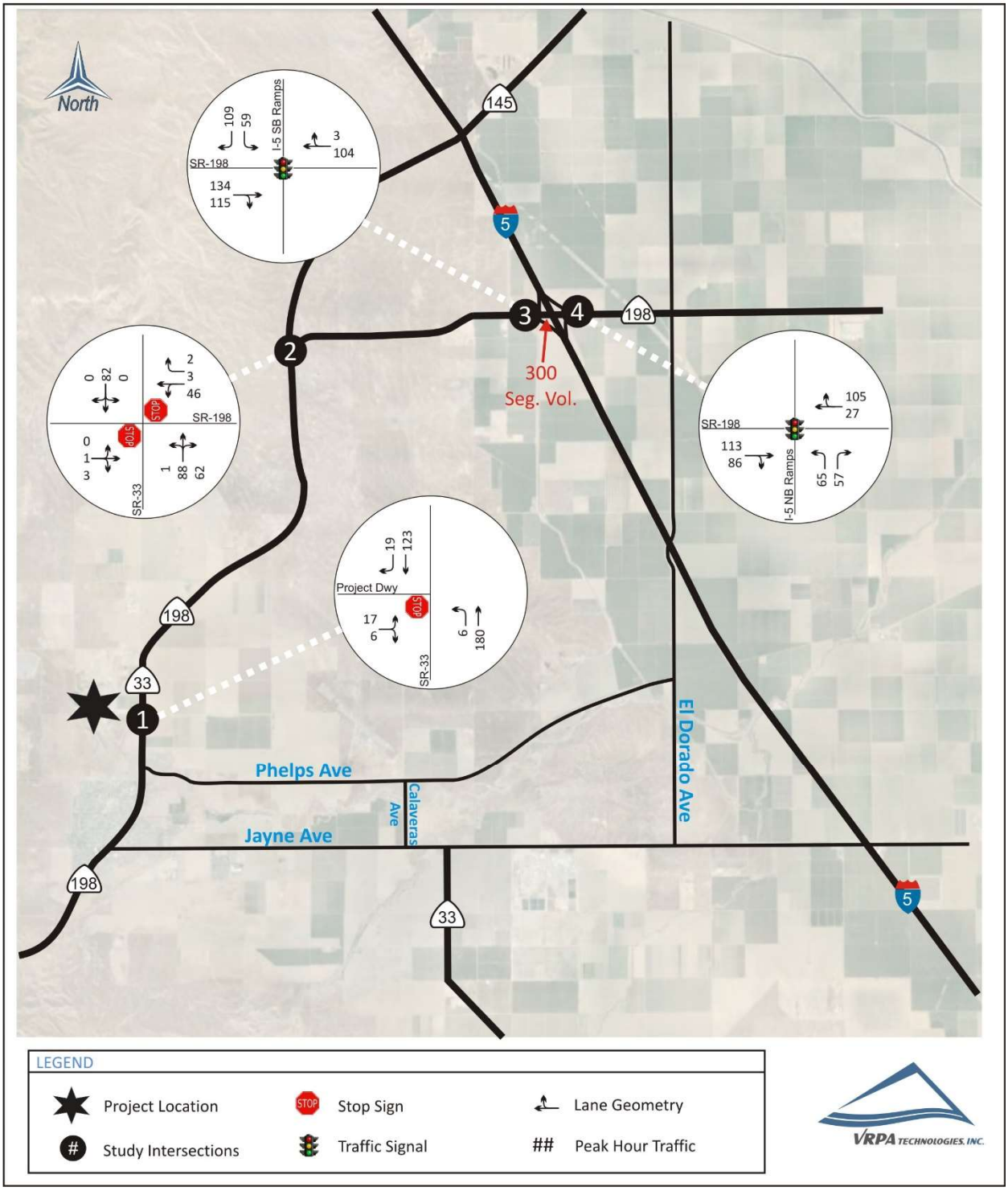
Granite Construction Company Coalinga Mine Expansion
Existing Lane Geometry

Figure 2-1



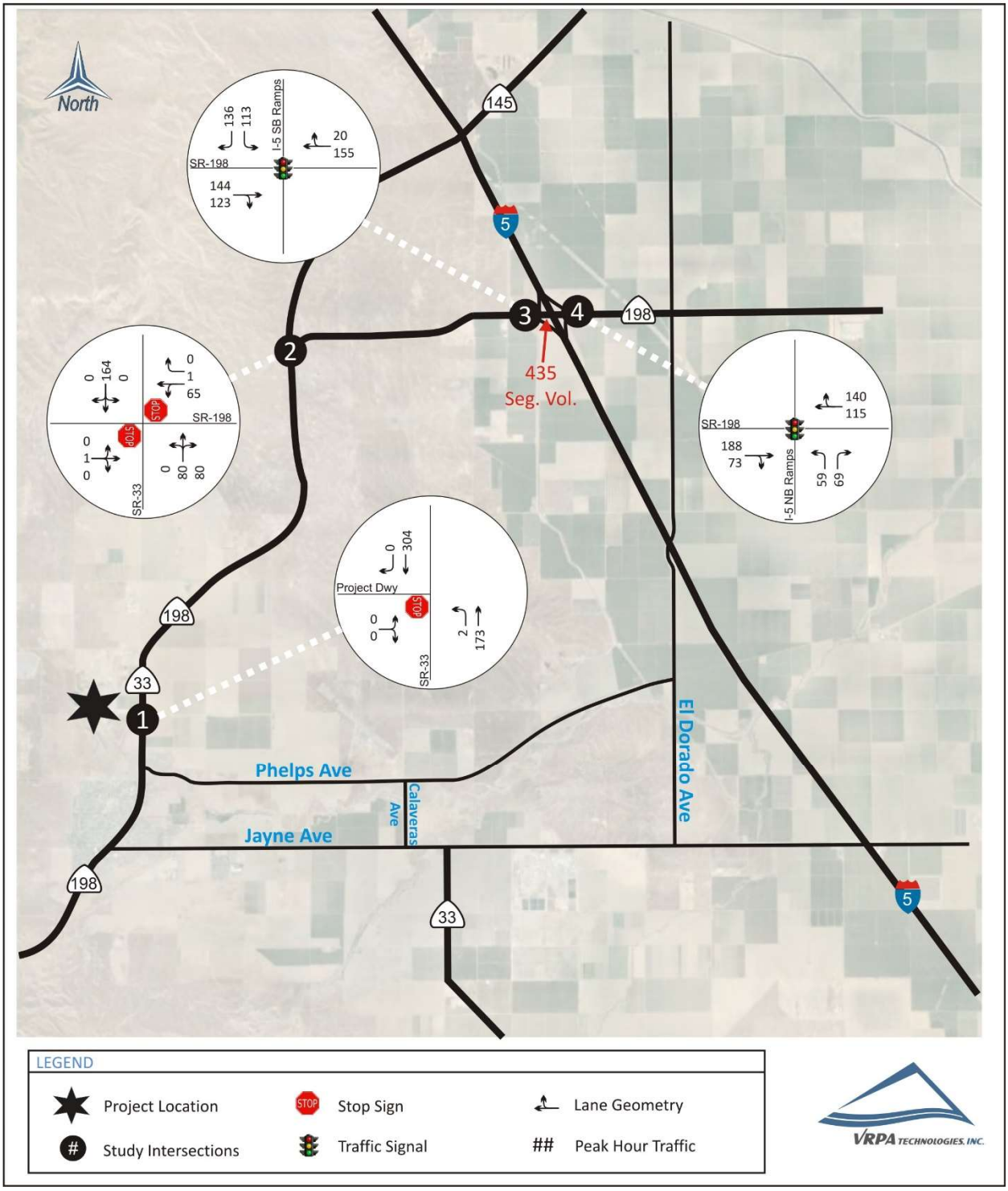
Granite Construction Company Coalinga Mine Expansion
Existing AM Peak Hour Traffic

Figure 2-2



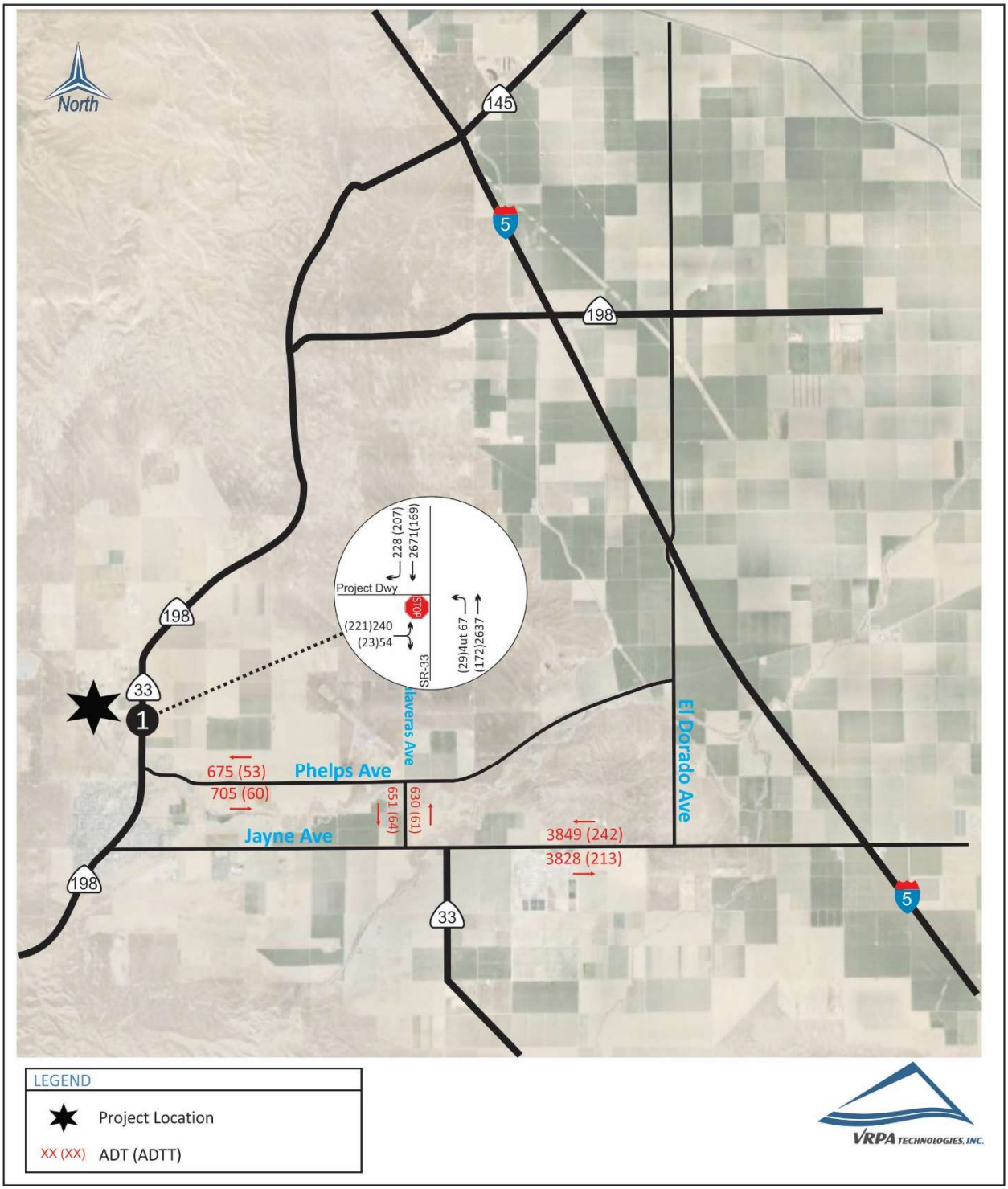
Granite Construction Company Coalinga Mine Expansion
Existing PM Peak Hour Traffic

Figure 2-3



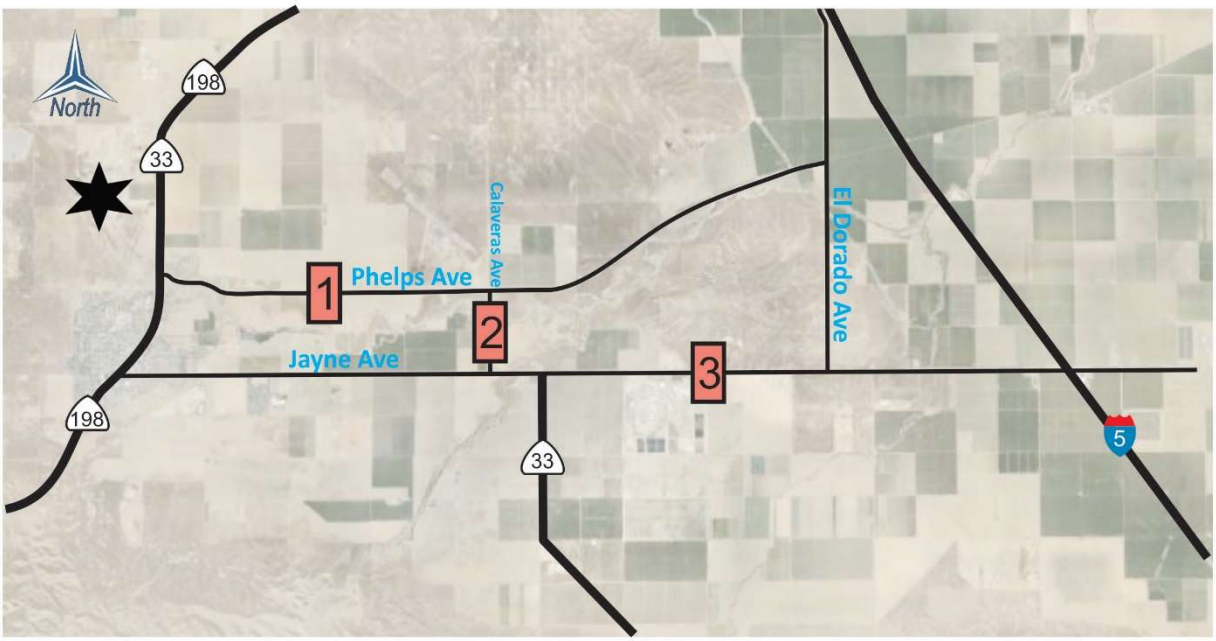
Granite Construction Company Coalinga Mine Expansion
Daily Segment Volumes

Figure 2-4



Granite Construction Company Coalinga Mine Expansion
Types of Trucks Observed in 24-Hour Counts

Figure 2-5



1

Eastbound

Sand/Gravel - 18
Agricultural - 6
Commercial - 2
Tanker - 8
Bus - 8
Other* - 18

Westbound

Sand/Gravel - 14
Agricultural - 10
Commercial - 3
Tanker - 8
Bus - 7
Other* - 11

2

Northbound

Sand/Gravel - 18
Agricultural - 13
Commercial - 2
Tanker - 14
Bus - 0
Other* - 14

Southbound

Sand/Gravel - 14
Agricultural - 15
Commercial - 3
Tanker - 12
Bus - 1
Other* - 19

3

Eastbound

Sand/Gravel - 16
Agricultural - 55
Commercial - 53
Tanker - 17
Bus - 18
Other* - 54

Westbound

Sand/Gravel - 22
Agricultural - 74
Commercial - 56
Tanker - 25
Bus - 18
Other* - 47

* Consists of Utility Trucks, Big-Rigs with large flat-bed, Delivery Trucks, Big-Rigs without trailer, and Garbage Trucks

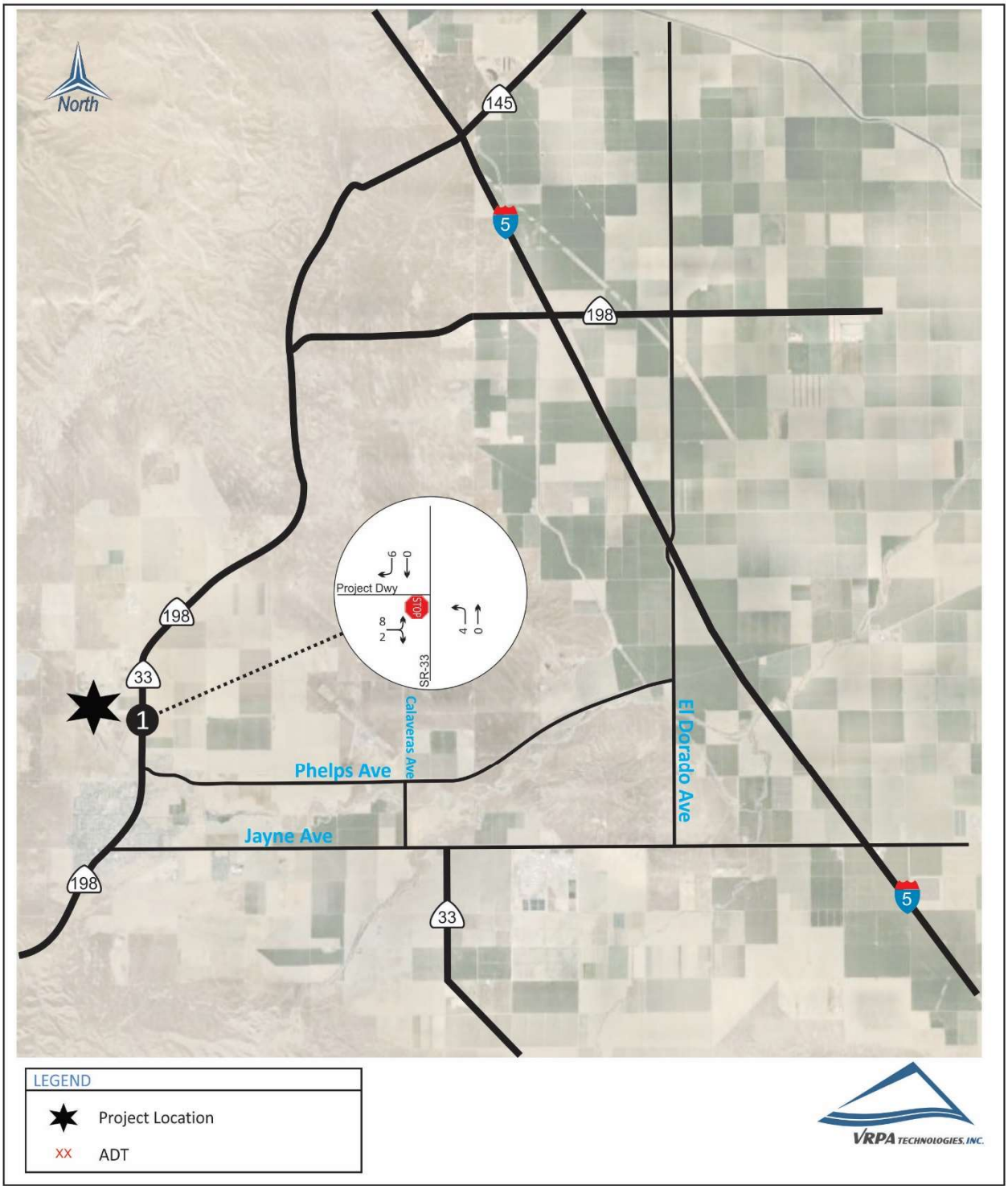
LEGEND

★ Project Location

VRPA TECHNOLOGIES, INC.

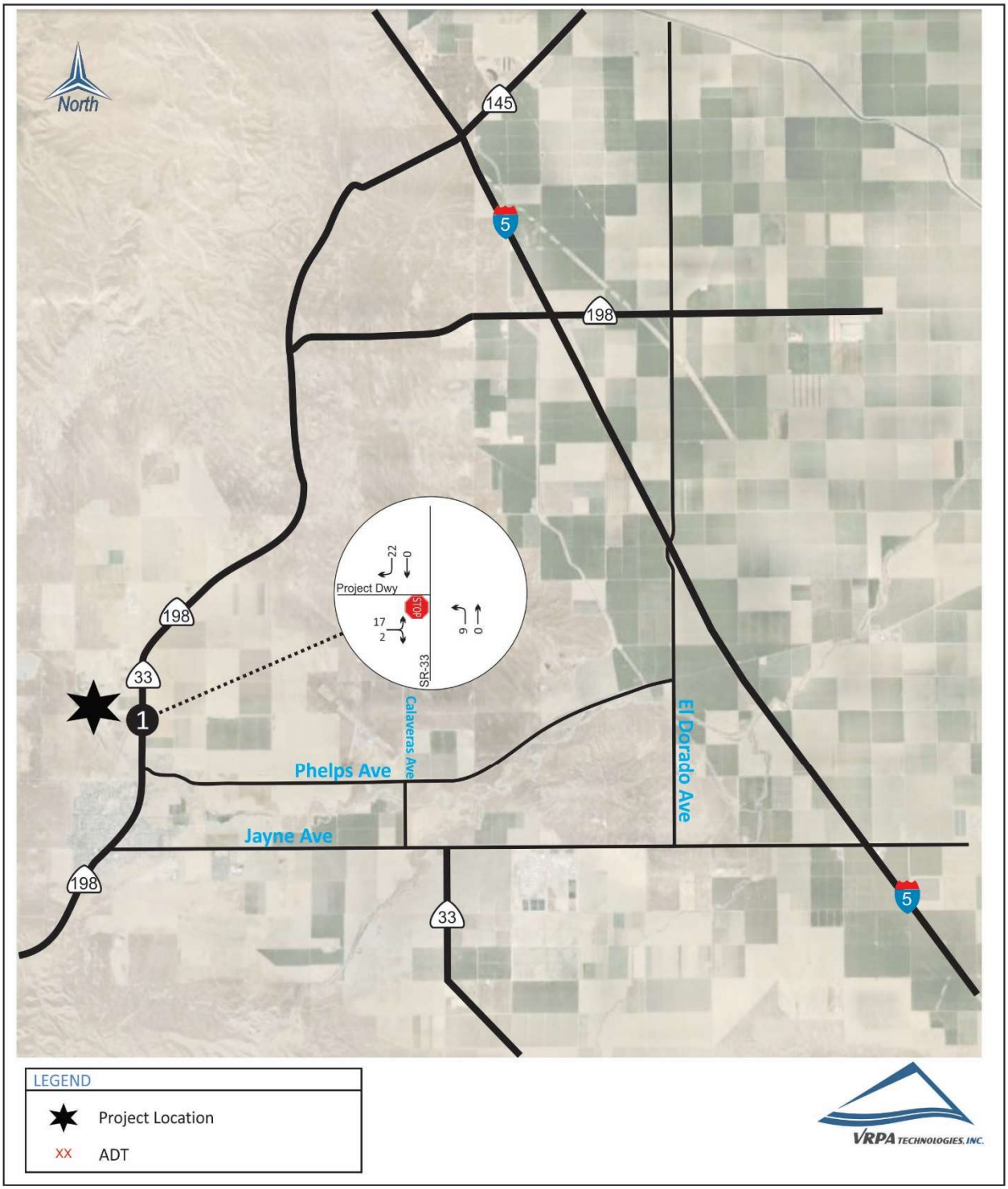
Granite Construction Company Coalinga Mine Expansion
Granite Construction Company 2-Axle Truck Volumes

Figure 2-6



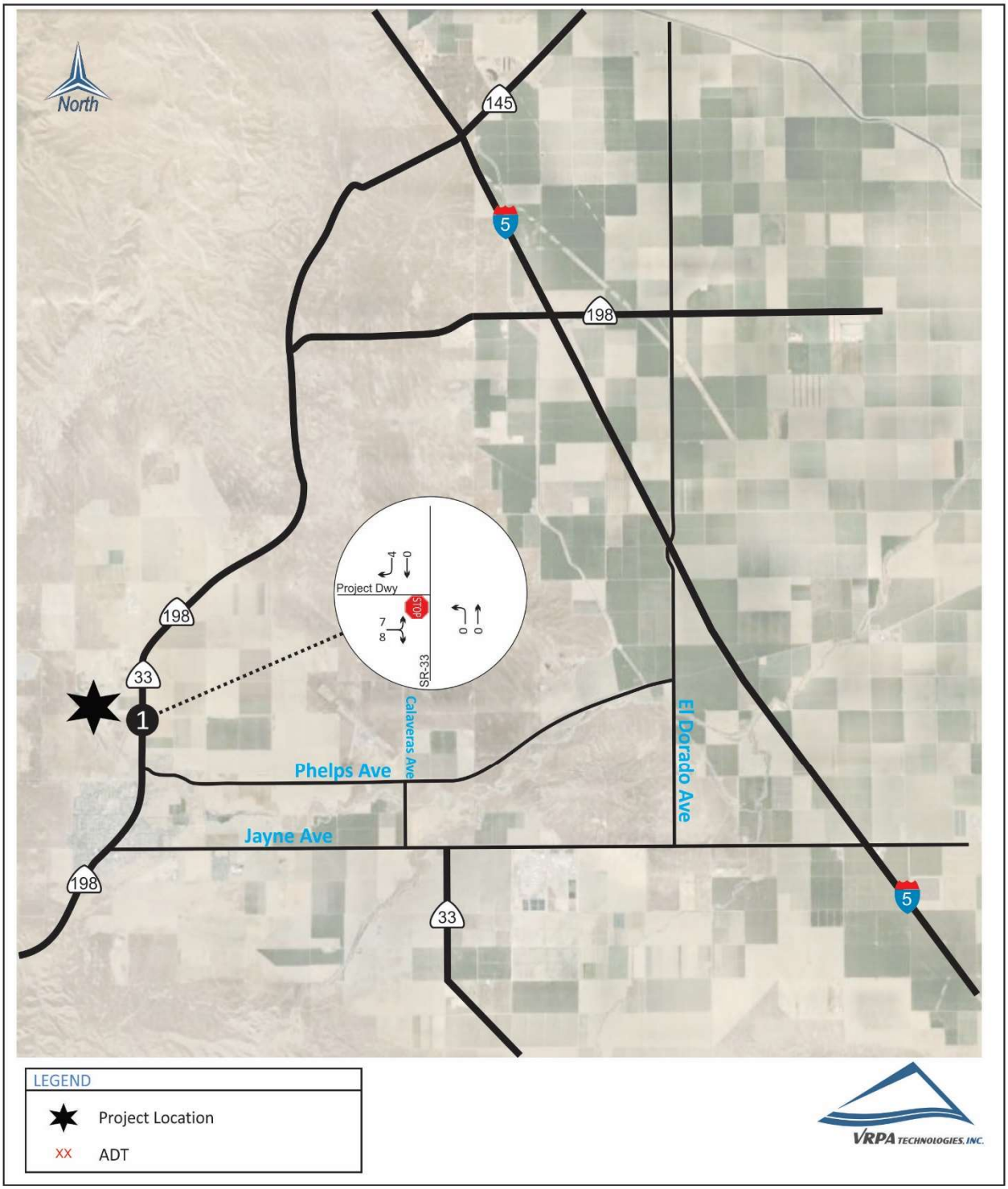
Granite Construction Company Coalinga Mine Expansion
Granite Construction Company 3-Axle Truck Volumes

Figure 2-7



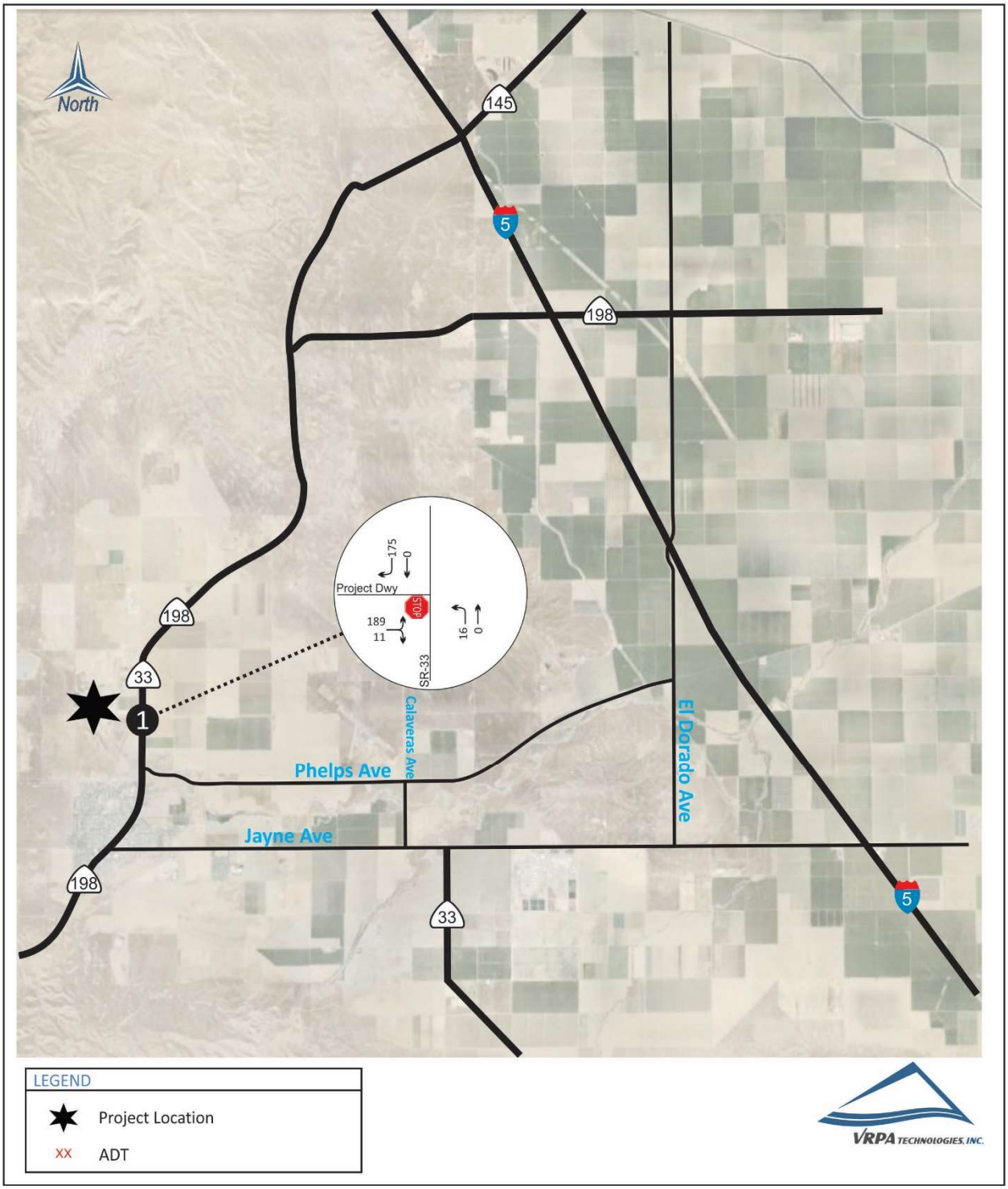
Granite Construction Company Coalinga Mine Expansion
Granite Construction Company 4-Axle Truck Volumes

Figure 2-8



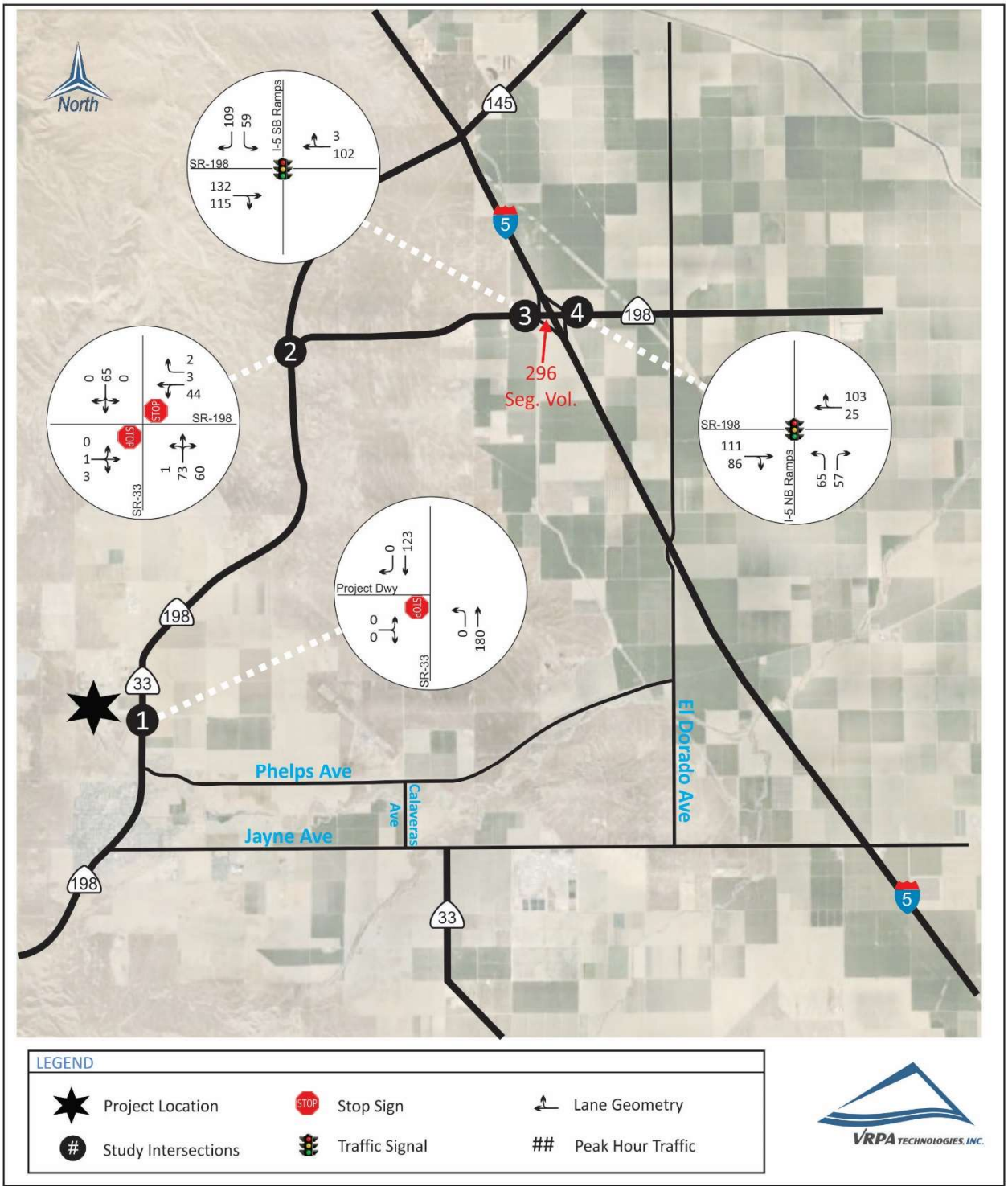
Granite Construction Company Coalinga Mine Expansion
Granite Construction Company 5-Axle or greater Truck Volumes

Figure 2-9



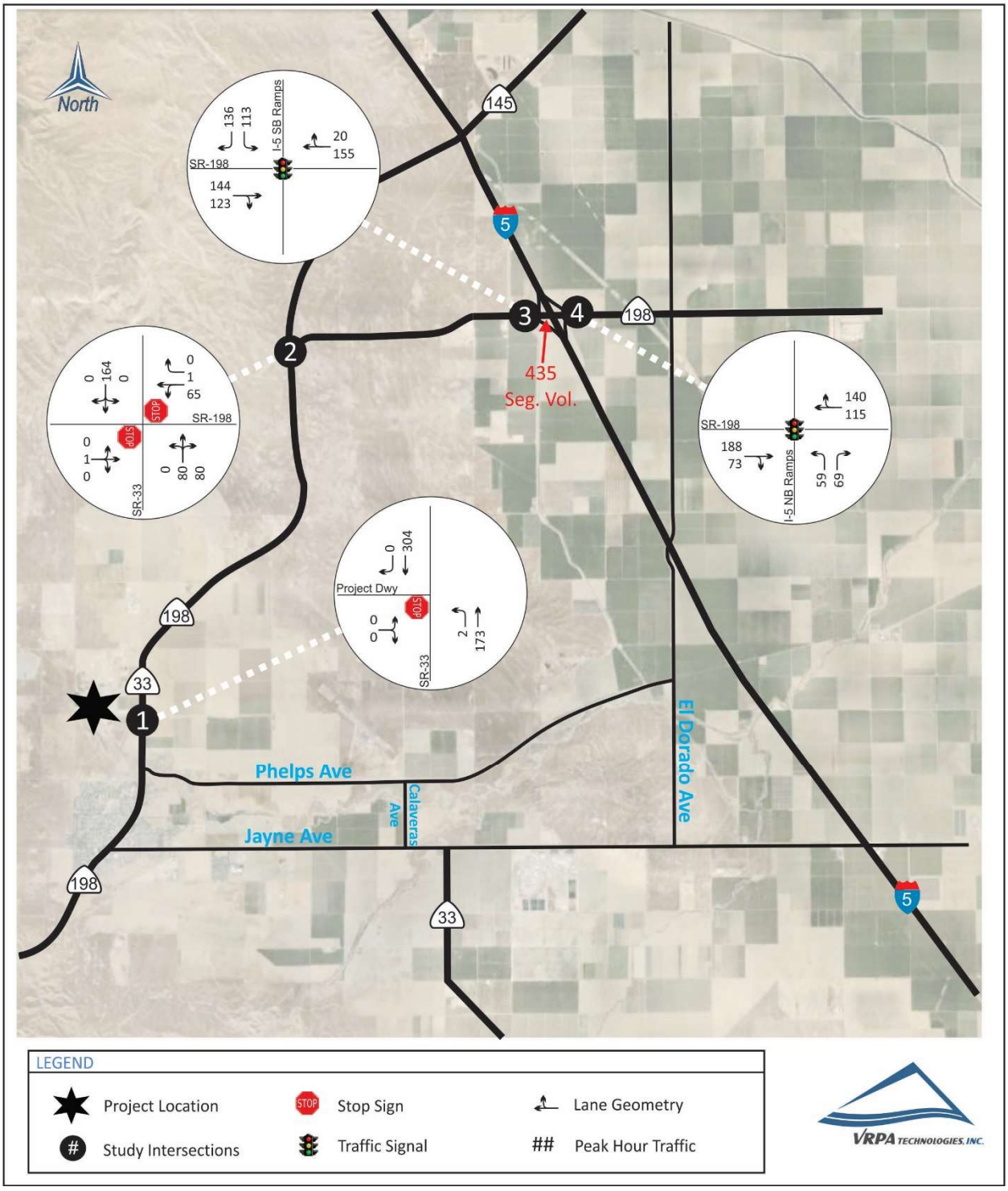
Granite Construction Company Coalinga Mine Expansion
Existing AM Peak Hour Traffic - Scenario 1

Figure 2-10



Granite Construction Company Coalinga Mine Expansion
Existing PM Peak Hour Traffic - Scenario 1

Figure 2-11



Granite Construction Company Coalinga Mine Expansion
Daily Segment Volumes - Scenario 1

Figure 2-12

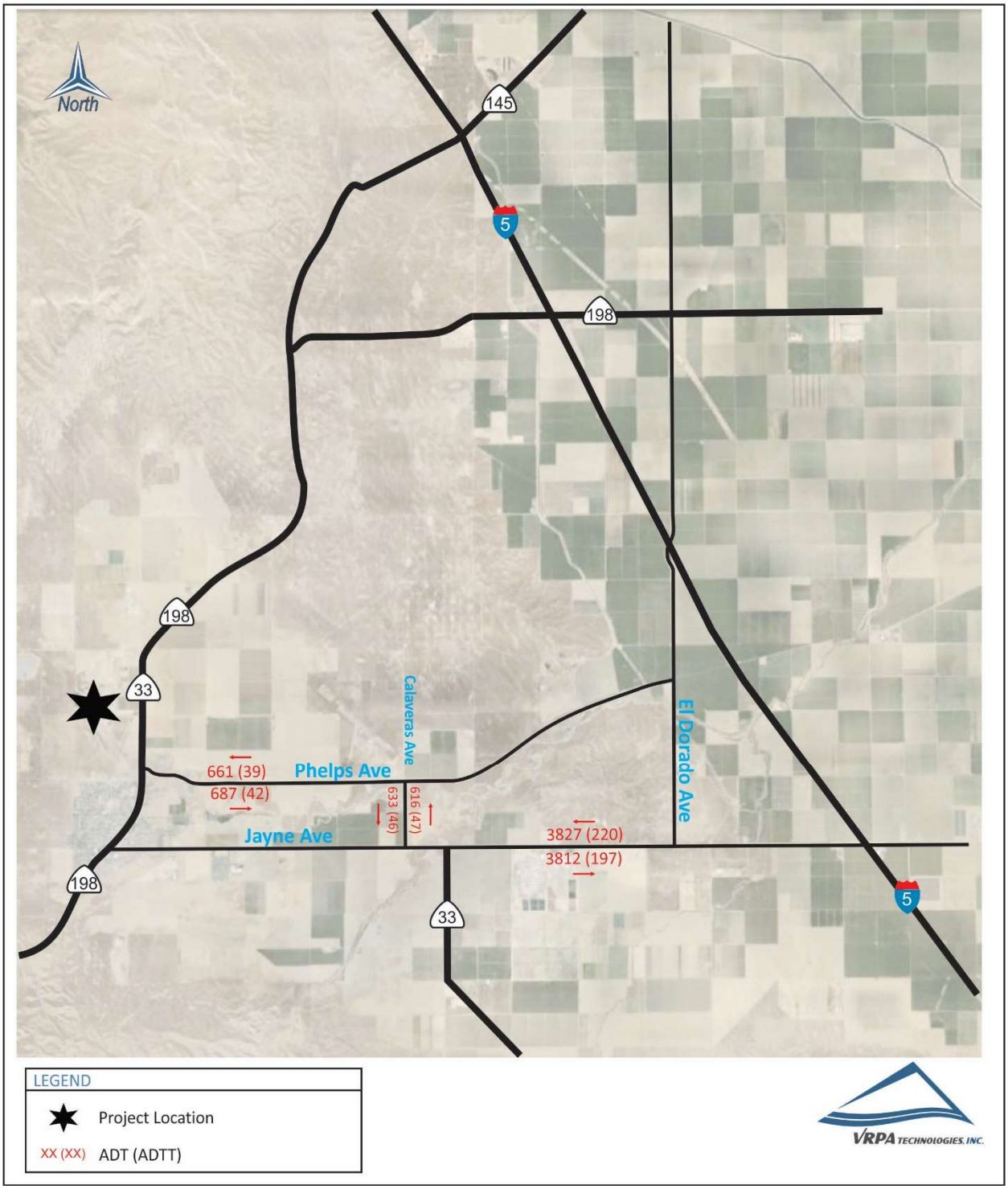


Table 2-1
Existing Intersection Operations

INTERSECTION	CONTROL	TARGET LOS	PEAK HOUR	EXISTING		MODIFIED EXISTING SCENARIO 1	
				DELAY	LOS	DELAY	LOS
1. SR 33 / Project Driveway	One-Way Stop	C	AM	10.5	B	0.0	A
			PM	7.9	A	7.9	A
2. SR 33 / SR 198	Two-Way Stop	C	AM	10.9	B	10.5	B
			PM	12.2	B	12.2	B
3. I-5 SB Off Ramp / SR 198	Signalized	C	AM	20.2	C	20.2	C
			PM	19.0	B	19.0	B
4. I-5 NB Off Ramp / SR 198	Signalized	C	AM	6.6	A	6.7	A
			PM	5.6	A	5.6	A

DELAY is measured in seconds
LOS = Level of Service / **BOLD** denotes LOS standard has been exceeded
For signalized and all-way stop controlled intersections, delay results show the average for the entire intersection. For one-way and two-way stop controlled intersections, delay results show the delay for the worst movement.

Table 2-2
Existing Segment Operations

STREET SEGMENT	SEGMENT DESCRIPTION	TARGET LOS	CAPACITY[1]	PEAK HOUR	EXISTING			MODIFIED EXISTING SCENARIO 1		
					VOLUME	V/C[2]	LOS	VOLUME	V/C[2]	LOS
SR 198										
I-5 SB Off Ramp to I-5 NB Off Ramp	2 Lanes Undivided	C	1,350	AM	300	0.22	C	296	0.22	C
				PM	435	0.32	C	435	0.32	C

LOS = Level of Service / **BOLD** denotes LOS standard has been exceeded
1: Modified HCM-Based LOS Tables (Florida Tables)
2: Volume to Capacity Ratio

3.0 Traffic Impacts

This chapter provides an assessment of the traffic the Project is expected to generate and the impact of that traffic on the surrounding street system.

3.1 Trip Generation

Based upon the Project's annual Surface Mining and Reclamation Act (SMARA) reports for the past 12 years, the annual average production at the existing site is 1.5 million tons. The Project's trip generation was estimated using sales data provided by Project representatives. Typically, trip generation is based on trip generation rates per the Institute of Transportation Engineer's (ITE) Trip General Manual. However, the ITE Trip Generation Manual does not provide trip rates for Sand and Gravel facilities. As a result, use of average sales production levels from the Project site is appropriate for determining the Project's trip generation. The Project's estimated daily, AM peak hour, and PM peak hour trips are provided in Table 3-1. The daily trip estimates presented in Table 3-1 are based on sales at an annual production rate of 1.5 million tons per year averaged over 250 working days in a year and assume each haul truck carries 25 tons of material. A passenger car equivalent (PCE) of 2.5 for all Project truck trips entering and exiting the facility is also provided in Table 3-1, which is consistent with County/Caltrans staff recommendations.

The estimated trips reflected in Table 3-1 are 'existing' trips from the Project's current operation. The Project (expansion) will not modify the current production levels, hours of operation, materials to be mined, equipment types, or mining methods.

Table 3-1
Granite Construction Company Trip Generation

TOTAL SALES	DAILY TRIP ENDS[1] (ADT)	AM PEAK HOUR				PM PEAK HOUR			
	VOLUME	IN:OUT SPLIT	VOLUME			IN:OUT SPLIT	VOLUME		
			IN	OUT	TOTAL		IN	OUT	TOTAL
1.5 Million Tons/Year Total	480 Truck Trips	50:50	60	60	120	50:50	12	12	24
	20 Employee Trips	85:15	9	1	10	20:80	2	8	10
EXISTING PROJECT SITE TRIPS	**500**		**69**	**61**	**130**		**14**	**20**	**34**
EXISTING PROJECT SITE TRIPS (PCE)	**1,220**		**159**	**151**	**310**		**32**	**38**	**70**
PROJECT SITE TRIPS W/ EXPANSION	**500**		**69**	**61**	**130**		**14**	**20**	**34**
PROJECT SITE TRIPS W/ EXPANSION (PCE)	**1,220**		**159**	**151**	**310**		**32**	**38**	**70**

1 A "trip" is defined as a "one-way" trip

Maximum AM peak hour trips for aggregate are based on the time it takes for a loaded truck to drive onto the scale and is issued a weigh ticket. In the ideal case, this process takes at least 1 minute. Therefore, in 1 hour, 60 loads or 60 truck trips would make it out. It is a conservative assumption that trucks would be coming in at the same rate as the trucks going out for a total of 120 peak hour truck trips. It should also be noted that ratio of AM peak hour trips to Daily trips for the Coalinga Mine site is consistent with trip generation information from several other sand and gravel mining sites in Fresno County.

Total PM peak hour truck trips represent 5% of the Daily truck trips. On a typical day, the demand for aggregate deliveries generally decrease over the course of the day (i.e., greater trips during the AM hours and decreasing into the PM hours) which is consistent with the Project's typical hours of operation and the peak hour trips as shown above. It should be noted that employee trips to the site generally take place outside of the typical 7-9am and 4-6pm peak hours.

3.2 Trip Distribution

Trip Distribution for the 'existing' Project trips, as depicted in Table 3-1, was determined using sales data provided by Project representatives. VRPA performed a detailed review of sales data provided by Granite Construction Company to determine the trip distribution for the Coalinga Mine site with the baseline production level of 1.5 million tons per year. Use of project sales data to develop trip distribution for sand and gravel project's is a typical practice and is a reasonable approach for this Project. Figure 3-1 depicts the estimated Project trip distribution percentages for existing site operations. Using the trip distribution percentages shown in Figure 3-1, Project trips were assigned to the roadway network in the vicinity of the Project site. The distribution of traffic volumes for daily, AM peak hour, and PM peak hour are shown in Figures 3-2 through 3-4. It should be noted that the scope for this TIS included a trip trace to the intersections of I-5 NB Off Ramp and Jayne Avenue, SR-33 and Jayne Avenue, SR-33 and Juniper Ridge Boulevard, SR-33 and 5th Street, and SR-33 and 3rd Street. Project AM and PM peak hour trips to the trip trace only intersections are provided in Figures 3-2 and 3-3.

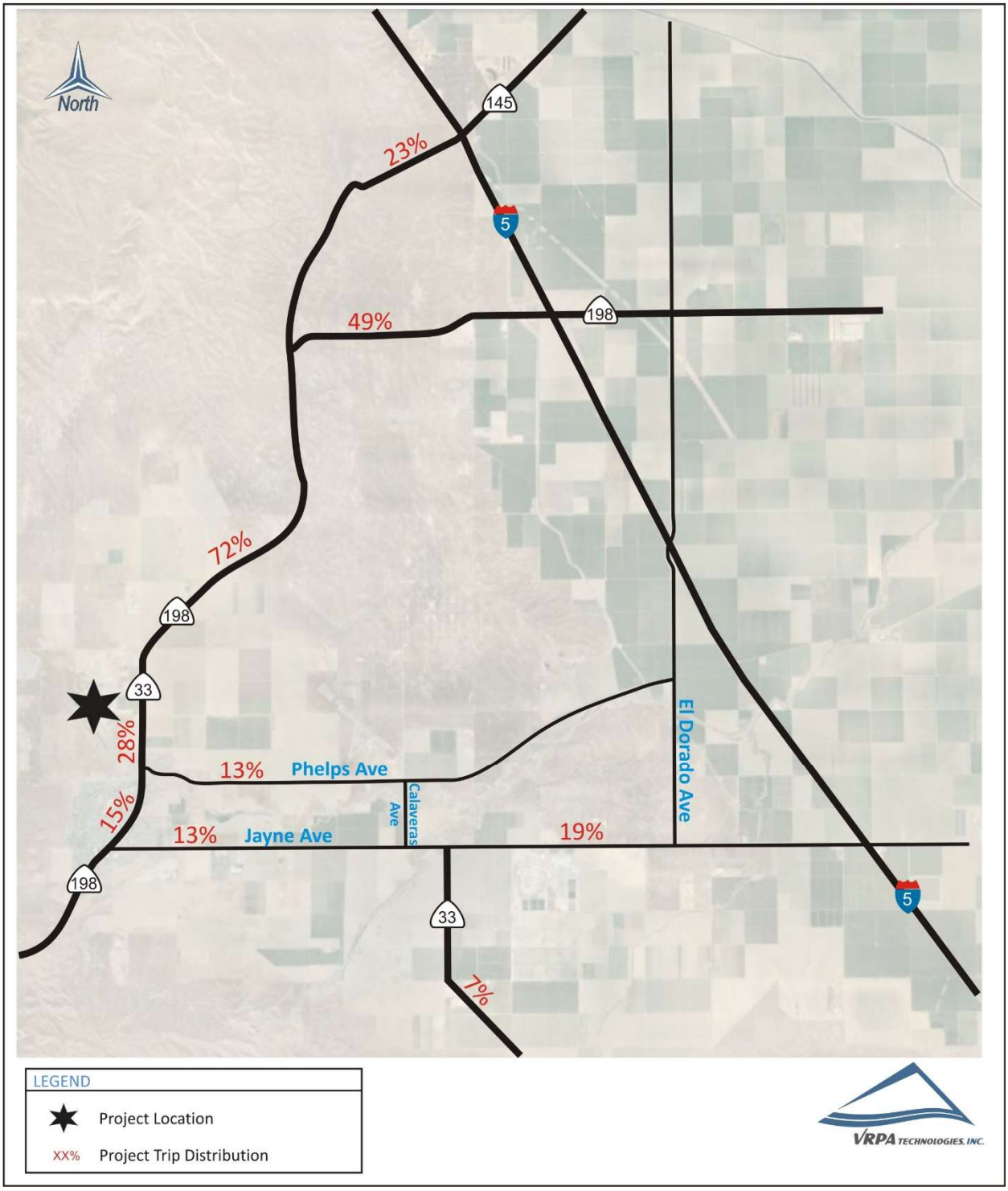
Access to the site is provided along SR-33 via one (1) driveway located approximately ¾ miles north of Phelps Avenue. The lone driveway along SR-33 is a full access driveway with a one-way stop sign for vehicles exiting the site.

3.3 Modified Existing Scenario 2

A Modified Existing Scenario 2 was evaluated to assess existing conditions Plus Granite Construction Trips associated with 1.5 million tons of sales. Project trips provided in Figures 3-2, 3-3, and 3-4 were added to the volumes developed for Modified Existing Scenario 1. The resulting traffic is shown in Figures 3-5, 3-6, and 3-7.

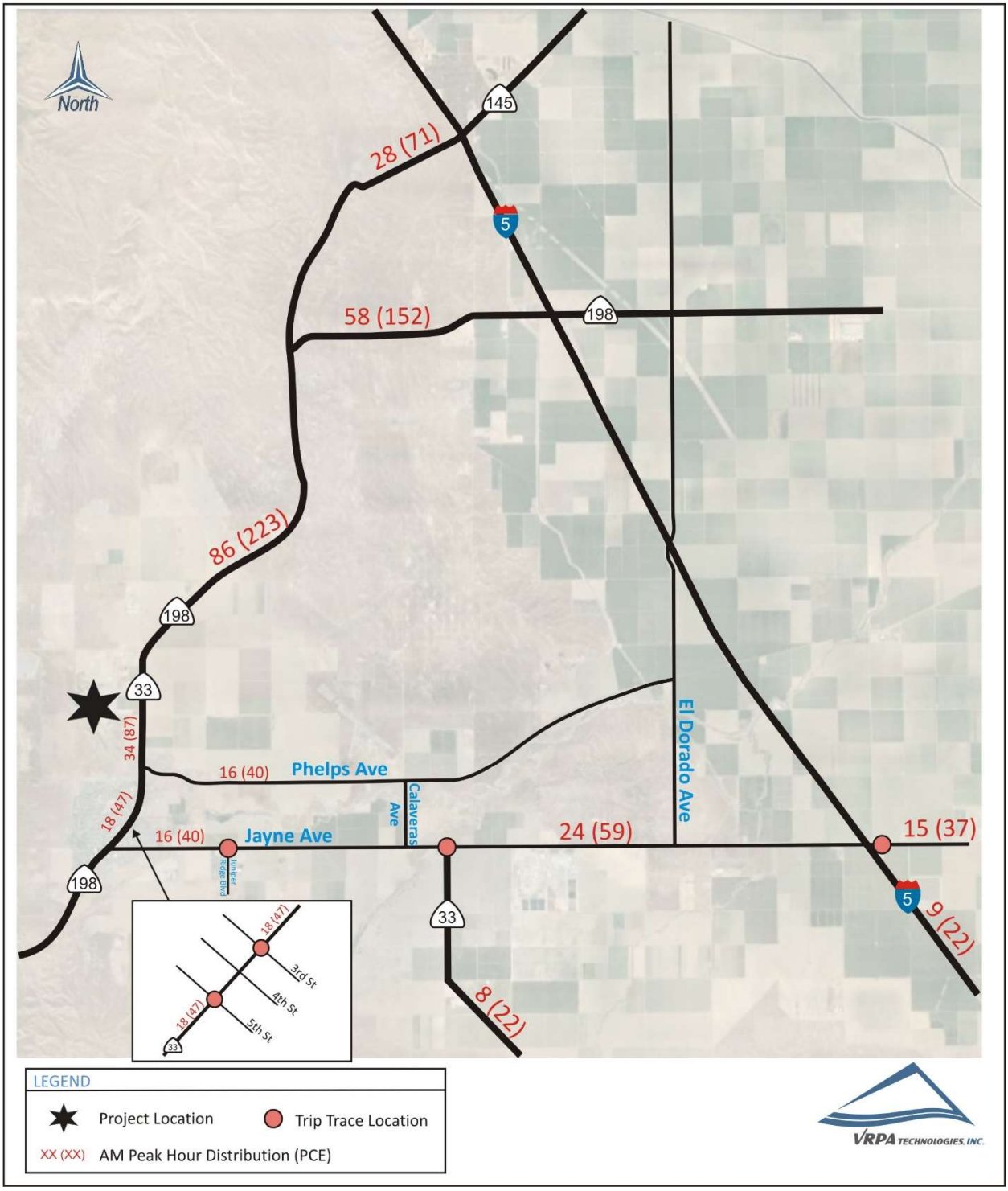
Granite Construction Company Coalinga Mine Expansion
Project Trip Distribution

Figure 3-1



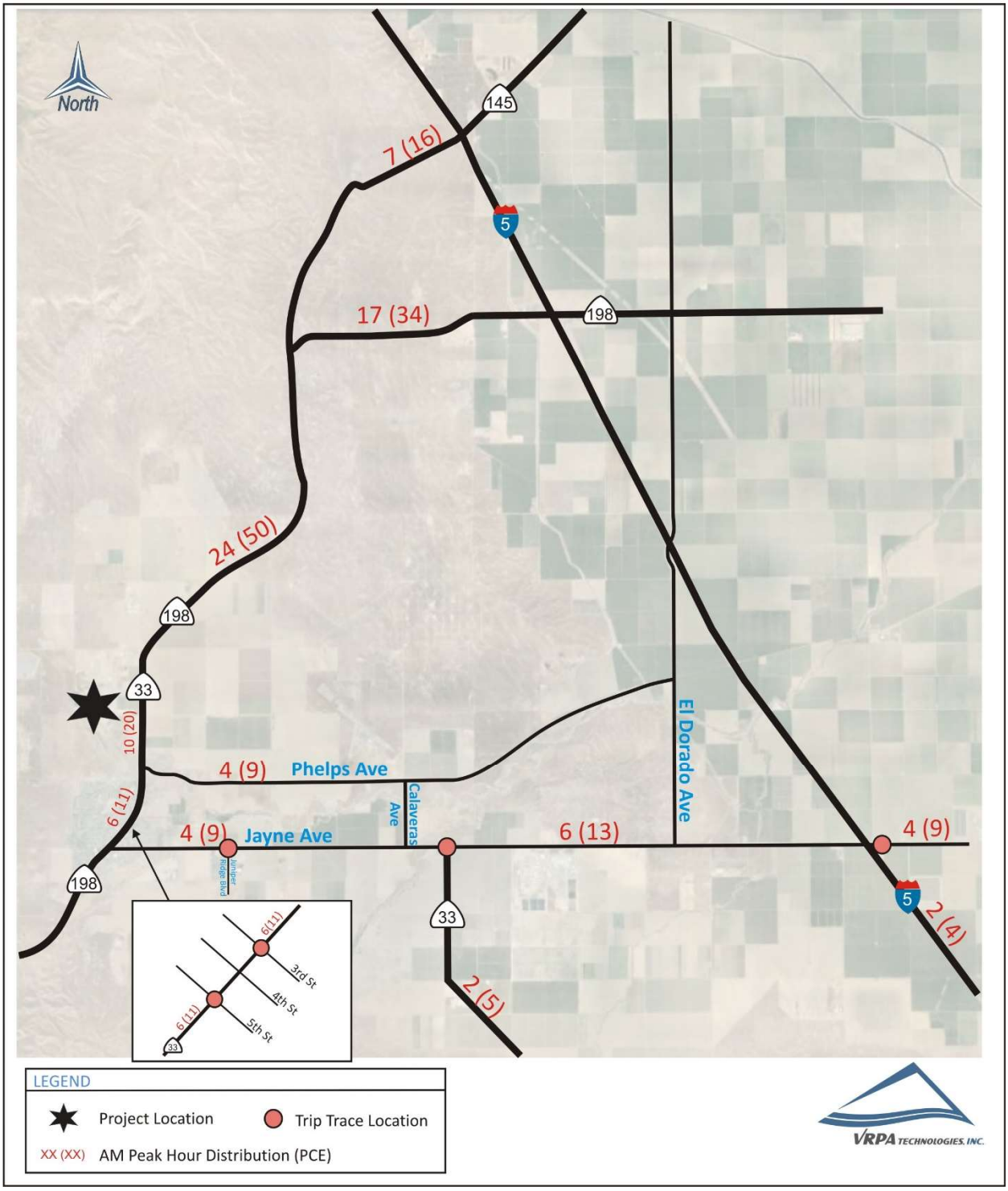
Granite Construction Company Coalinga Mine Expansion
AM Peak Hour Trip Distribution

Figure 3-2



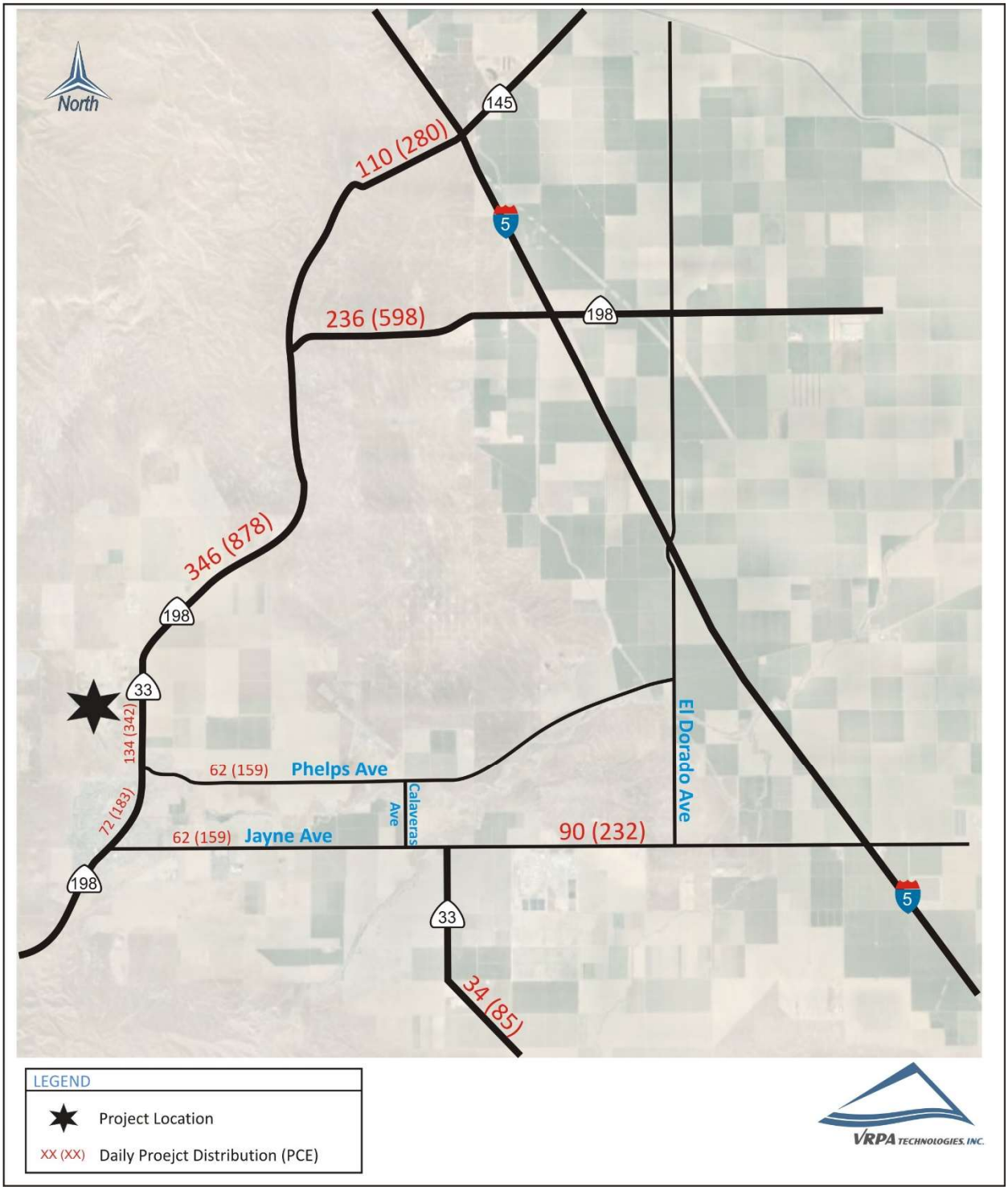
Granite Construction Company Coalinga Mine Expansion
PM Peak Hour Trip Distribution

Figure 3-3



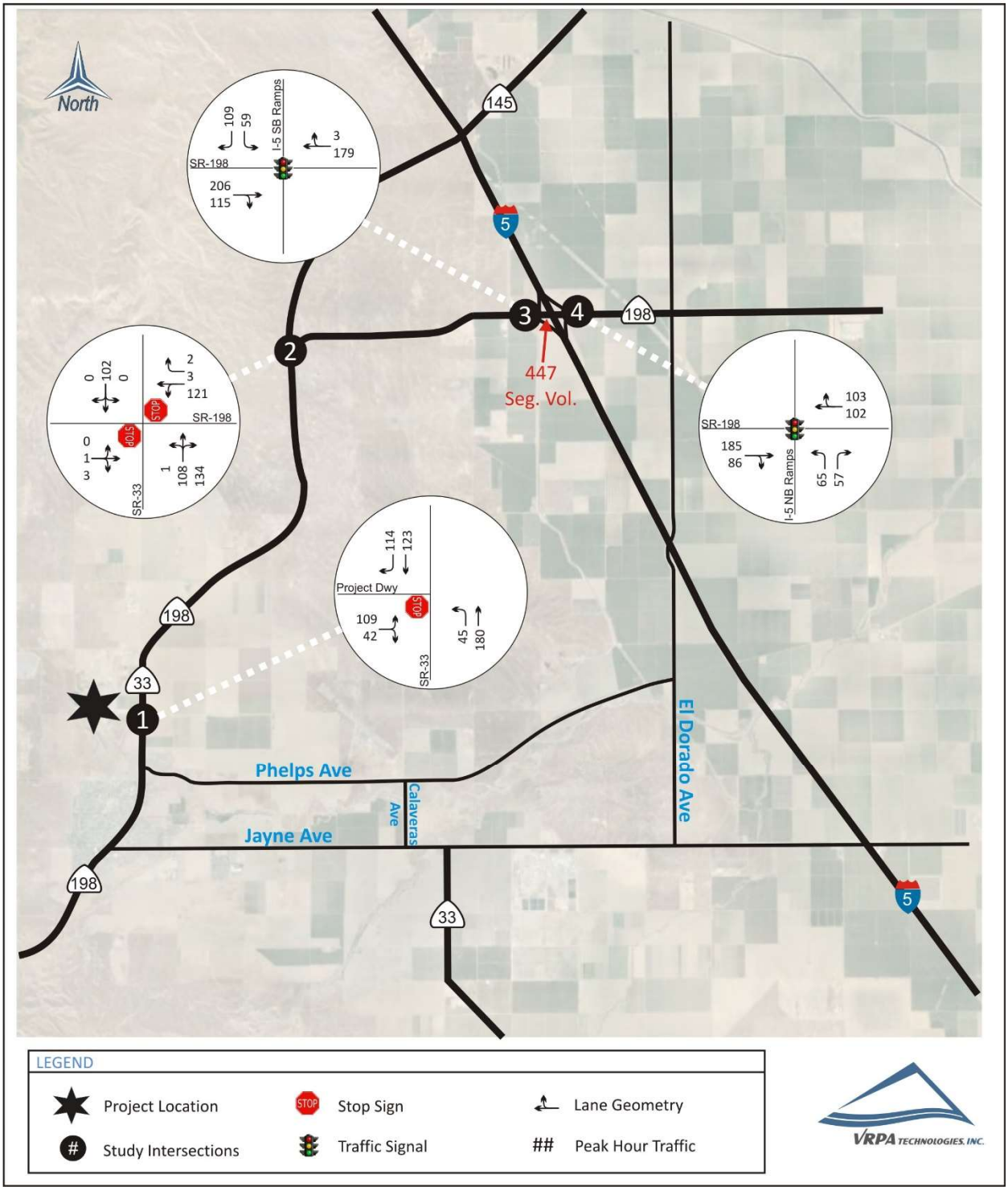
Granite Construction Company Coalinga Mine Expansion
Daily Trip Distribution

Figure 3-4



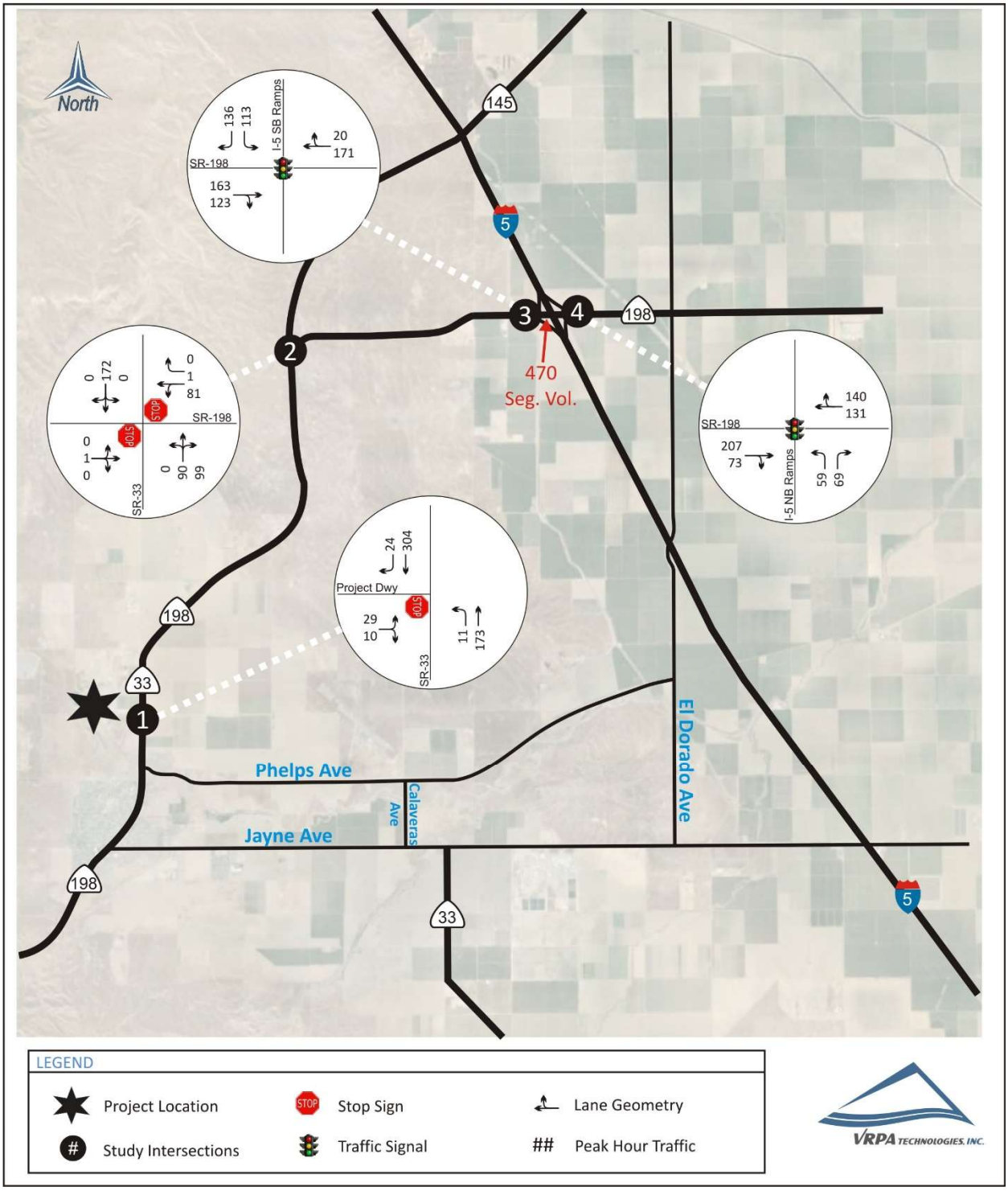
Granite Construction Company Coalinga Mine Expansion
Existing AM Peak Hour Traffic - Scenario 2

Figure 3-5



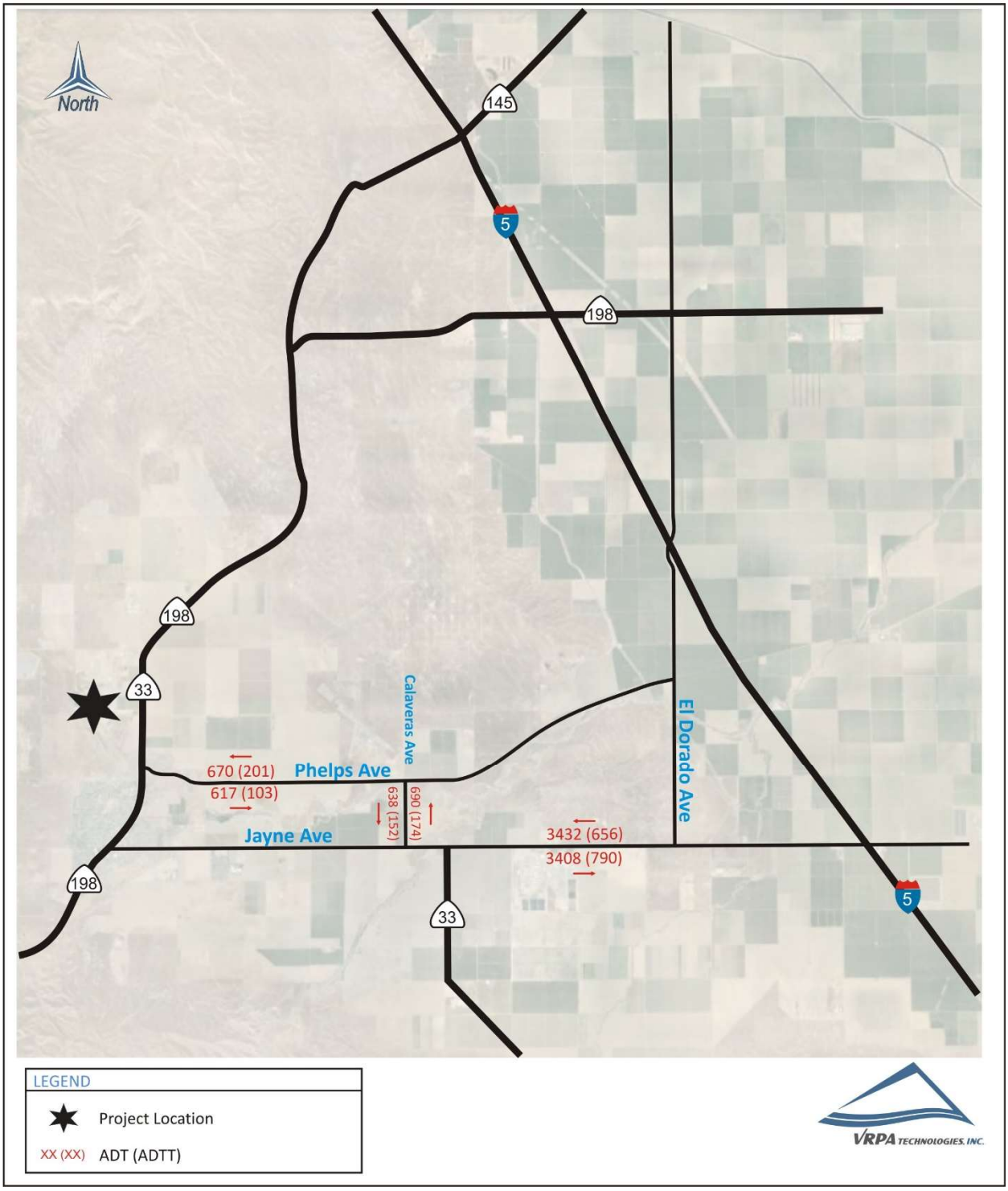
Granite Construction Company Coalinga Mine Expansion
Existing PM Peak Hour Traffic - Scenario 2

Figure 3-6



Granite Construction Company Coalinga Mine Expansion
Daily Segment Volumes - Scenario 2

Figure 3-7



3.4 Cumulative Year 2040 Scenarios

The Cumulative Year 2040 Scenario 1 (omitting actual Granite Construction trips included in existing counts) was determined by applying a 2% per year growth rate (consistent with Fresno COG model projections) to the Modified Existing Scenario 1 volumes as documented in Section 2.0. The resulting traffic is shown in Figures 3-8, 3-9, and 3-10.

Project trips (1.5 million tons of sales) provided in Figures 3-2, 3-3, and 3-4 were added to the volumes shown in Figures 3-8, 3-9, and 3-10 to develop volumes for the Cumulative Year 2040 Scenario 2 (including Granite Construction trips associated with operations of 1.5 million tons of sales). The resulting traffic is shown in Figures 3-11, 3-12, and 3-13.

3.5 Impacts

3.5.1 *Intersection Capacity Analysis*

Table 3-2 shows the results of the intersection analysis for the study intersections include in this TIS. Results of the analysis show that all of the study intersections will operate at acceptable levels of service for the Modified Existing Scenario 2, Cumulative Year 2040 Scenario 1, and Cumulative Year 2040 Scenario 2 conditions. As a result, mitigation measures are not recommended for Project impacts to study intersections.

Caltrans has determined that its facilities at I-5 NB Off Ramp and Jayne Avenue, SR-33 and Jayne Avenue, SR-33 and Juniper Ridge Boulevard, SR-33 and 5th Street, and SR-33 and 3rd Street would require improvements in order to accommodate projected future demand and has required that the Project identify trips to these facilities. Table 3-3 identifies the number of trips generated by the Project that will impact Caltrans' facilities and the corresponding fee that the Project is responsible for.

3.5.2 *Roadway Segment Capacity Analysis*

Table 3-4 shows roadway segment volumes and levels of service pertaining to the Modified Existing Scenario 2, Cumulative Year 2040 Scenario 1, and Cumulative Year 2040 Scenario 2 conditions. Results of the analysis show that the study roadway segment will meet acceptable levels of service for the Modified Existing Scenario 2, Cumulative Year 2040 Scenario 1, and Cumulative Year 2040 Scenario 2 conditions. As a result, mitigation measures are not recommended for Project impacts to the SR 198 roadway segment between the I-5 SB Off Ramp and I-5 NB Off Ramp.

3.5.3 *Traffic Index Analysis*

The traffic impact analysis included an evaluation of the Project's impact to the Traffic Index (TI) along the roadway segments analyzed as part of this TIS, which include Phelps Avenue between

SR-33 and Calaveras Avenue, Calaveras Avenue between Phelps Avenue and SR-33, and Jayne Avenue between SR-33 and I-5. Fresno County has established significance criteria for the purpose of determining if a project has an impact to the traffic index of County facilities. If truck traffic generated by the Project results in the TI increasing by a factor of 0.5, the Project is required to mitigate the roadway structural section to accommodate the increase in truck traffic.

The analysis of the TI was determined by Chapter 610 of Caltrans' Highway Design Manual. TI calculations are based on a 365-day period, whereas the average daily truck trips presented in Table 3-1 are based on 250 operational days per year. Therefore, the Project trips will be converted for use in the calculation of TI's as follows:

(480 average daily truck trips x 250 days)/(365 days) = 329 ADT

This ADT will then be distributed to study area roads based on the projected trip distribution discussed previously. Project impacts to the TI will be calculated based on a 20-Year Design Life considering the TI analysis approach below. As noted previously, the Project will not modify the 'current' production levels, hours of operation, materials to be mined, equipment types, or mining methods. Although the Project will not generate any "new" trips, the expansion of the Project site will allow Granite Construction to continue operations at 1.5 million tons of production.

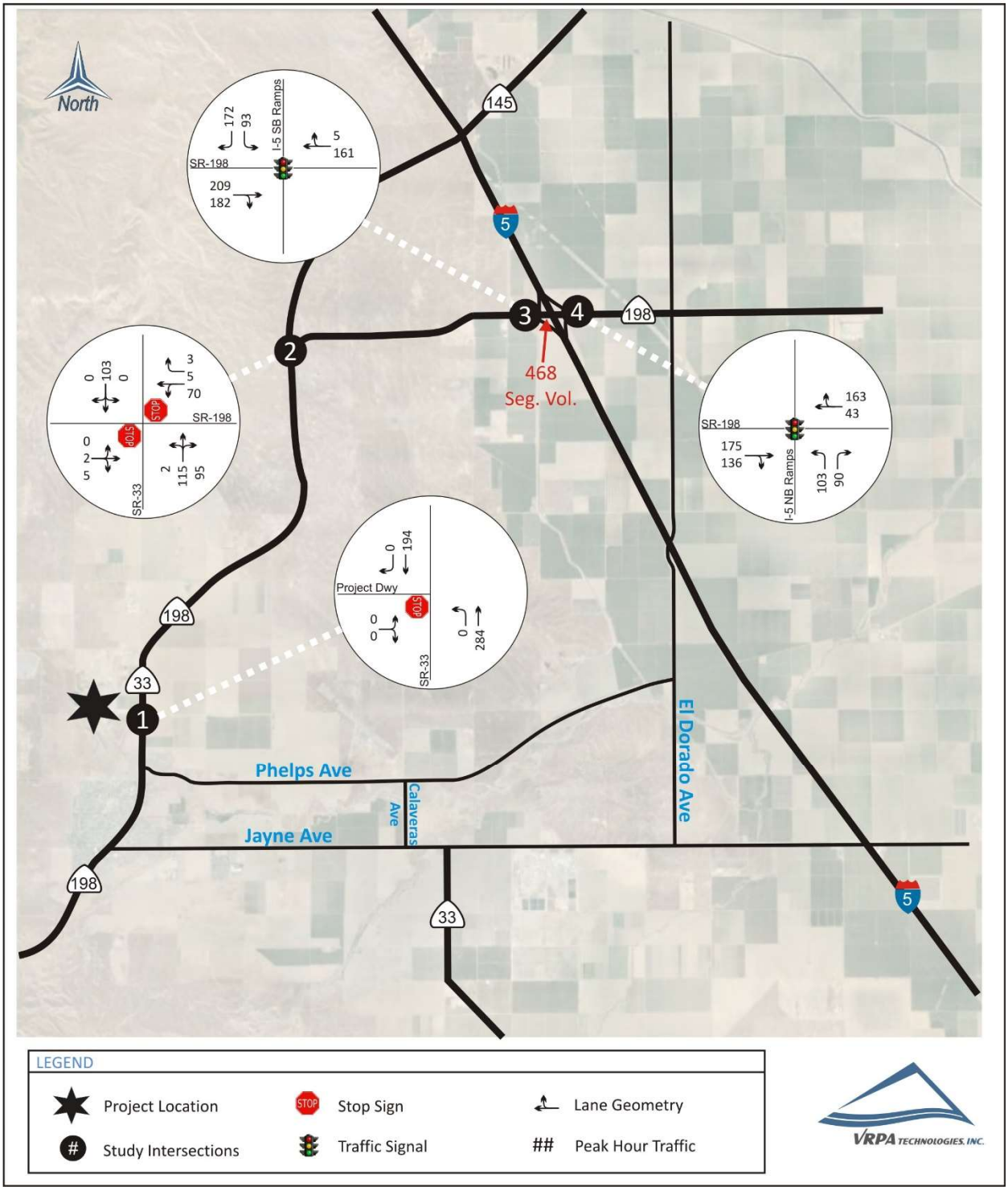
- ✓ Modified Existing Scenario 1 – Determine the TI (20 Year-Design) along the roadways indicated above considering existing traffic counts (omitting actual Granite Construction trips included in existing counts)
- ✓ Modified Existing Scenario 2 – Determine the TI (20 Year-Design) along the roadways indicated above considering existing traffic counts (including current Granite Construction operations of 1.5 million tons of sales)

Results of the analysis are shown in Table 3-5. Results show that the Project will impact all three (3) of the roadways analyzed since the Project's truck traffic results in the TI increasing by a factor of 0.5 or greater. As a result, the Project is responsible for costs associated with the TI increase.

Table 3-6 shows the equitable share responsibility to Fresno County facilities related to pavement structure. The Operational Statement for the proposed Project indicates that the expansion area contains an estimated eighty-two (82) million tons of aggregate reserves, which would allow for greater than fifty (50) years of additional operational life at an average annual production of 1.5 million tons.

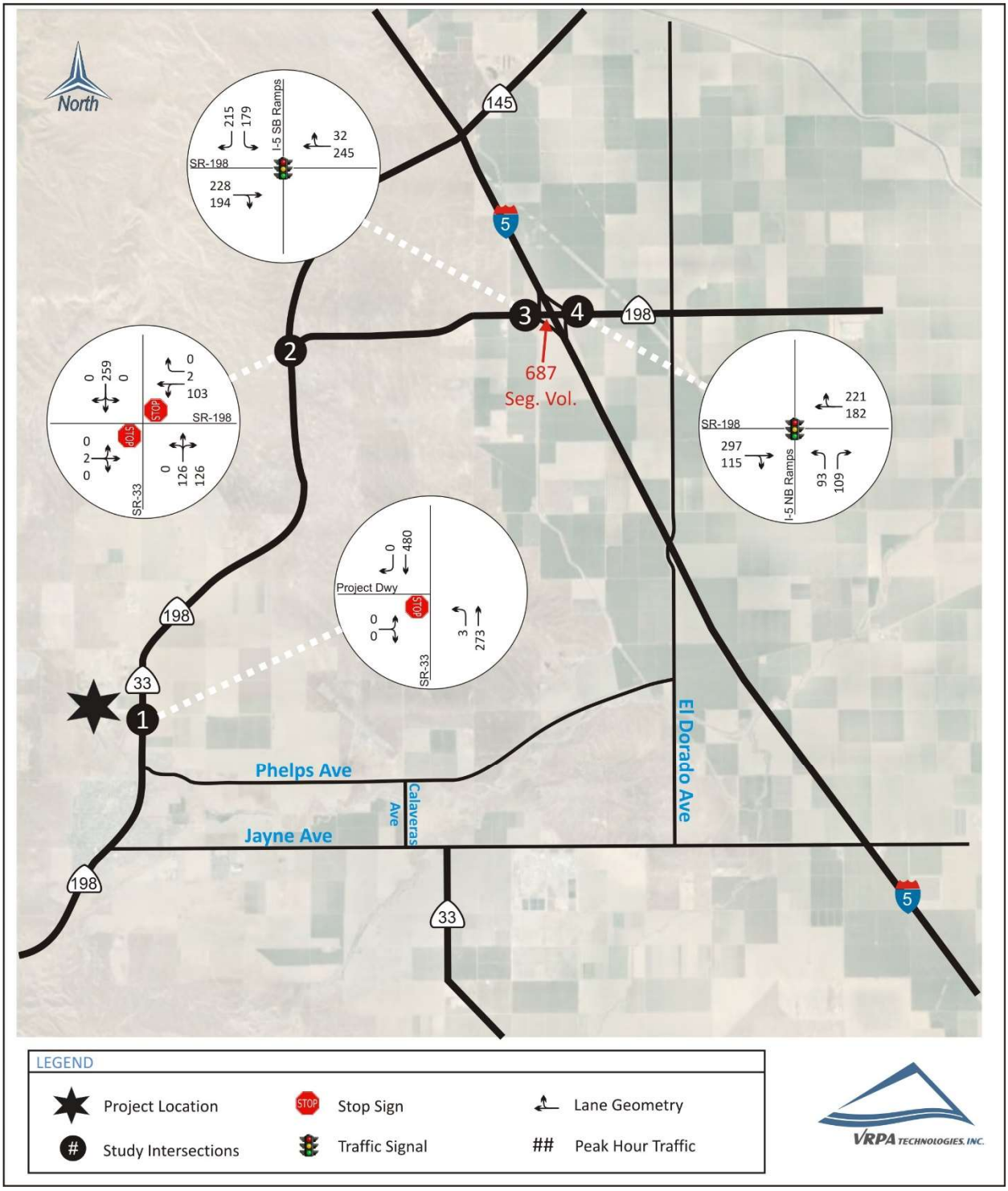
Granite Construction Company Coalinga Mine Expansion
Cumulative Year 2040 AM Peak Hour Traffic - Scenario 1

Figure 3-8



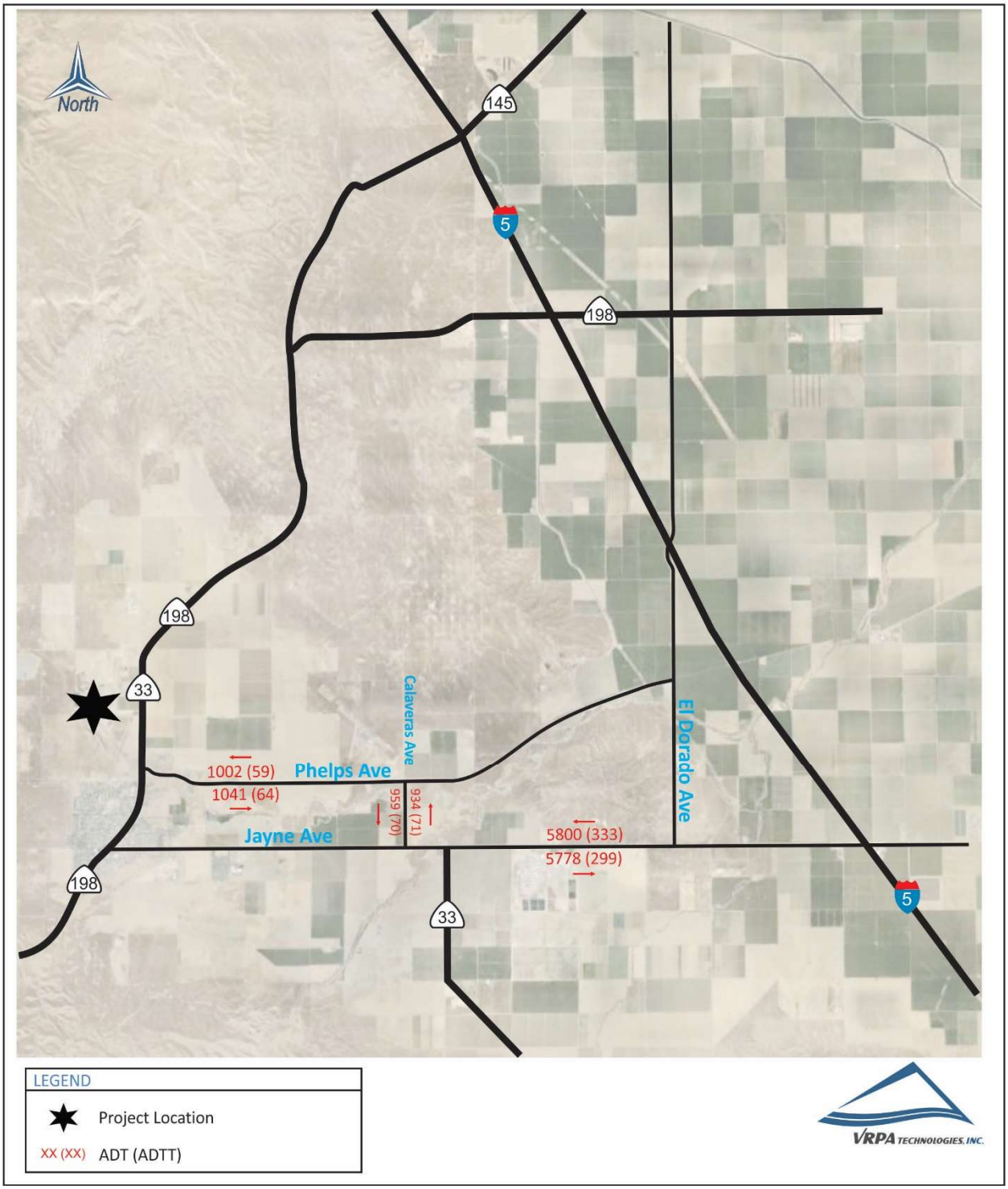
Granite Construction Company Coalinga Mine Expansion
Cumulative Year 2040 PM Peak Hour Traffic - Scenario 1

Figure 3-9



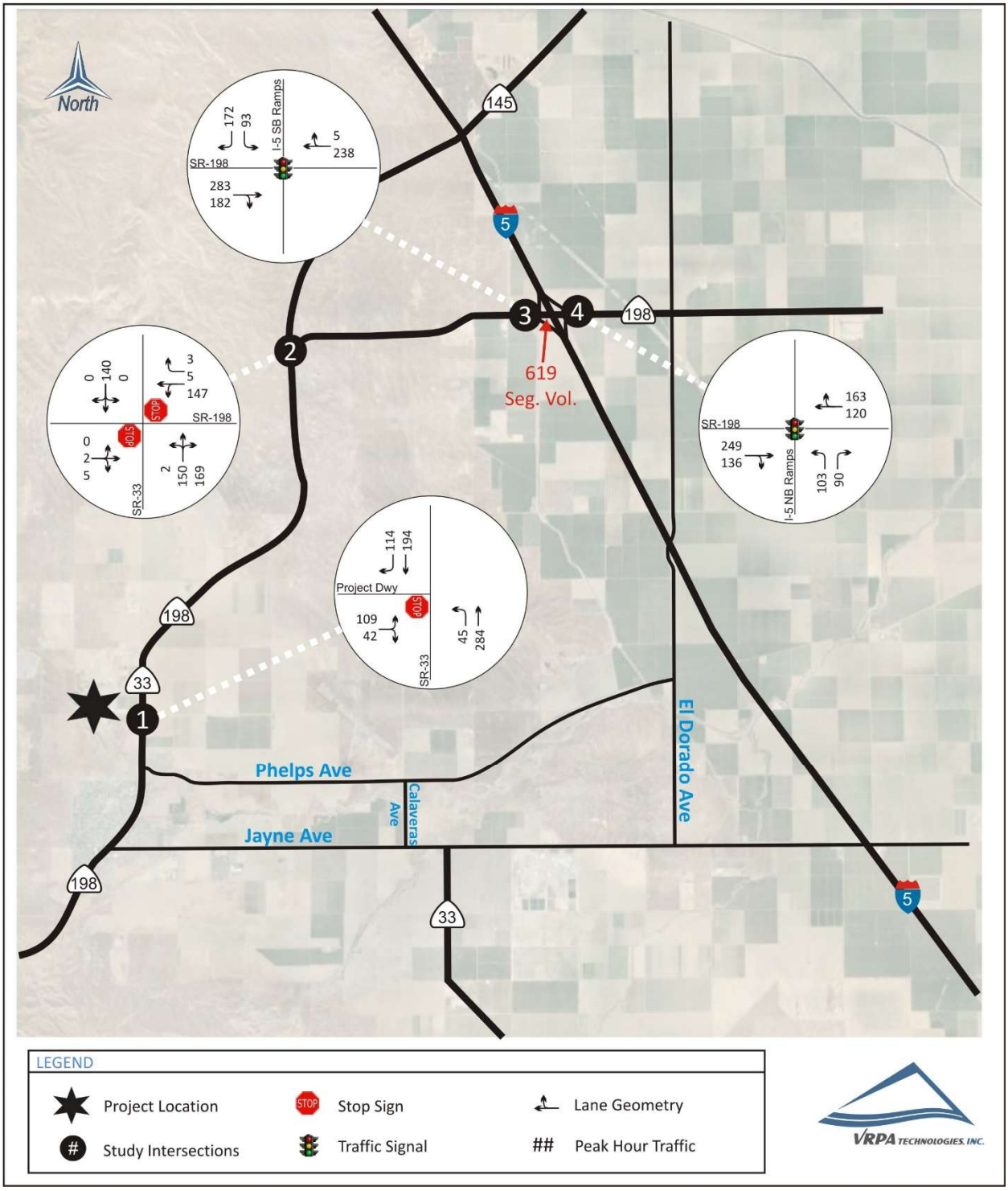
Granite Construction Company Coalinga Mine Expansion
Cumulative Year 2040 Daily Segment Volumes - Scenario 1

Figure 3-10



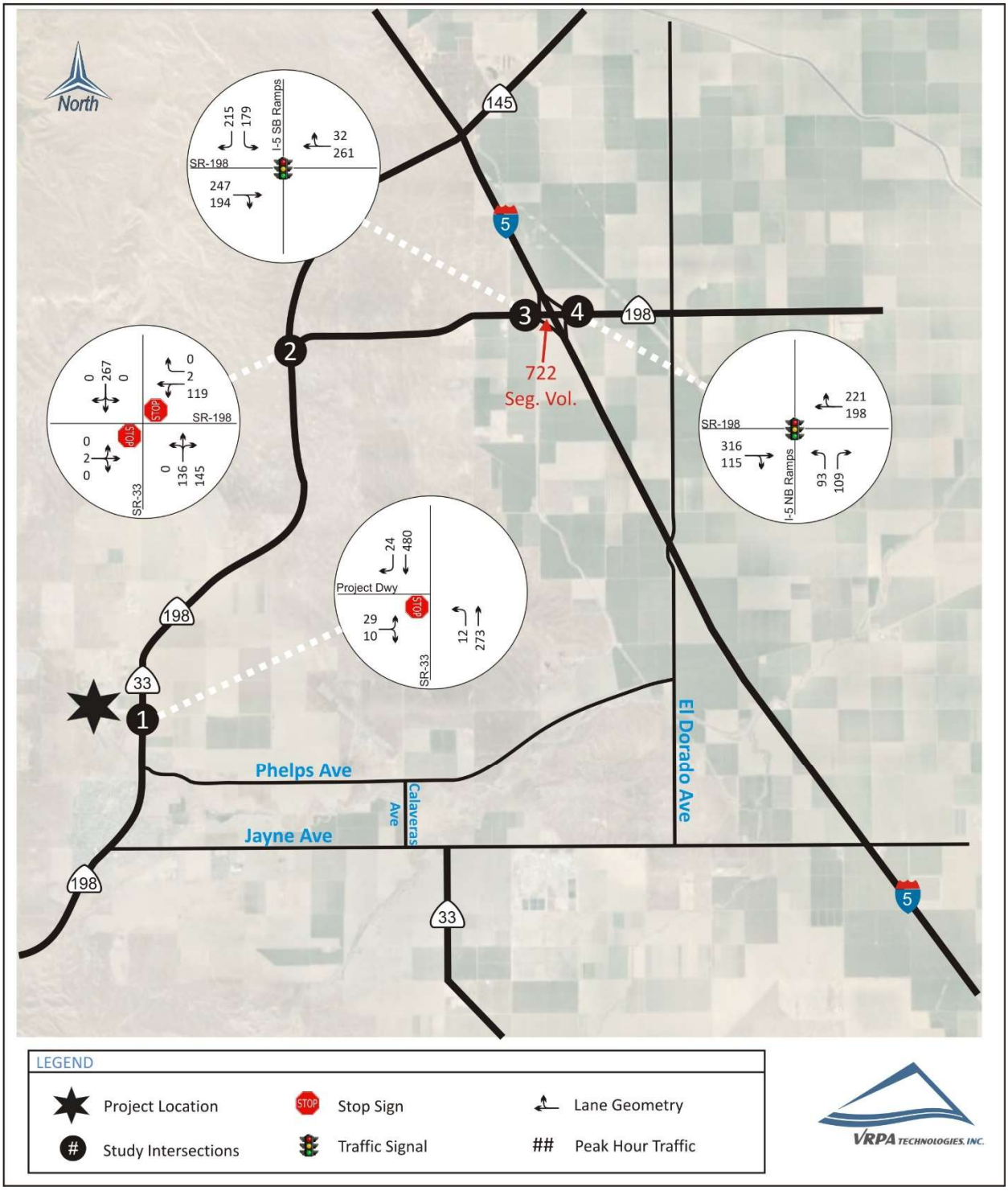
Granite Construction Company Coalinga Mine Expansion
Cumulative Year 2040 AM Peak Hour Traffic - Scenario 2

Figure 3-11



Granite Construction Company Coalinga Mine Expansion
Cumulative Year 2040 PM Peak Hour Traffic - Scenario 2

Figure 3-12



Granite Construction Company Coalinga Mine Expansion
Cumulative Year 2040 Daily Segment Volumes - Scenario 2

Figure 3-13

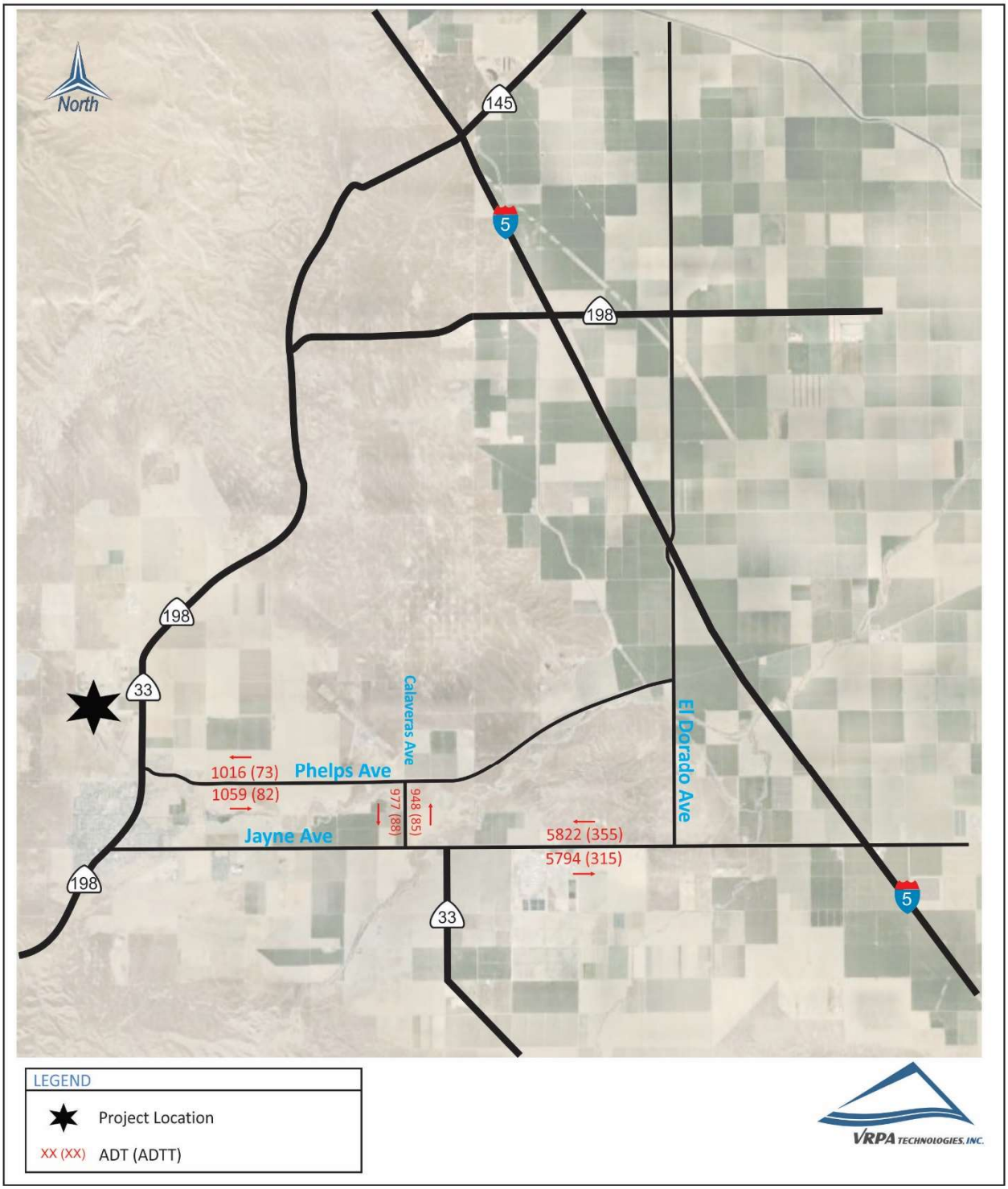


Table 3-2
Intersection Operations

INTERSECTION	CONTROL	TARGET LOS	PEAK HOUR	MODIFIED EXISTING SCENARIO 2		CUMULATIVE YEAR 2040 SCENARIO 1		CUMULATIVE YEAR 2040 SCENARIO 2	
				DELAY	LOS	DELAY	LOS	DELAY	LOS
1. SR 33 / Project Driveway	One-Way Stop	C	AM	14.3	B	0.0	A	15.6	C
			PM	12.8	B	8.4	A	16.1	C
2. SR 33 / SR 198	Two-Way Stop	C	AM	13.4	B	11.8	B	15.4	C
			PM	12.9	B	15.5	C	16.8	B
3. I-5 SB Off Ramp / SR 198	Signalized	C	AM	21.7	C	20.0	C	21.0	C
			PM	19.4	B	19.1	B	19.4	B
4. I-5 NB Off Ramp / SR 198	Signalized	C	AM	5.8	A	6.8	A	6.1	A
			PM	5.4	A	5.7	A	5.6	A

DELAY is measured in seconds

LOS = Level of Service / **BOLD** denotes LOS standard has been exceeded

For signalized and all-way stop controlled intersections, delay results show the average for the entire intersection. For one-way and two-way stop controlled intersections, delay results show the delay for the worst movement.

Table 3-3
Fair-Share Cost to Caltrans Facilities

INTERSECTION	ESTIMATED COST	COST / TRIP	PROJECT TRUCK TRIPS	FAIR SHARE COST
I-5 NB Off Ramp at Jayne Avenue	$1,200,000	$925	5	$4,625
SR 33 at Jayne Avenue	$173,000	$90	34	$3,060
SR 33 at Juniper Ridge Boulevard	$173,000	$90	17	$1,530
SR 33 at 5th Street	$470,000	$162	19	$3,078
SR 33 at 3rd Street	$470,000	$218	19	$4,142

Table 3-4
Segment Operations

STREET SEGMENT	SEGMENT DESCRIPTION	TARGET LOS	CAPACITY[1]	PEAK HOUR	MODIFIED EXISTING SCENARIO 2			CUMULATIVE YEAR 2040 SCENARIO 1			CUMULATIVE YEAR 2040 SCENARIO 2		
					VOLUME	V/C[2]	LOS	VOLUME	V/C[2]	LOS	VOLUME	V/C[2]	LOS
SR 198													
I-5 SB Off Ramp to I-5 NB Off Ramp	2 Lanes Undivided	C	1,350	AM	447	0.33	C	468	0.35	C	619	0.46	C
				PM	470	0.35	C	687	0.51	C	722	0.53	C

LOS = Level of Service / **BOLD** denotes LOS standard has been exceeded
1: Modified HCM-Based LOS Tables (Florida Tables)
2: Volume to Capacity Ratio

Table 3-5
Traffic Index Analysis

STREET SEGMENT	DIRECTION	EXISTING (w/out Granite Trips)	EXISTING (w/ Granite Trips)	INCREASE
Phelps Avenue				
SR-33 and Calaveras Avenue	Eastbound	8.0	8.5	**0.5**
	Westbound	8.0	8.5	**0.5**
Calaveras Avenue				
Phelps Avenue and Jayne Avenue	Northbound	8.5	9.0	**0.5**
	Southbound	8.5	9.0	**0.5**
Jayne Avenue				
Alpine Avenue and I-5	Eastbound	10.0	10.0	0.0
	Westbound	10.0	10.5	**0.5**

Bold denotes standard has been exceeded

Table 3-6
Equitable Fair-Share Responsibility

SEGMENT	DIRECTION	TI INCREASE DUE TO PROJECT TRIPS	FAIR SHARE PERCENTAGE
Phelps Avenue			
SR-33 to Calaveras Avenue	Eastbound	0.5	100.0%
	Westbound	0.5	100.0%
Calaveras Avenue			
Phelps Avenue to Jayne Avenue	Northbound	0.5	100.0%
	Southbound	0.5	100.0%
Jayne Avenue			
Alpine Avenue and I-5	Westbound	0.5	100.0%

APPENDIX A

Modified HCM-Based Tables (Florida Tables)

TABLE 4

Generalized **Peak Hour Two-Way** Volumes for Florida's **Urbanized Areas**[1]

12/18/12

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Class I (40 mph or higher posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	1,510	1,600	**
4	Divided	*	3,420	3,580	**
6	Divided	*	5,250	5,390	**
8	Divided	*	7,090	7,210	**

Class II (35 mph or slower posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	660	1,330	1,410
4	Divided	*	1,310	2,920	3,040
6	Divided	*	2,090	4,500	4,590
8	Divided	*	2,880	6,060	6,130

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
2	Divided	Yes	No	+5%
2	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding two-directional volumes in this table by 0.6

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Lanes	B	C	D	E
4	4,120	5,540	6,700	7,190
6	6,130	8,370	10,060	11,100
8	8,230	11,100	13,390	15,010
10	10,330	14,040	16,840	18,930
12	14,450	18,880	22,030	22,860

Freeway Adjustments

Auxiliary Lanes Present in Both Directions	Ramp Metering
+ 1,800	+ 5%

UNINTERRUPTED FLOW HIGHWAYS

Lanes	Median	B	C	D	E
2	Undivided	770	1,530	2,170	2,990
4	Divided	3,300	4,660	5,900	6,530
6	Divided	4,950	6,990	8,840	9,790

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
2	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

BICYCLE MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	260	680	1,770
50-84%	190	600	1,770	>1,770
85-100%	830	1,770	>1,770	**

PEDESTRIAN MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	250	850
50-84%	*	150	780	1,420
85-100%	340	960	1,560	>1,770

BUS MODE (Scheduled Fixed Route)[3]

(Buses in peak hour in peak direction)

Sidewalk Coverage	B	C	D	E
0-84%	> 5	≥ 4	≥ 3	≥ 2
85-100%	> 4	≥ 3	≥ 2	≥ 1

[1] Values shown are presented as peak hour two-way volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

[3] Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Planning Office
www.dot.state.fl.us/planning/systems/sm/los/default.shtm

APPENDIX B

Traffic Count Data Sheets

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-33 & Granite Construction Dwy
City: Coalinga
Control: 1-Way Stop(EB)

Project ID: 17-08078-001
Date: 9/7/2017

Total

NS/EW Streets:	SR-33				SR-33				Granite Construction Dwy				Granite Construction Dwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	0	1	1	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	51	0	0	0	21	1	0	7	0	2	0	0	0	0	0	83
7:15 AM	1	25	0	0	0	40	1	0	3	0	0	0	0	0	0	0	70
7:30 AM	0	38	0	0	0	37	3	0	1	0	2	0	0	0	0	0	81
7:45 AM	1	49	0	0	0	30	4	0	3	0	2	0	0	0	0	0	89
8:00 AM	1	45	0	0	0	32	2	0	3	0	0	0	0	0	0	0	83
8:15 AM	2	40	0	0	0	33	9	0	5	0	1	0	0	0	0	0	90
8:30 AM	2	46	0	0	0	28	4	0	6	0	3	0	0	0	0	0	89
8:45 AM	1	38	0	0	0	23	0	0	5	0	2	0	0	0	0	0	69
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	9	332	0	0	0	244	24	0	33	0	12	0	0	0	0	0	654
APPROACH %'s :	2.64%	97.36%	0.00%	0.00%	0.00%	91.04%	8.96%	0.00%	73.33%	0.00%	26.67%	0.00%					
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	6	180	0	0	0	123	19	0	17	0	6	0	0	0	0	0	351
PEAK HR FACTOR :	0.750	0.918	0.000	0.000	0.000	0.932	0.528	0.000	0.708	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.975
	0.930				0.845				0.639								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	0	1	1	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	2	29	0	2	0	65	0	0	0	0	1	0	0	0	0	0	99
4:15 PM	1	32	0	1	0	72	0	0	0	0	0	0	0	0	0	0	106
4:30 PM	0	41	0	0	0	64	0	0	0	0	0	0	0	0	0	0	105
4:45 PM	2	29	0	2	0	83	0	0	0	0	0	0	0	0	0	0	116
5:00 PM	0	46	0	0	0	86	0	0	0	0	0	0	0	0	0	0	132
5:15 PM	0	57	0	0	0	71	0	0	0	0	0	0	0	0	0	0	128
5:30 PM	0	30	0	0	0	52	0	0	0	0	0	0	0	0	0	0	82
5:45 PM	1	39	0	0	0	50	0	0	0	0	0	0	0	0	0	0	90
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	6	303	0	5	0	543	0	0	0	0	1	0	0	0	0	0	858
APPROACH %'s :	1.91%	96.50%	0.00%	1.59%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	2	173	0	2	0	304	0	0	0	0	0	0	0	0	0	0	481
PEAK HR FACTOR :	0.250	0.759	0.000	0.250	0.000	0.884	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.911
	0.776				0.884												

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-33 & SR-198
City: Coalinga
Control: Signalized

Project ID: 17-08078-002
Date: 9/7/2017

Total

NS/EW Streets:	SR-33				SR-33				SR-198				SR-198				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	33	13	0	0	18	0	0	0	1	0	0	14	1	0	0	81
7:15 AM	0	22	20	0	0	21	0	0	0	0	1	0	14	0	1	0	79
7:30 AM	0	18	9	0	0	21	0	0	0	0	2	0	11	1	0	0	62
7:45 AM	0	15	20	0	0	22	0	0	0	0	0	0	7	1	1	0	66
8:00 AM	0	15	11	0	0	30	0	0	0	0	0	0	9	0	0	0	65
8:15 AM	0	24	20	0	0	14	0	0	0	0	2	0	7	1	0	0	68
8:30 AM	1	20	17	0	0	10	0	0	0	2	0	0	8	1	0	0	59
8:45 AM	0	20	20	0	0	20	0	0	1	0	1	0	7	0	0	0	69
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	167	130	0	0	156	0	0	1	3	6	0	77	5	2	0	549
APPROACH %'s :	0.67%	55.85%	43.48%	0.00%	0.00%	100.00%	0.00%	0.00%	10.00%	30.00%	60.00%	0.00%	91.67%	5.95%	2.38%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	1	88	62	0	0	82	0	0	0	1	3	0	46	3	2	0	288
PEAK HR FACTOR :	0.250	0.667	0.775	0.000	0.000	0.932	0.000	0.000	0.000	0.250	0.375	0.000	0.821	0.750	0.500	0.000	0.889
	0.803				0.932				0.500				0.850				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	14	14	0	0	31	0	0	1	1	2	0	19	0	0	0	82
4:15 PM	0	12	13	0	0	34	0	0	0	2	2	0	20	0	0	0	83
4:30 PM	0	23	22	0	0	35	0	0	0	1	0	0	16	1	0	0	98
4:45 PM	0	18	20	0	0	45	0	0	0	0	0	0	16	0	0	0	99
5:00 PM	0	22	19	0	0	49	0	0	0	0	0	0	20	0	0	0	110
5:15 PM	0	17	19	0	0	35	0	0	0	0	0	0	13	0	0	0	84
5:30 PM	0	21	8	0	0	30	0	0	0	0	0	0	18	0	0	0	77
5:45 PM	0	17	9	0	0	15	0	0	0	0	0	0	17	0	0	0	58
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	144	124	0	0	274	0	0	1	4	4	0	139	1	0	0	691
APPROACH %'s :	0.00%	53.73%	46.27%	0.00%	0.00%	100.00%	0.00%	0.00%	11.11%	44.44%	44.44%	0.00%	99.29%	0.71%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	80	80	0	0	164	0	0	0	1	0	0	65	1	0	0	391
PEAK HR FACTOR :	0.000	0.870	0.909	0.000	0.000	0.837	0.000	0.000	0.000	0.250	0.000	0.000	0.813	0.250	0.000	0.000	0.889
	0.889				0.837				0.250				0.825				

National Data & Surveying Services

Intersection Turning Movement Count

Location: I-5 SB Off Ramp & SR-198
City: Coalinga
Control: Signalized

Project ID: 17-08078-003
Date: 9/7/2017

Total

NS/EW Streets:	I-5 SB Off Ramp				I-5 SB Off Ramp				SR-198				SR-198				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	0	1	1	0	0	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	5	0	27	0	0	25	22	0	0	34	2	0	115
7:15 AM	0	0	0	0	15	0	18	0	0	32	20	0	0	37	0	0	122
7:30 AM	0	0	0	0	15	0	22	0	0	22	23	0	0	22	1	0	105
7:45 AM	0	0	0	0	12	0	30	0	0	42	22	0	0	33	2	0	141
8:00 AM	0	0	0	0	16	0	37	0	0	28	33	0	0	21	1	0	136
8:15 AM	0	0	0	0	11	0	20	0	0	36	37	0	0	31	0	0	135
8:30 AM	0	0	0	0	20	0	22	0	0	28	23	0	0	19	0	0	112
8:45 AM	0	0	0	0	18	0	20	0	0	43	19	0	0	20	0	0	120
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	112	0	196	0	0	256	199	0	0	217	6	0	986
APPROACH %'s :					36.36%	0.00%	63.64%	0.00%	0.00%	56.26%	43.74%	0.00%	0.00%	97.31%	2.69%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	59	0	109	0	0	134	115	0	0	104	3	0	524
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.738	0.000	0.736	0.000	0.000	0.798	0.777	0.000	0.000	0.788	0.375	0.000	0.929
					0.792				0.853				0.764				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	0	1	1	0	0	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	29	0	33	0	0	41	23	0	0	39	6	0	171
4:15 PM	0	0	0	0	23	0	42	0	0	29	32	0	0	42	4	0	172
4:30 PM	0	0	0	0	34	0	29	0	0	40	30	0	0	42	5	0	180
4:45 PM	0	0	0	0	27	0	32	0	0	34	38	0	0	32	5	0	168
5:00 PM	0	0	0	0	26	0	20	0	0	39	29	0	0	36	3	0	153
5:15 PM	0	0	0	0	38	0	26	0	0	36	16	0	0	30	2	0	148
5:30 PM	0	0	0	0	29	0	32	0	0	34	21	0	0	28	6	0	150
5:45 PM	0	0	0	0	31	0	30	0	0	22	35	0	0	29	4	0	151
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	237	0	244	0	0	275	224	0	0	278	35	0	1293
APPROACH %'s :					49.27%	0.00%	50.73%	0.00%	0.00%	55.11%	44.89%	0.00%	0.00%	88.82%	11.18%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	113	0	136	0	0	144	123	0	0	155	20	0	691
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.831	0.000	0.810	0.000	0.000	0.878	0.809	0.000	0.000	0.923	0.833	0.000	0.960
					0.958				0.927				0.931				

National Data & Surveying Services

Intersection Turning Movement Count

Location: I-5 NB Off Ramp & SR-198
City: Coalinga
Control: Signalized

Project ID: 17-08078-004
Date: 9/7/2017

Total

NS/EW Streets:	I-5 NB Off Ramp				I-5 NB Off Ramp				SR-198				SR-198				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	1	1	0	0	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	15	0	7	0	0	0	0	0	0	11	20	0	0	21	23	0	97
7:15 AM	11	0	7	0	0	0	0	0	0	30	17	0	0	26	20	0	111
7:30 AM	11	0	9	0	0	0	0	0	0	25	12	0	0	12	26	0	95
7:45 AM	21	0	13	0	0	0	0	0	0	38	15	0	0	13	16	0	116
8:00 AM	17	0	12	0	0	0	0	0	0	20	24	0	0	6	23	0	102
8:15 AM	18	0	22	0	0	0	0	0	0	24	22	0	0	13	31	0	130
8:30 AM	18	0	10	0	0	0	0	0	0	29	19	0	0	1	23	0	100
8:45 AM	12	0	13	0	0	0	0	0	0	40	21	0	0	7	28	0	121
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	123	0	93	0	0	0	0	0	0	217	150	0	0	99	190	0	872
APPROACH %'s :	56.94%	0.00%	43.06%	0.00%					0.00%	59.13%	40.87%	0.00%	0.00%	34.26%	65.74%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	65	0	57	0	0	0	0	0	0	113	86	0	0	27	105	0	453
PEAK HR FACTOR :	0.903	0.000	0.648	0.000	0.000	0.000	0.000	0.000	0.000	0.706	0.896	0.000	0.000	0.519	0.847	0.000	0.871
	0.763								0.816				0.750				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	1	1	0	0	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	18	0	18	0	0	0	0	0	0	45	25	0	0	27	40	0	173
4:15 PM	8	0	22	0	0	0	0	0	0	30	22	0	0	38	35	0	155
4:30 PM	13	0	18	0	0	0	0	0	0	62	16	0	0	33	25	0	167
4:45 PM	20	0	11	0	0	0	0	0	0	51	10	0	0	17	40	0	149
5:00 PM	16	0	14	0	0	0	0	0	0	48	17	0	0	24	33	0	152
5:15 PM	15	0	13	0	0	0	0	0	0	58	14	0	0	18	32	0	150
5:30 PM	17	0	10	0	0	0	0	0	0	50	13	0	0	17	34	0	141
5:45 PM	15	0	15	0	0	0	0	0	0	31	23	0	0	18	28	0	130
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	122	0	121	0	0	0	0	0	0	375	140	0	0	192	267	0	1217
APPROACH %'s :	50.21%	0.00%	49.79%	0.00%					0.00%	72.82%	27.18%	0.00%	0.00%	41.83%	58.17%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	59	0	69	0	0	0	0	0	0	188	73	0	0	115	140	0	644
PEAK HR FACTOR :	0.738	0.000	0.784	0.000	0.000	0.000	0.000	0.000	0.000	0.758	0.730	0.000	0.000	0.757	0.875	0.000	0.931
	0.889								0.837				0.873				

Prepared by National Data & Surveying Services

CLASSIFICATION

Phelps Ave W/O S San Mateo Ave

Day: Thursday
Date: 9/19/2019

City: Coalinga
Project #: CA19_2072_001e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1
1:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:00	0	2	0	0	0	0	0	0	1	0	0	0	0	3
3:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
4:00	0	15	3	0	0	0	0	0	0	0	0	0	0	18
5:00	0	58	30	0	0	0	0	0	0	0	0	0	0	88
6:00	0	37	17	1	2	2	0	0	2	0	0	0	0	61
7:00	0	40	7	0	0	0	1	0	1	0	0	0	0	49
8:00	0	21	8	2	0	2	1	0	0	0	3	0	0	37
9:00	0	15	12	1	1	4	1	0	4	0	0	0	0	38
10:00	0	16	13	1	1	1	0	0	0	0	0	0	0	32
11:00	0	22	15	0	3	1	1	1	2	0	0	0	0	45
12:00 PM	0	18	12	0	2	2	0	0	1	0	0	0	0	35
13:00	0	16	11	1	0	1	0	0	1	0	0	0	0	30
14:00	0	22	17	0	1	0	0	0	0	0	0	0	0	40
15:00	0	22	5	1	1	0	0	0	1	0	0	0	0	30
16:00	0	28	10	1	0	0	0	0	0	0	0	0	0	39
17:00	0	34	16	0	1	0	0	0	0	0	0	0	0	51
18:00	0	16	10	1	0	0	0	0	1	0	1	0	0	29
19:00	0	18	3	0	0	0	0	0	1	0	0	0	0	22
20:00	0	17	3	0	0	0	0	0	1	0	0	0	0	21
21:00	0	11	3	0	0	0	0	0	0	0	0	0	0	14
22:00	0	9	1	0	0	0	0	0	0	0	0	0	0	10
23:00	0	5	2	0	0	0	0	0	0	0	0	0	0	7
Totals		447	198	9	12	13	4	1	16		4	1		705
% of Totals		63%	28%	1%	2%	2%	1%	0%	2%		1%	0%		100%

AM Volumes	0	231	105	5	7	10	4	1	10	0	3	1	0	377
% AM		33%	15%	1%	1%	1%	1%	0%	1%		0%	0%		53%
AM Peak Hour		5:00	5:00	8:00	11:00	9:00	7:00	11:00	9:00		8:00			5:00
Volume		58	30	2	3	4	1	1	4		3	1		88
PM Volumes	0	216	93	4	5	3	0	0	6	0	1	0	0	328
% PM		31%	13%	1%	1%	0%			1%		0%			47%
PM Peak Hour		17:00	14:00	13:00	12:00	12:00			12:00		18:00			17:00
Volume		34	17	1	2	2			1		1			51

Directional Peak Periods All Classes	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume		%	Volume		%	Volume		%	Volume		%
	86	↔	12%	65	↔	9%	90	↔	13%	464	↔	66%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

Phelps Ave W/O S San Mateo Ave

Day: Thursday
Date: 9/19/2019

City: Coalinga
Project #: CA19_2072_001w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	3	1	0	0	0	0	0	1	0	0	0	0	5
1:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
2:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
4:00	0	7	2	0	0	0	0	0	0	0	0	0	0	9
5:00	0	15	9	0	1	0	0	0	1	0	0	0	0	26
6:00	0	31	9	0	0	2	0	0	1	0	0	0	0	43
7:00	0	24	6	1	0	1	0	0	2	0	0	0	0	34
8:00	0	11	6	2	1	2	0	0	1	0	3	0	0	26
9:00	0	13	8	0	1	2	0	0	0	0	0	0	0	24
10:00	0	15	12	1	1	1	0	0	4	0	0	0	0	34
11:00	0	16	12	1	2	1	0	0	2	0	0	0	0	34
12:00 PM	0	22	11	0	0	0	0	0	0	0	0	0	0	33
13:00	0	18	13	0	0	0	0	0	4	0	0	0	0	35
14:00	0	38	19	0	1	0	0	0	1	0	0	0	0	59
15:00	0	27	20	0	0	1	0	0	1	0	1	0	0	50
16:00	0	63	18	1	0	0	0	0	0	0	0	0	0	82
17:00	1	41	14	0	0	0	0	0	0	0	0	1	0	57
18:00	0	19	11	0	0	0	0	0	1	0	1	0	0	32
19:00	0	23	9	0	0	0	0	0	0	0	0	0	0	32
20:00	0	6	3	0	0	0	0	0	1	0	0	0	0	10
21:00	0	12	5	0	0	0	0	0	0	0	2	0	0	19
22:00	0	13	2	0	0	0	0	0	1	0	0	0	0	16
23:00	0	4	3	0	0	0	0	0	0	0	1	0	0	8
Totals	1	427	194	6	7	10			21		8	1		675
% of Totals	0%	63%	29%	1%	1%	1%			3%		1%	0%		100%

AM Volumes	0	141	66	5	6	9	0	0	12	0	3	0	0	242
% AM		21%	10%	1%	1%	1%			2%		0%			36%
AM Peak Hour		6:00	10:00	8:00	11:00	6:00			10:00		8:00			6:00
Volume		31	12	2	2	2			4		3			43
PM Volumes	1	286	128	1	1	1	0	0	9	0	5	1	0	433
% PM	0%	42%	19%	0%	0%	0%			1%		1%	0%		64%
PM Peak Hour	17:00	16:00	15:00	16:00	14:00	15:00			13:00		21:00	17:00		16:00
Volume	1	63	20	1	1	1			4		2	1		82

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	60		9%	68		10%	139		21%	408		60%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

Calavaras Ave N/O W Jayne Ave

Day: Thursday
Date: 9/19/2019

City: Coalinga
Project #: CA19_2072_002n

North Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	3	1	0	0	0	0	0	1	0	1	0	0	6
1:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:00	0	2	0	0	0	0	0	0	2	0	0	0	0	4
3:00	0	3	0	0	0	0	0	0	1	0	0	0	0	4
4:00	0	9	3	0	0	0	0	0	0	0	0	0	0	12
5:00	0	24	14	0	2	0	0	0	1	0	0	0	0	41
6:00	0	40	14	0	1	2	0	0	1	0	1	0	0	59
7:00	0	15	18	0	0	1	0	0	2	0	0	0	0	36
8:00	0	12	3	0	1	2	0	0	1	0	1	0	0	20
9:00	0	17	11	0	1	1	0	0	0	0	1	0	0	31
10:00	0	12	17	1	1	1	0	0	5	0	0	1	0	38
11:00	0	10	9	0	4	0	0	0	1	0	0	1	0	25
12:00 PM	0	17	13	0	0	0	0	0	0	0	0	0	0	30
13:00	0	13	15	0	0	0	0	0	4	0	1	0	0	33
14:00	0	30	21	0	0	0	0	0	1	0	0	0	0	52
15:00	0	19	19	0	0	0	0	0	1	0	1	2	0	42
16:00	0	56	15	0	0	0	0	0	0	0	0	0	0	71
17:00	1	26	7	0	0	0	0	0	1	0	0	2	0	37
18:00	0	14	10	0	0	0	0	0	1	0	1	0	0	26
19:00	0	13	5	0	0	0	0	0	0	0	0	0	0	18
20:00	0	3	1	0	0	0	0	0	1	0	0	0	0	5
21:00	0	10	4	0	0	0	0	0	0	0	2	0	0	16
22:00	0	11	2	0	0	0	0	0	2	0	0	0	0	15
23:00	0	3	3	0	0	0	0	0	0	0	1	1	0	8
Totals	1	363	205	1	10	7			26		10	7		630
% of Totals	0%	58%	33%	0%	2%	1%			4%		2%	1%		100%

AM Volumes	0	148	90	1	10	7	0	0	15	0	4	2	0	277
% AM		23%	14%	0%	2%	1%			2%		1%	0%		44%
AM Peak Hour		6:00	7:00	10:00	11:00	6:00			10:00			10:00		6:00
Volume		40	18	1	4	2			5		1	1		59
PM Volumes	1	215	115	0	0	0	0	0	11	0	6	5	0	353
% PM	0%	34%	18%						2%		1%	1%		56%
PM Peak Hour	17:00	16:00	14:00						13:00		21:00	15:00		16:00
Volume	1	56	21						4		2	2		71

Directional Peak Periods All Classes	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume		%	Volume		%	Volume		%	Volume		%
	56	↔	9%	63	↔	10%	108	↔	17%	403	↔	64%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

Calavaras Ave N/O W Jayne Ave

Day: Thursday
Date: 9/19/2019

City: Coalinga
Project #: CA19_2072_002s

South Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	1
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	1	0	0	0	0	0	0	1	0	0	0	0	2
3:00	0	1	1	0	0	0	0	0	2	0	0	0	0	4
4:00	0	11	5	0	0	0	0	0	1	0	0	0	0	17
5:00	0	42	17	0	0	0	0	0	0	0	0	0	0	59
6:00	0	31	19	1	0	2	0	0	2	0	0	0	0	55
7:00	0	33	10	0	0	0	1	0	1	0	0	0	0	45
8:00	0	19	7	0	0	0	1	0	2	0	5	1	0	35
9:00	0	15	7	0	1	2	1	0	5	0	1	0	0	32
10:00	0	13	14	0	0	0	0	0	0	0	0	1	0	28
11:00	0	12	15	0	4	1	1	1	5	0	0	0	0	39
12:00 PM	0	14	12	0	3	1	0	0	3	0	0	1	0	34
13:00	0	14	18	0	0	0	0	0	1	0	0	0	0	33
14:00	0	20	23	1	0	0	0	0	0	0	1	0	0	45
15:00	0	26	9	0	1	0	0	0	2	0	0	0	0	38
16:00	0	29	15	0	1	0	0	0	0	0	0	0	0	45
17:00	0	28	15	0	0	0	0	0	0	0	0	0	0	43
18:00	0	20	9	0	0	0	0	0	1	0	1	0	0	31
19:00	0	8	6	0	0	0	0	0	1	0	0	0	0	15
20:00	0	16	4	0	0	0	0	0	1	0	0	0	0	21
21:00	0	11	5	0	0	0	0	0	0	0	0	0	0	16
22:00	0	6	1	0	0	0	0	0	0	0	0	0	0	7
23:00	0	2	2	0	0	0	0	0	1	0	0	1	0	6
Totals		372	215	2	10	6	4	1	29		8	4		651
% of Totals		57%	33%	0%	2%	1%	1%	0%	4%		1%	1%		100%

AM Volumes	0	178	96	1	5	5	4	1	19	0	6	2	0	317
% AM		27%	15%	0%	1%	1%	1%	0%	3%		1%	0%		49%
AM Peak Hour		5:00	6:00	6:00	11:00	6:00	7:00	11:00	9:00		8:00	8:00		5:00
Volume		42	19	1	4	2	1	1	5		5	1		59
PM Volumes	0	194	119	1	5	1	0	0	10	0	2	2	0	334
% PM		30%	18%	0%	1%	0%			2%		0%	0%		51%
PM Peak Hour		16:00	14:00	14:00	12:00	12:00			12:00		14:00	12:00		14:00
Volume		29	23	1	3	1			3		1	1		45

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume		%	Volume		%	Volume		%	Volume		%
	80	⟷	12%	67	⟷	10%	88	⟷	14%	416	⟷	64%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

W Jayne Ave Bet.S El Dorado Ave & S Alpine Ave

Day: Thursday
Date: 9/19/2019

City: Coalinga
Project #: CA19_2072_003e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	18	1	0	2	0	0	0	2	0	1	0	0	24
1:00	0	5	1	0	0	0	2	0	1	0	0	0	0	9
2:00	0	11	1	0	0	0	0	0	1	0	2	0	0	15
3:00	0	13	0	0	1	0	0	0	3	0	0	0	0	17
4:00	0	61	18	0	0	0	0	0	1	0	3	1	0	84
5:00	0	121	24	1	0	0	1	0	2	0	0	0	0	149
6:00	0	150	37	7	1	2	1	0	4	0	0	0	0	202
7:00	0	130	34	0	1	3	1	0	3	0	1	2	0	175
8:00	0	85	24	1	1	1	1	1	4	0	1	1	0	120
9:00	0	115	31	0	1	1	0	0	2	0	0	1	0	151
10:00	0	80	39	0	2	1	1	1	3	0	2	2	0	131
11:00	0	111	34	0	7	1	1	1	7	0	0	1	0	163
12:00 PM	0	120	49	1	6	2	1	0	6	0	0	3	0	188
13:00	1	148	45	1	5	2	0	0	6	0	1	1	0	210
14:00	0	235	84	1	2	1	0	2	5	0	1	0	0	331
15:00	0	285	80	5	3	1	1	0	7	0	0	2	0	384
16:00	0	341	102	2	6	3	0	0	5	0	0	0	0	459
17:00	0	217	53	0	4	0	0	1	2	0	1	0	0	278
18:00	0	115	20	2	0	0	0	0	5	0	1	0	0	143
19:00	0	127	26	0	1	1	0	0	4	0	1	0	0	160
20:00	0	87	13	0	1	1	0	0	3	0	0	0	0	105
21:00	0	94	20	0	0	0	0	0	1	0	2	1	0	118
22:00	0	113	6	0	0	0	0	0	0	0	2	0	0	121
23:00	0	82	8	0	0	0	0	0	1	0	0	0	0	91
Totals	1	2864	750	21	44	20	10	6	78		19	15		3828
% of Totals	0%	75%	20%	1%	1%	1%	0%	0%	2%		0%	0%		100%

AM Volumes	0	900	244	9	16	9	8	3	33	0	10	8	0	1240
% AM		24%	6%	0%	0%	0%	0%	0%	1%		0%	0%		32%
AM Peak Hour		6:00	10:00	6:00	11:00	7:00	1:00	8:00	11:00		4:00	7:00		6:00
Volume		150	39	7	7	3	2	1	7		3	2		202
PM Volumes	1	1964	506	12	28	11	2	3	45	0	9	7	0	2588
% PM	0%	51%	13%	0%	1%	0%	0%	0%	1%		0%	0%		68%
PM Peak Hour	13:00	16:00	16:00	15:00	12:00	16:00	12:00	14:00	15:00		21:00	12:00		16:00
Volume	1	341	102	5	6	3	1	2	7		2	3		459

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	295		8%	398		10%	737		19%	2398		63%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

W Jayne Ave Bet.S El Dorado Ave & S Alpine Ave

Day: Thursday
Date: 9/19/2019

City: Coalinga
Project #: CA19_2072_003w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	22	2	0	0	0	0	0	2	0	0	0	0	26
1:00	0	6	6	0	0	0	0	0	1	0	0	0	0	13
2:00	0	12	0	0	0	0	0	0	2	0	0	0	0	14
3:00	0	41	7	0	0	0	0	0	4	0	0	0	0	52
4:00	0	45	10	0	0	0	0	0	0	0	0	0	0	55
5:00	1	247	64	0	2	0	0	0	3	0	0	0	0	317
6:00	0	335	70	0	6	3	0	2	4	0	0	5	0	425
7:00	0	324	70	5	2	2	0	1	8	0	3	0	0	415
8:00	0	157	38	0	6	5	0	0	7	0	2	0	0	215
9:00	0	100	29	0	4	4	0	0	1	0	2	3	0	143
10:00	0	76	33	2	5	1	0	0	9	0	0	2	0	128
11:00	0	69	30	0	9	1	0	0	5	0	1	1	0	116
12:00 PM	0	115	52	0	2	0	0	0	6	0	0	2	0	177
13:00	0	176	54	0	5	0	0	2	8	0	1	1	0	247
14:00	0	163	40	0	5	1	0	2	5	0	0	0	0	216
15:00	0	120	33	1	1	1	0	1	6	0	2	5	0	170
16:00	0	175	51	8	0	0	0	0	5	0	0	0	0	239
17:00	0	164	43	1	2	0	0	0	1	0	2	0	0	213
18:00	0	130	29	0	0	1	0	0	5	0	3	0	0	168
19:00	0	86	24	1	0	0	0	0	2	0	3	0	0	116
20:00	0	90	24	0	0	0	0	0	7	0	2	2	0	125
21:00	0	102	18	0	1	0	1	0	1	0	2	2	0	127
22:00	0	83	9	0	0	0	0	0	2	0	1	1	0	96
23:00	0	25	7	0	0	0	0	0	1	0	1	2	0	36
Totals	1	2863	743	18	50	19	1	8	95		25	26		3849
% of Totals	0%	74%	19%	0%	1%	0%	0%	0%	2%		1%	1%		100%

AM Volumes	1	1434	359	7	34	16	0	3	46	0	8	11	0	1919
% AM	0%	37%	9%	0%	1%	0%		0%	1%		0%	0%		50%
AM Peak Hour	5:00	6:00	6:00	7:00	11:00	8:00		6:00	10:00		7:00	6:00		6:00
Volume	1	335	70	5	9	5		2	9		3	5		425
PM Volumes	0	1429	384	11	16	3	1	5	49	0	17	15	0	1930
% PM		37%	10%	0%	0%	0%	0%	0%	1%		0%	0%		50%
PM Peak Hour		13:00	13:00	16:00	13:00	14:00	21:00	13:00	13:00		18:00	15:00		13:00
Volume		176	54	8	5	1	1	2	8		3	5		247

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	630		16%	424		11%	452		12%	2343		61%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

APPENDIX C

SYNCHRO 9 Worksheets

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	17	6	6	180	123	19
Future Vol, veh/h	17	6	6	180	123	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	425	-	-	350
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	64	64	93	93	85	85
Heavy Vehicles, %	3	3	3	18	18	3
Mvmt Flow	27	9	6	194	145	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	351	145	145	0	-	0
Stage 1	145	-	-	-	-	-
Stage 2	206	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	644	900	1431	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	641	900	1431	-	-	-
Mov Cap-2 Maneuver	641	-	-	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	823	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.5	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1431	-	693	-	-
HCM Lane V/C Ratio	0.005	-	0.052	-	-
HCM Control Delay (s)	7.5	-	10.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	1	3	46	3	2	1	88	62	0	82	0
Future Vol, veh/h	0	1	3	46	3	2	1	88	62	0	82	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	50	50	50	85	85	85	80	80	80	93	93	93
Heavy Vehicles, %	3	3	3	22	3	3	3	18	22	3	18	3
Mvmt Flow	0	2	6	54	4	2	1	110	78	0	88	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	241	278	88	243	239	149	88	0	0	188	0	0
Stage 1	88	88	-	151	151	-	-	-	-	-	-	-
Stage 2	153	190	-	92	88	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.32	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.32	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.32	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.698	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	711	628	968	671	660	895	1501	-	-	1380	-	-
Stage 1	917	820	-	806	770	-	-	-	-	-	-	-
Stage 2	847	741	-	868	820	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	706	627	968	665	659	895	1501	-	-	1380	-	-
Mov Cap-2 Maneuver	706	627	-	665	659	-	-	-	-	-	-	-
Stage 1	916	820	-	805	769	-	-	-	-	-	-	-
Stage 2	840	740	-	861	820	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	10.8	0	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1501	-	-	852	665	895	1380	-	-
HCM Lane V/C Ratio	0.001	-	-	0.009	0.087	0.003	-	-	-
HCM Control Delay (s)	7.4	0	-	9.3	10.9	9	0	-	-
HCM Lane LOS	A	A	-	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.3	0	0	-	-

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	134	104	0	59	109
Future Volume (veh/h)	0	134	104	0	59	109
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1557	1557	0	1557	1557
Adj Flow Rate, veh/h	0	158	137	0	75	0
Adj No. of Lanes	0	1	1	0	1	1
Peak Hour Factor	0.85	0.85	0.76	0.76	0.79	0.79
Percent Heavy Veh, %	0	22	22	0	22	22
Cap, veh/h	0	245	245	0	1013	904
Arrive On Green	0.00	0.16	0.16	0.00	0.68	0.00
Sat Flow, veh/h	0	1557	1557	0	1483	1324
Grp Volume(v), veh/h	0	158	137	0	75	0
Grp Sat Flow(s),veh/h/ln	0	1557	1557	0	1483	1324
Q Serve(g_s), s	0.0	5.4	4.6	0.0	1.0	0.0
Cycle Q Clear(g_c), s	0.0	5.4	4.6	0.0	1.0	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	245	245	0	1013	904
V/C Ratio(X)	0.00	0.64	0.56	0.00	0.07	0.00
Avail Cap(c_a), veh/h	0	1174	1174	0	1013	904
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	22.3	21.9	0.0	3.0	0.0
Incr Delay (d2), s/veh	0.0	2.8	2.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.5	2.1	0.0	0.4	0.0
LnGrp Delay(d),s/veh	0.0	25.1	23.9	0.0	3.1	0.0
LnGrp LOS		C	C		A	
Approach Vol, veh/h		158	137		75	
Approach Delay, s/veh		25.1	23.9		3.1	
Approach LOS		C	C		A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				13.4		43.0		13.4
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				42.5		38.5		42.5
Max Q Clear Time (g_c+I1), s				7.4		3.0		6.6
Green Ext Time (p_c), s				1.6		0.2		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	20.2
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	113	0	0	27	65	57
Future Volume (veh/h)	113	0	0	27	65	57
Number	4	14	3	8	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1557	0	0	1557	1557	1557
Adj Flow Rate, veh/h	138	0	0	36	86	0
Adj No. of Lanes	1	0	0	1	1	1
Peak Hour Factor	0.82	0.82	0.75	0.75	0.76	0.76
Percent Heavy Veh, %	22	0	0	22	22	22
Cap, veh/h	282	0	0	282	153	137
Arrive On Green	0.18	0.00	0.00	0.18	0.10	0.00
Sat Flow, veh/h	1557	0	0	1557	1483	1324
Grp Volume(v), veh/h	138	0	0	36	86	0
Grp Sat Flow(s),veh/h/ln	1557	0	0	1557	1483	1324
Q Serve(g_s), s	1.0	0.0	0.0	0.2	0.7	0.0
Cycle Q Clear(g_c), s	1.0	0.0	0.0	0.2	0.7	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	282	0	0	282	153	137
V/C Ratio(X)	0.49	0.00	0.00	0.13	0.56	0.00
Avail Cap(c_a), veh/h	6626	0	0	6626	3244	2895
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.6	0.0	0.0	4.3	5.4	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.2	3.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	0.1	0.4	0.0
LnGrp Delay(d),s/veh	5.9	0.0	0.0	4.5	8.6	0.0
LnGrp LOS	A			A	A	
Approach Vol, veh/h	138			36	86	
Approach Delay, s/veh	5.9			4.5	8.6	
Approach LOS	A			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				6.8		5.8		6.8
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				53.5		27.5		53.5
Max Q Clear Time (g_c+I1), s				3.0		2.7		2.2
Green Ext Time (p_c), s				0.9		0.2		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	6.6
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	0	0	2	173	304	0
Future Vol, veh/h	0	0	2	173	304	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	425	-	-	350
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	78	78	88	88
Heavy Vehicles, %	3	3	3	18	18	3
Mvmt Flow	0	0	3	222	345	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	572	345	345	0	-	0
Stage 1	345	-	-	-	-	-
Stage 2	227	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	480	696	1208	-	-	-
Stage 1	715	-	-	-	-	-
Stage 2	808	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	479	696	1208	-	-	-
Mov Cap-2 Maneuver	479	-	-	-	-	-
Stage 1	715	-	-	-	-	-
Stage 2	806	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1208	-	-	-	-
HCM Lane V/C Ratio	0.002	-	-	-	-
HCM Control Delay (s)	8	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	1	0	65	1	0	0	80	80	0	164	0
Future Vol, veh/h	0	1	0	65	1	0	0	80	80	0	164	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	25	25	25	83	83	83	89	89	89	84	84	84
Heavy Vehicles, %	3	3	3	22	3	3	3	18	22	3	18	3
Mvmt Flow	0	4	0	78	1	0	0	90	90	0	195	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	330	375	195	332	330	135	195	0	0	180	0	0
Stage 1	195	195	-	135	135	-	-	-	-	-	-	-
Stage 2	135	180	-	197	195	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.32	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.32	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.32	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.698	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	621	554	844	585	588	911	1372	-	-	1389	-	-
Stage 1	804	737	-	823	783	-	-	-	-	-	-	-
Stage 2	866	749	-	761	737	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	620	554	844	582	588	911	1372	-	-	1389	-	-
Mov Cap-2 Maneuver	620	554	-	582	588	-	-	-	-	-	-	-
Stage 1	804	737	-	823	783	-	-	-	-	-	-	-
Stage 2	865	749	-	757	737	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.5	12.2	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1372	-	-	554	582	-	1389	-	-
HCM Lane V/C Ratio	-	-	-	0.007	0.137	-	-	-	-
HCM Control Delay (s)	0	-	-	11.5	12.2	0	0	-	-
HCM Lane LOS	A	-	-	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.5	-	0	-	-

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	144	155	0	113	136
Future Volume (veh/h)	0	144	155	0	113	136
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1557	1557	0	1557	1557
Adj Flow Rate, veh/h	0	155	167	0	118	0
Adj No. of Lanes	0	1	1	0	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.96	0.96
Percent Heavy Veh, %	0	22	22	0	22	22
Cap, veh/h	0	257	257	0	1004	896
Arrive On Green	0.00	0.17	0.17	0.00	0.68	0.00
Sat Flow, veh/h	0	1557	1557	0	1483	1324
Grp Volume(v), veh/h	0	155	167	0	118	0
Grp Sat Flow(s),veh/h/ln	0	1557	1557	0	1483	1324
Q Serve(g_s), s	0.0	5.3	5.7	0.0	1.6	0.0
Cycle Q Clear(g_c), s	0.0	5.3	5.7	0.0	1.6	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	257	257	0	1004	896
V/C Ratio(X)	0.00	0.60	0.65	0.00	0.12	0.00
Avail Cap(c_a), veh/h	0	1163	1163	0	1004	896
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	22.0	22.2	0.0	3.2	0.0
Incr Delay (d2), s/veh	0.0	2.3	2.7	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.4	2.7	0.0	0.7	0.0
LnGrp Delay(d),s/veh	0.0	24.3	25.0	0.0	3.5	0.0
LnGrp LOS		C	C		A	
Approach Vol, veh/h		155	167		118	
Approach Delay, s/veh		24.3	25.0		3.5	
Approach LOS		C	C		A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				13.9		43.0		13.9
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				42.5		38.5		42.5
Max Q Clear Time (g_c+I1), s				7.3		3.6		7.7
Green Ext Time (p_c), s				1.8		0.3		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	19.0
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	188	0	0	115	59	69
Future Volume (veh/h)	188	0	0	115	59	69
Number	4	14	3	8	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1557	0	0	1557	1557	1557
Adj Flow Rate, veh/h	224	0	0	132	66	0
Adj No. of Lanes	1	0	0	1	1	1
Peak Hour Factor	0.84	0.84	0.87	0.87	0.89	0.89
Percent Heavy Veh, %	22	0	0	22	22	22
Cap, veh/h	468	0	0	468	119	107
Arrive On Green	0.30	0.00	0.00	0.30	0.08	0.00
Sat Flow, veh/h	1557	0	0	1557	1483	1324
Grp Volume(v), veh/h	224	0	0	132	66	0
Grp Sat Flow(s),veh/h/ln	1557	0	0	1557	1483	1324
Q Serve(g_s), s	1.7	0.0	0.0	0.9	0.6	0.0
Cycle Q Clear(g_c), s	1.7	0.0	0.0	0.9	0.6	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	468	0	0	468	119	107
V/C Ratio(X)	0.48	0.00	0.00	0.28	0.55	0.00
Avail Cap(c_a), veh/h	5733	0	0	5733	2807	2505
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.2	0.0	0.0	3.9	6.4	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.3	4.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	0.4	0.4	0.0
LnGrp Delay(d),s/veh	4.9	0.0	0.0	4.2	10.4	0.0
LnGrp LOS	A			A	B	
Approach Vol, veh/h	224			132	66	
Approach Delay, s/veh	4.9			4.2	10.4	
Approach LOS	A			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				8.9		5.7		8.9
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				53.5		27.5		53.5
Max Q Clear Time (g_c+I1), s				3.7		2.6		2.9
Green Ext Time (p_c), s				2.0		0.1		2.0

Intersection Summary	
HCM 2010 Ctrl Delay	5.6
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	0	0	0	180	123	0
Future Vol, veh/h	0	0	0	180	123	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	425	-	-	350
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	64	64	93	93	85	85
Heavy Vehicles, %	3	3	3	18	18	3
Mvmt Flow	0	0	0	194	145	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	339	145	145	0	-	0
Stage 1	145	-	-	-	-	-
Stage 2	194	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	655	900	1431	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	836	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	655	900	1431	-	-	-
Mov Cap-2 Maneuver	655	-	-	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	836	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1431	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	1	3	44	3	2	1	73	60	0	65	0
Future Vol, veh/h	0	1	3	44	3	2	1	73	60	0	65	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	50	50	50	85	85	85	80	80	80	93	93	93
Heavy Vehicles, %	3	3	3	22	3	3	3	18	22	3	18	3
Mvmt Flow	0	2	6	52	4	2	1	91	75	0	70	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	203	239	70	205	201	129	70	0	0	166	0	0
Stage 1	70	70	-	131	131	-	-	-	-	-	-	-
Stage 2	133	169	-	74	70	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.32	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.32	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.32	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.698	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	753	660	990	712	693	918	1524	-	-	1406	-	-
Stage 1	937	835	-	827	786	-	-	-	-	-	-	-
Stage 2	868	757	-	888	835	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	748	659	990	706	692	918	1524	-	-	1406	-	-
Mov Cap-2 Maneuver	748	659	-	706	692	-	-	-	-	-	-	-
Stage 1	936	835	-	826	785	-	-	-	-	-	-	-
Stage 2	861	756	-	881	835	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.1	10.4	0.1	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1524	-	-	880	705	918	1406	-	-
HCM Lane V/C Ratio	0.001	-	-	0.009	0.078	0.003	-	-	-
HCM Control Delay (s)	7.4	0	-	9.1	10.5	8.9	0	-	-
HCM Lane LOS	A	A	-	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.3	0	0	-	-

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	132	102	0	59	109
Future Volume (veh/h)	0	132	102	0	59	109
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1557	1557	0	1557	1557
Adj Flow Rate, veh/h	0	155	134	0	75	0
Adj No. of Lanes	0	1	1	0	1	1
Peak Hour Factor	0.85	0.85	0.76	0.76	0.79	0.79
Percent Heavy Veh, %	0	22	22	0	22	22
Cap, veh/h	0	241	241	0	1016	907
Arrive On Green	0.00	0.15	0.15	0.00	0.68	0.00
Sat Flow, veh/h	0	1557	1557	0	1483	1324
Grp Volume(v), veh/h	0	155	134	0	75	0
Grp Sat Flow(s),veh/h/ln	0	1557	1557	0	1483	1324
Q Serve(g_s), s	0.0	5.3	4.5	0.0	0.9	0.0
Cycle Q Clear(g_c), s	0.0	5.3	4.5	0.0	0.9	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	241	241	0	1016	907
V/C Ratio(X)	0.00	0.64	0.56	0.00	0.07	0.00
Avail Cap(c_a), veh/h	0	1177	1177	0	1016	907
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	22.3	22.0	0.0	2.9	0.0
Incr Delay (d2), s/veh	0.0	2.8	2.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.4	2.0	0.0	0.4	0.0
LnGrp Delay(d),s/veh	0.0	25.1	23.9	0.0	3.1	0.0
LnGrp LOS		C	C		A	
Approach Vol, veh/h		155	134		75	
Approach Delay, s/veh		25.1	23.9		3.1	
Approach LOS		C	C		A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				13.2		43.0		13.2
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				42.5		38.5		42.5
Max Q Clear Time (g_c+I1), s				7.3		2.9		6.5
Green Ext Time (p_c), s				1.6		0.2		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	20.2
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	111	0	0	25	65	57
Future Volume (veh/h)	111	0	0	25	65	57
Number	4	14	3	8	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1557	0	0	1557	1557	1557
Adj Flow Rate, veh/h	135	0	0	33	86	0
Adj No. of Lanes	1	0	0	1	1	1
Peak Hour Factor	0.82	0.82	0.75	0.75	0.76	0.76
Percent Heavy Veh, %	22	0	0	22	22	22
Cap, veh/h	275	0	0	275	153	137
Arrive On Green	0.18	0.00	0.00	0.18	0.10	0.00
Sat Flow, veh/h	1557	0	0	1557	1483	1324
Grp Volume(v), veh/h	135	0	0	33	86	0
Grp Sat Flow(s),veh/h/ln	1557	0	0	1557	1483	1324
Q Serve(g_s), s	1.0	0.0	0.0	0.2	0.7	0.0
Cycle Q Clear(g_c), s	1.0	0.0	0.0	0.2	0.7	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	275	0	0	275	153	137
V/C Ratio(X)	0.49	0.00	0.00	0.12	0.56	0.00
Avail Cap(c_a), veh/h	6665	0	0	6665	3263	2912
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.6	0.0	0.0	4.3	5.3	0.0
Incr Delay (d2), s/veh	1.4	0.0	0.0	0.2	3.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	0.1	0.4	0.0
LnGrp Delay(d),s/veh	6.0	0.0	0.0	4.5	8.5	0.0
LnGrp LOS	A			A	A	
Approach Vol, veh/h	135			33	86	
Approach Delay, s/veh	6.0			4.5	8.5	
Approach LOS	A			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				6.7		5.8		6.7
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				53.5		27.5		53.5
Max Q Clear Time (g_c+I1), s				3.0		2.7		2.2
Green Ext Time (p_c), s				0.9		0.2		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	6.7
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	0	0	2	173	304	0
Future Vol, veh/h	0	0	2	173	304	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	425	-	-	350
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	78	78	88	88
Heavy Vehicles, %	3	3	3	18	18	3
Mvmt Flow	0	0	3	222	345	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	572	345	345	0	-	0
Stage 1	345	-	-	-	-	-
Stage 2	227	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	480	696	1208	-	-	-
Stage 1	715	-	-	-	-	-
Stage 2	808	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	479	696	1208	-	-	-
Mov Cap-2 Maneuver	479	-	-	-	-	-
Stage 1	715	-	-	-	-	-
Stage 2	806	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1208	-	-	-	-
HCM Lane V/C Ratio	0.002	-	-	-	-
HCM Control Delay (s)	8	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	1	0	65	1	0	0	80	80	0	164	0
Future Vol, veh/h	0	1	0	65	1	0	0	80	80	0	164	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	25	25	25	83	83	83	89	89	89	84	84	84
Heavy Vehicles, %	3	3	3	22	3	3	3	18	22	3	18	3
Mvmt Flow	0	4	0	78	1	0	0	90	90	0	195	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	330	375	195	332	330	135	195	0	0	180	0	0
Stage 1	195	195	-	135	135	-	-	-	-	-	-	-
Stage 2	135	180	-	197	195	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.32	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.32	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.32	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.698	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	621	554	844	585	588	911	1372	-	-	1389	-	-
Stage 1	804	737	-	823	783	-	-	-	-	-	-	-
Stage 2	866	749	-	761	737	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	620	554	844	582	588	911	1372	-	-	1389	-	-
Mov Cap-2 Maneuver	620	554	-	582	588	-	-	-	-	-	-	-
Stage 1	804	737	-	823	783	-	-	-	-	-	-	-
Stage 2	865	749	-	757	737	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.5	12.2	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1372	-	-	554	582	-	1389	-	-
HCM Lane V/C Ratio	-	-	-	0.007	0.137	-	-	-	-
HCM Control Delay (s)	0	-	-	11.5	12.2	0	0	-	-
HCM Lane LOS	A	-	-	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.5	-	0	-	-

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	144	155	0	113	136
Future Volume (veh/h)	0	144	155	0	113	136
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1557	1557	0	1557	1557
Adj Flow Rate, veh/h	0	155	167	0	118	0
Adj No. of Lanes	0	1	1	0	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.96	0.96
Percent Heavy Veh, %	0	22	22	0	22	22
Cap, veh/h	0	257	257	0	1004	896
Arrive On Green	0.00	0.17	0.17	0.00	0.68	0.00
Sat Flow, veh/h	0	1557	1557	0	1483	1324
Grp Volume(v), veh/h	0	155	167	0	118	0
Grp Sat Flow(s),veh/h/ln	0	1557	1557	0	1483	1324
Q Serve(g_s), s	0.0	5.3	5.7	0.0	1.6	0.0
Cycle Q Clear(g_c), s	0.0	5.3	5.7	0.0	1.6	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	257	257	0	1004	896
V/C Ratio(X)	0.00	0.60	0.65	0.00	0.12	0.00
Avail Cap(c_a), veh/h	0	1163	1163	0	1004	896
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	22.0	22.2	0.0	3.2	0.0
Incr Delay (d2), s/veh	0.0	2.3	2.7	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.4	2.7	0.0	0.7	0.0
LnGrp Delay(d),s/veh	0.0	24.3	25.0	0.0	3.5	0.0
LnGrp LOS		C	C		A	
Approach Vol, veh/h		155	167		118	
Approach Delay, s/veh		24.3	25.0		3.5	
Approach LOS		C	C		A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				13.9		43.0		13.9
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				42.5		38.5		42.5
Max Q Clear Time (g_c+I1), s				7.3		3.6		7.7
Green Ext Time (p_c), s				1.8		0.3		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	19.0
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	188	0	0	115	59	69
Future Volume (veh/h)	188	0	0	115	59	69
Number	4	14	3	8	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1557	0	0	1557	1557	1557
Adj Flow Rate, veh/h	224	0	0	132	66	0
Adj No. of Lanes	1	0	0	1	1	1
Peak Hour Factor	0.84	0.84	0.87	0.87	0.89	0.89
Percent Heavy Veh, %	22	0	0	22	22	22
Cap, veh/h	468	0	0	468	119	107
Arrive On Green	0.30	0.00	0.00	0.30	0.08	0.00
Sat Flow, veh/h	1557	0	0	1557	1483	1324
Grp Volume(v), veh/h	224	0	0	132	66	0
Grp Sat Flow(s),veh/h/ln	1557	0	0	1557	1483	1324
Q Serve(g_s), s	1.7	0.0	0.0	0.9	0.6	0.0
Cycle Q Clear(g_c), s	1.7	0.0	0.0	0.9	0.6	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	468	0	0	468	119	107
V/C Ratio(X)	0.48	0.00	0.00	0.28	0.55	0.00
Avail Cap(c_a), veh/h	5733	0	0	5733	2807	2505
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.2	0.0	0.0	3.9	6.4	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.3	4.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	0.4	0.4	0.0
LnGrp Delay(d),s/veh	4.9	0.0	0.0	4.2	10.4	0.0
LnGrp LOS	A			A	B	
Approach Vol, veh/h	224			132	66	
Approach Delay, s/veh	4.9			4.2	10.4	
Approach LOS	A			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				8.9		5.7		8.9
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				53.5		27.5		53.5
Max Q Clear Time (g_c+I1), s				3.7		2.6		2.9
Green Ext Time (p_c), s				2.0		0.1		2.0

Intersection Summary	
HCM 2010 Ctrl Delay	5.6
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	109	42	45	180	123	114
Future Vol, veh/h	109	42	45	180	123	114
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	425	-	-	350
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	64	64	93	93	85	85
Heavy Vehicles, %	3	3	3	18	18	3
Mvmt Flow	170	66	48	194	145	134

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	435	145	145	0	-	0
Stage 1	145	-	-	-	-	-
Stage 2	290	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	576	900	1431	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	757	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	557	900	1431	-	-	-
Mov Cap-2 Maneuver	557	-	-	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	732	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.3	1.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1431	-	623	-	-
HCM Lane V/C Ratio	0.034	-	0.379	-	-
HCM Control Delay (s)	7.6	-	14.3	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	1.8	-	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	1	3	121	3	2	1	108	134	0	102	0
Future Vol, veh/h	0	1	3	121	3	2	1	108	134	0	102	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	50	50	50	85	85	85	80	80	80	93	93	93
Heavy Vehicles, %	3	3	3	22	3	3	3	18	22	3	18	3
Mvmt Flow	0	2	6	142	4	2	1	135	168	0	110	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	333	415	110	335	331	219	110	0	0	303	0	0
Stage 1	110	110	-	221	221	-	-	-	-	-	-	-
Stage 2	223	305	-	114	110	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.32	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.32	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.32	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.698	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	619	526	941	582	587	818	1474	-	-	1252	-	-
Stage 1	893	802	-	738	719	-	-	-	-	-	-	-
Stage 2	777	660	-	844	802	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	614	525	941	576	586	818	1474	-	-	1252	-	-
Mov Cap-2 Maneuver	614	525	-	576	586	-	-	-	-	-	-	-
Stage 1	892	802	-	737	718	-	-	-	-	-	-	-
Stage 2	770	659	-	837	802	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.6	13.3	0	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1474	-	-	785	576	818	1252	-	-
HCM Lane V/C Ratio	0.001	-	-	0.01	0.253	0.003	-	-	-
HCM Control Delay (s)	7.4	0	-	9.6	13.4	9.4	0	-	-
HCM Lane LOS	A	A	-	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	1	0	0	-	-

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	206	179	0	59	109
Future Volume (veh/h)	0	206	179	0	59	109
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1557	1557	0	1557	1557
Adj Flow Rate, veh/h	0	242	236	0	75	0
Adj No. of Lanes	0	1	1	0	1	1
Peak Hour Factor	0.85	0.85	0.76	0.76	0.79	0.79
Percent Heavy Veh, %	0	22	22	0	22	22
Cap, veh/h	0	343	343	0	937	836
Arrive On Green	0.00	0.22	0.22	0.00	0.63	0.00
Sat Flow, veh/h	0	1557	1557	0	1483	1324
Grp Volume(v), veh/h	0	242	236	0	75	0
Grp Sat Flow(s),veh/h/ln	0	1557	1557	0	1483	1324
Q Serve(g_s), s	0.0	8.7	8.5	0.0	1.2	0.0
Cycle Q Clear(g_c), s	0.0	8.7	8.5	0.0	1.2	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	343	343	0	937	836
V/C Ratio(X)	0.00	0.70	0.69	0.00	0.08	0.00
Avail Cap(c_a), veh/h	0	1086	1086	0	937	836
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	21.9	21.8	0.0	4.4	0.0
Incr Delay (d2), s/veh	0.0	2.6	2.4	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.0	3.8	0.0	0.5	0.0
LnGrp Delay(d),s/veh	0.0	24.6	24.3	0.0	4.5	0.0
LnGrp LOS		C	C		A	
Approach Vol, veh/h		242	236		75	
Approach Delay, s/veh		24.6	24.3		4.5	
Approach LOS		C	C		A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				17.9		43.0		17.9
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				42.5		38.5		42.5
Max Q Clear Time (g_c+I1), s				10.7		3.2		10.5
Green Ext Time (p_c), s				2.7		0.2		2.7

Intersection Summary	
HCM 2010 Ctrl Delay	21.7
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	185	0	0	102	65	57
Future Volume (veh/h)	185	0	0	102	65	57
Number	4	14	3	8	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1557	0	0	1557	1557	1557
Adj Flow Rate, veh/h	226	0	0	136	86	0
Adj No. of Lanes	1	0	0	1	1	1
Peak Hour Factor	0.82	0.82	0.75	0.75	0.76	0.76
Percent Heavy Veh, %	22	0	0	22	22	22
Cap, veh/h	471	0	0	471	149	133
Arrive On Green	0.30	0.00	0.00	0.30	0.10	0.00
Sat Flow, veh/h	1557	0	0	1557	1483	1324
Grp Volume(v), veh/h	226	0	0	136	86	0
Grp Sat Flow(s),veh/h/ln	1557	0	0	1557	1483	1324
Q Serve(g_s), s	1.8	0.0	0.0	1.0	0.8	0.0
Cycle Q Clear(g_c), s	1.8	0.0	0.0	1.0	0.8	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	471	0	0	471	149	133
V/C Ratio(X)	0.48	0.00	0.00	0.29	0.58	0.00
Avail Cap(c_a), veh/h	5531	0	0	5531	2708	2417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.3	0.0	0.0	4.0	6.5	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.3	3.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	0.5	0.5	0.0
LnGrp Delay(d),s/veh	5.1	0.0	0.0	4.4	10.0	0.0
LnGrp LOS	A			A	A	
Approach Vol, veh/h	226			136	86	
Approach Delay, s/veh	5.1			4.4	10.0	
Approach LOS	A			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				9.1		6.0		9.1
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				53.5		27.5		53.5
Max Q Clear Time (g_c+I1), s				3.8		2.8		3.0
Green Ext Time (p_c), s				2.1		0.2		2.1

Intersection Summary	
HCM 2010 Ctrl Delay	5.8
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	29	10	11	173	304	24
Future Vol, veh/h	29	10	11	173	304	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	425	-	-	350
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	78	78	88	88
Heavy Vehicles, %	3	3	3	18	18	3
Mvmt Flow	32	11	14	222	345	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	595	345	345	0	-	0
Stage 1	345	-	-	-	-	-
Stage 2	250	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	465	696	1208	-	-	-
Stage 1	715	-	-	-	-	-
Stage 2	789	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	460	696	1208	-	-	-
Mov Cap-2 Maneuver	460	-	-	-	-	-
Stage 1	715	-	-	-	-	-
Stage 2	780	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.8	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1208	-	504	-	-
HCM Lane V/C Ratio	0.012	-	0.084	-	-
HCM Control Delay (s)	8	-	12.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	1	0	81	1	0	0	90	99	0	172	0
Future Vol, veh/h	0	1	0	81	1	0	0	90	99	0	172	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	25	25	25	83	83	83	89	89	89	84	84	84
Heavy Vehicles, %	3	3	3	22	3	3	3	18	22	3	18	3
Mvmt Flow	0	4	0	98	1	0	0	101	111	0	205	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	362	417	205	364	362	157	205	0	0	212	0	0
Stage 1	205	205	-	157	157	-	-	-	-	-	-	-
Stage 2	157	212	-	207	205	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.32	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.32	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.32	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.698	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	592	525	833	557	564	886	1360	-	-	1352	-	-
Stage 1	795	730	-	800	766	-	-	-	-	-	-	-
Stage 2	843	725	-	751	730	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	591	525	833	554	564	886	1360	-	-	1352	-	-
Mov Cap-2 Maneuver	591	525	-	554	564	-	-	-	-	-	-	-
Stage 1	795	730	-	800	766	-	-	-	-	-	-	-
Stage 2	842	725	-	747	730	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.9	12.9	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1360	-	-	525	554	-	1352	-	-
HCM Lane V/C Ratio	-	-	-	0.008	0.178	-	-	-	-
HCM Control Delay (s)	0	-	-	11.9	12.9	0	0	-	-
HCM Lane LOS	A	-	-	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.6	-	0	-	-

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	163	171	0	113	136
Future Volume (veh/h)	0	163	171	0	113	136
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1557	1557	0	1557	1557
Adj Flow Rate, veh/h	0	175	184	0	118	0
Adj No. of Lanes	0	1	1	0	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.96	0.96
Percent Heavy Veh, %	0	22	22	0	22	22
Cap, veh/h	0	278	278	0	988	882
Arrive On Green	0.00	0.18	0.18	0.00	0.67	0.00
Sat Flow, veh/h	0	1557	1557	0	1483	1324
Grp Volume(v), veh/h	0	175	184	0	118	0
Grp Sat Flow(s),veh/h/ln	0	1557	1557	0	1483	1324
Q Serve(g_s), s	0.0	6.0	6.4	0.0	1.7	0.0
Cycle Q Clear(g_c), s	0.0	6.0	6.4	0.0	1.7	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	278	278	0	988	882
V/C Ratio(X)	0.00	0.63	0.66	0.00	0.12	0.00
Avail Cap(c_a), veh/h	0	1145	1145	0	988	882
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	22.0	22.1	0.0	3.5	0.0
Incr Delay (d2), s/veh	0.0	2.4	2.7	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.8	2.9	0.0	0.7	0.0
LnGrp Delay(d),s/veh	0.0	24.3	24.8	0.0	3.7	0.0
LnGrp LOS		C	C		A	
Approach Vol, veh/h		175	184		118	
Approach Delay, s/veh		24.3	24.8		3.7	
Approach LOS		C	C		A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				14.8		43.0		14.8
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				42.5		38.5		42.5
Max Q Clear Time (g_c+I1), s				8.0		3.7		8.4
Green Ext Time (p_c), s				2.0		0.3		2.0

Intersection Summary	
HCM 2010 Ctrl Delay	19.4
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	207	0	0	131	59	69
Future Volume (veh/h)	207	0	0	131	59	69
Number	4	14	3	8	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1557	0	0	1557	1557	1557
Adj Flow Rate, veh/h	246	0	0	151	66	0
Adj No. of Lanes	1	0	0	1	1	1
Peak Hour Factor	0.84	0.84	0.87	0.87	0.89	0.89
Percent Heavy Veh, %	22	0	0	22	22	22
Cap, veh/h	514	0	0	514	119	106
Arrive On Green	0.33	0.00	0.00	0.33	0.08	0.00
Sat Flow, veh/h	1557	0	0	1557	1483	1324
Grp Volume(v), veh/h	246	0	0	151	66	0
Grp Sat Flow(s),veh/h/ln	1557	0	0	1557	1483	1324
Q Serve(g_s), s	1.9	0.0	0.0	1.1	0.7	0.0
Cycle Q Clear(g_c), s	1.9	0.0	0.0	1.1	0.7	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	514	0	0	514	119	106
V/C Ratio(X)	0.48	0.00	0.00	0.29	0.56	0.00
Avail Cap(c_a), veh/h	5460	0	0	5460	2673	2386
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.1	0.0	0.0	3.8	6.8	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.3	4.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	0.5	0.4	0.0
LnGrp Delay(d),s/veh	4.8	0.0	0.0	4.1	10.8	0.0
LnGrp LOS	A			A	B	
Approach Vol, veh/h	246			151	66	
Approach Delay, s/veh	4.8			4.1	10.8	
Approach LOS	A			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				9.5		5.7		9.5
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				53.5		27.5		53.5
Max Q Clear Time (g_c+I1), s				3.9		2.7		3.1
Green Ext Time (p_c), s				2.3		0.1		2.3

Intersection Summary	
HCM 2010 Ctrl Delay	5.4
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	0	0	0	284	194	0
Future Vol, veh/h	0	0	0	284	194	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	425	-	-	350
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	18	18	3
Mvmt Flow	0	0	0	309	211	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	520	211	211	0	-	0
Stage 1	211	-	-	-	-	-
Stage 2	309	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	515	827	1354	-	-	-
Stage 1	822	-	-	-	-	-
Stage 2	742	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	515	827	1354	-	-	-
Mov Cap-2 Maneuver	515	-	-	-	-	-
Stage 1	822	-	-	-	-	-
Stage 2	742	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1354	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	2	5	70	5	3	2	115	95	0	103	0
Future Vol, veh/h	0	2	5	70	5	3	2	115	95	0	103	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	22	3	3	3	18	22	3	18	3
Mvmt Flow	0	2	5	76	5	3	2	125	103	0	112	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	296	345	112	297	293	177	112	0	0	228	0	0
Stage 1	112	112	-	181	181	-	-	-	-	-	-	-
Stage 2	184	233	-	116	112	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.32	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.32	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.32	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.698	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	654	576	938	617	616	863	1471	-	-	1334	-	-
Stage 1	891	801	-	776	748	-	-	-	-	-	-	-
Stage 2	815	710	-	842	801	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	646	575	938	611	615	863	1471	-	-	1334	-	-
Mov Cap-2 Maneuver	646	575	-	611	615	-	-	-	-	-	-	-
Stage 1	889	801	-	774	747	-	-	-	-	-	-	-
Stage 2	804	709	-	835	801	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.6	11.7	0.1	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1471	-	-	795	611	863	1334	-	-
HCM Lane V/C Ratio	0.001	-	-	0.01	0.133	0.004	-	-	-
HCM Control Delay (s)	7.5	0	-	9.6	11.8	9.2	0	-	-
HCM Lane LOS	A	A	-	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.5	0	0	-	-

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	209	161	0	93	172
Future Volume (veh/h)	0	209	161	0	93	172
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1557	1557	0	1557	1557
Adj Flow Rate, veh/h	0	227	175	0	101	0
Adj No. of Lanes	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	22	22	0	22	22
Cap, veh/h	0	321	321	0	955	852
Arrive On Green	0.00	0.21	0.21	0.00	0.64	0.00
Sat Flow, veh/h	0	1557	1557	0	1483	1324
Grp Volume(v), veh/h	0	227	175	0	101	0
Grp Sat Flow(s),veh/h/ln	0	1557	1557	0	1483	1324
Q Serve(g_s), s	0.0	8.1	6.0	0.0	1.6	0.0
Cycle Q Clear(g_c), s	0.0	8.1	6.0	0.0	1.6	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	321	321	0	955	852
V/C Ratio(X)	0.00	0.71	0.55	0.00	0.11	0.00
Avail Cap(c_a), veh/h	0	1106	1106	0	955	852
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	22.1	21.2	0.0	4.1	0.0
Incr Delay (d2), s/veh	0.0	2.9	1.4	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.7	2.7	0.0	0.7	0.0
LnGrp Delay(d),s/veh	0.0	24.9	22.7	0.0	4.3	0.0
LnGrp LOS		C	C		A	
Approach Vol, veh/h		227	175		101	
Approach Delay, s/veh		24.9	22.7		4.3	
Approach LOS		C	C		A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				16.8		43.0		16.8
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				42.5		38.5		42.5
Max Q Clear Time (g_c+I1), s				10.1		3.6		8.0
Green Ext Time (p_c), s				2.2		0.3		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	20.0
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	175	0	0	43	103	90
Future Volume (veh/h)	175	0	0	43	103	90
Number	4	14	3	8	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1557	0	0	1557	1557	1557
Adj Flow Rate, veh/h	190	0	0	47	112	0
Adj No. of Lanes	1	0	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	22	0	0	22	22	22
Cap, veh/h	338	0	0	338	188	168
Arrive On Green	0.22	0.00	0.00	0.22	0.13	0.00
Sat Flow, veh/h	1557	0	0	1557	1483	1324
Grp Volume(v), veh/h	190	0	0	47	112	0
Grp Sat Flow(s),veh/h/ln	1557	0	0	1557	1483	1324
Q Serve(g_s), s	1.5	0.0	0.0	0.3	1.0	0.0
Cycle Q Clear(g_c), s	1.5	0.0	0.0	0.3	1.0	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	338	0	0	338	188	168
V/C Ratio(X)	0.56	0.00	0.00	0.14	0.60	0.00
Avail Cap(c_a), veh/h	6078	0	0	6078	2976	2656
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.8	0.0	0.0	4.3	5.7	0.0
Incr Delay (d2), s/veh	1.5	0.0	0.0	0.2	3.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	0.2	0.5	0.0
LnGrp Delay(d),s/veh	6.3	0.0	0.0	4.5	8.7	0.0
LnGrp LOS	A			A	A	
Approach Vol, veh/h	190			47	112	
Approach Delay, s/veh	6.3			4.5	8.7	
Approach LOS	A			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				7.5		6.2		7.5
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				53.5		27.5		53.5
Max Q Clear Time (g_c+I1), s				3.5		3.0		2.3
Green Ext Time (p_c), s				1.3		0.3		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	6.8
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	0	0	3	273	480	0
Future Vol, veh/h	0	0	3	273	480	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	425	-	-	350
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	18	18	3
Mvmt Flow	0	0	3	297	522	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	825	522	522	0	-	0
Stage 1	522	-	-	-	-	-
Stage 2	303	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	341	553	1039	-	-	-
Stage 1	593	-	-	-	-	-
Stage 2	747	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	340	553	1039	-	-	-
Mov Cap-2 Maneuver	340	-	-	-	-	-
Stage 1	593	-	-	-	-	-
Stage 2	745	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1039	-	-	-	-
HCM Lane V/C Ratio	0.003	-	-	-	-
HCM Control Delay (s)	8.5	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	2	0	103	2	0	0	126	126	0	259	0
Future Vol, veh/h	0	2	0	103	2	0	0	126	126	0	259	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	22	3	3	3	18	22	3	18	3
Mvmt Flow	0	2	0	112	2	0	0	137	137	0	282	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	489	556	282	488	487	205	282	0	0	274	0	0
Stage 1	282	282	-	205	205	-	-	-	-	-	-	-
Stage 2	207	274	-	283	282	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.32	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.32	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.32	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.698	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	488	438	755	459	479	833	1275	-	-	1283	-	-
Stage 1	723	676	-	753	730	-	-	-	-	-	-	-
Stage 2	793	681	-	683	676	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	486	438	755	457	479	833	1275	-	-	1283	-	-
Mov Cap-2 Maneuver	486	438	-	457	479	-	-	-	-	-	-	-
Stage 1	723	676	-	753	730	-	-	-	-	-	-	-
Stage 2	791	681	-	681	676	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.3	15.5	0	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1275	-	-	438	457	-	1283	-	-
HCM Lane V/C Ratio	-	-	-	0.005	0.25	-	-	-	-
HCM Control Delay (s)	0	-	-	13.3	15.5	0	0	-	-
HCM Lane LOS	A	-	-	B	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	1	-	0	-	-

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	228	245	0	179	215
Future Volume (veh/h)	0	228	245	0	179	215
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1557	1557	0	1557	1557
Adj Flow Rate, veh/h	0	248	266	0	195	0
Adj No. of Lanes	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	22	22	0	22	22
Cap, veh/h	0	368	368	0	918	819
Arrive On Green	0.00	0.24	0.24	0.00	0.62	0.00
Sat Flow, veh/h	0	1557	1557	0	1483	1324
Grp Volume(v), veh/h	0	248	266	0	195	0
Grp Sat Flow(s),veh/h/ln	0	1557	1557	0	1483	1324
Q Serve(g_s), s	0.0	9.0	9.8	0.0	3.6	0.0
Cycle Q Clear(g_c), s	0.0	9.0	9.8	0.0	3.6	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	368	368	0	918	819
V/C Ratio(X)	0.00	0.67	0.72	0.00	0.21	0.00
Avail Cap(c_a), veh/h	0	1064	1064	0	918	819
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	21.6	21.9	0.0	5.2	0.0
Incr Delay (d2), s/veh	0.0	2.1	2.7	0.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.1	4.5	0.0	1.6	0.0
LnGrp Delay(d),s/veh	0.0	23.7	24.6	0.0	5.7	0.0
LnGrp LOS		C	C		A	
Approach Vol, veh/h		248	266		195	
Approach Delay, s/veh		23.7	24.6		5.7	
Approach LOS		C	C		A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				19.2		43.0		19.2
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				42.5		38.5		42.5
Max Q Clear Time (g_c+I1), s				11.0		5.6		11.8
Green Ext Time (p_c), s				2.9		0.6		2.9

Intersection Summary	
HCM 2010 Ctrl Delay	19.1
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	297	0	0	182	93	109
Future Volume (veh/h)	297	0	0	182	93	109
Number	4	14	3	8	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1557	0	0	1557	1557	1557
Adj Flow Rate, veh/h	323	0	0	198	101	0
Adj No. of Lanes	1	0	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	22	0	0	22	22	22
Cap, veh/h	627	0	0	627	162	145
Arrive On Green	0.40	0.00	0.00	0.40	0.11	0.00
Sat Flow, veh/h	1557	0	0	1557	1483	1324
Grp Volume(v), veh/h	323	0	0	198	101	0
Grp Sat Flow(s),veh/h/ln	1557	0	0	1557	1483	1324
Q Serve(g_s), s	2.9	0.0	0.0	1.6	1.2	0.0
Cycle Q Clear(g_c), s	2.9	0.0	0.0	1.6	1.2	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	627	0	0	627	162	145
V/C Ratio(X)	0.52	0.00	0.00	0.32	0.62	0.00
Avail Cap(c_a), veh/h	4516	0	0	4516	2211	1973
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.2	0.0	0.0	3.8	7.8	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.3	3.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	0.7	0.7	0.0
LnGrp Delay(d),s/veh	4.8	0.0	0.0	4.1	11.7	0.0
LnGrp LOS	A			A	B	
Approach Vol, veh/h	323			198	101	
Approach Delay, s/veh	4.8			4.1	11.7	
Approach LOS	A			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				11.9		6.5		11.9
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				53.5		27.5		53.5
Max Q Clear Time (g_c+I1), s				4.9		3.2		3.6
Green Ext Time (p_c), s				3.1		0.2		3.1

Intersection Summary	
HCM 2010 Ctrl Delay	5.7
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	109	42	45	284	194	114
Future Vol, veh/h	109	42	45	284	194	114
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	425	-	-	350
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	18	18	3
Mvmt Flow	118	46	49	309	211	124

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	618	211	211	0	-	0
Stage 1	211	-	-	-	-	-
Stage 2	407	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	451	827	1354	-	-	-
Stage 1	822	-	-	-	-	-
Stage 2	670	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	435	827	1354	-	-	-
Mov Cap-2 Maneuver	435	-	-	-	-	-
Stage 1	822	-	-	-	-	-
Stage 2	646	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.6	1.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1354	-	501	-	-
HCM Lane V/C Ratio	0.036	-	0.328	-	-
HCM Control Delay (s)	7.8	-	15.6	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1.4	-	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	2	5	147	5	3	2	150	169	0	140	0
Future Vol, veh/h	0	2	5	147	5	3	2	150	169	0	140	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	22	3	3	3	18	22	3	18	3
Mvmt Flow	0	2	5	160	5	3	2	163	184	0	152	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	414	503	152	415	411	255	152	0	0	347	0	0
Stage 1	152	152	-	259	259	-	-	-	-	-	-	-
Stage 2	262	351	-	156	152	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.32	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.32	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.32	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.698	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	547	469	892	514	529	781	1423	-	-	1206	-	-
Stage 1	848	770	-	704	692	-	-	-	-	-	-	-
Stage 2	741	630	-	801	770	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	540	468	892	508	528	781	1423	-	-	1206	-	-
Mov Cap-2 Maneuver	540	468	-	508	528	-	-	-	-	-	-	-
Stage 1	846	770	-	703	691	-	-	-	-	-	-	-
Stage 2	731	629	-	794	770	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.1	15.3	0	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1423	-	-	709	509	781	1206	-	-
HCM Lane V/C Ratio	0.002	-	-	0.011	0.325	0.004	-	-	-
HCM Control Delay (s)	7.5	0	-	10.1	15.4	9.6	0	-	-
HCM Lane LOS	A	A	-	B	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	1.4	0	0	-	-

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	283	238	0	93	172
Future Volume (veh/h)	0	283	238	0	93	172
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1557	1557	0	1557	1557
Adj Flow Rate, veh/h	0	308	259	0	101	0
Adj No. of Lanes	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	22	22	0	22	22
Cap, veh/h	0	410	410	0	886	791
Arrive On Green	0.00	0.26	0.26	0.00	0.60	0.00
Sat Flow, veh/h	0	1557	1557	0	1483	1324
Grp Volume(v), veh/h	0	308	259	0	101	0
Grp Sat Flow(s),veh/h/ln	0	1557	1557	0	1483	1324
Q Serve(g_s), s	0.0	11.7	9.5	0.0	1.9	0.0
Cycle Q Clear(g_c), s	0.0	11.7	9.5	0.0	1.9	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	410	410	0	886	791
V/C Ratio(X)	0.00	0.75	0.63	0.00	0.11	0.00
Avail Cap(c_a), veh/h	0	1027	1027	0	886	791
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	21.8	21.0	0.0	5.6	0.0
Incr Delay (d2), s/veh	0.0	2.8	1.6	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.3	4.2	0.0	0.8	0.0
LnGrp Delay(d),s/veh	0.0	24.6	22.6	0.0	5.9	0.0
LnGrp LOS		C	C		A	
Approach Vol, veh/h		308	259		101	
Approach Delay, s/veh		24.6	22.6		5.9	
Approach LOS		C	C		A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				21.5		43.0		21.5
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				42.5		38.5		42.5
Max Q Clear Time (g_c+I1), s				13.7		3.9		11.5
Green Ext Time (p_c), s				3.3		0.3		3.3

Intersection Summary	
HCM 2010 Ctrl Delay	21.0
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	249	0	0	120	103	90
Future Volume (veh/h)	249	0	0	120	103	90
Number	4	14	3	8	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1557	0	0	1557	1557	1557
Adj Flow Rate, veh/h	271	0	0	130	112	0
Adj No. of Lanes	1	0	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	22	0	0	22	22	22
Cap, veh/h	524	0	0	524	180	161
Arrive On Green	0.34	0.00	0.00	0.34	0.12	0.00
Sat Flow, veh/h	1557	0	0	1557	1483	1324
Grp Volume(v), veh/h	271	0	0	130	112	0
Grp Sat Flow(s),veh/h/ln	1557	0	0	1557	1483	1324
Q Serve(g_s), s	2.3	0.0	0.0	1.0	1.2	0.0
Cycle Q Clear(g_c), s	2.3	0.0	0.0	1.0	1.2	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	524	0	0	524	180	161
V/C Ratio(X)	0.52	0.00	0.00	0.25	0.62	0.00
Avail Cap(c_a), veh/h	5018	0	0	5018	2457	2192
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.4	0.0	0.0	4.0	6.9	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.2	3.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	0.5	0.6	0.0
LnGrp Delay(d),s/veh	5.2	0.0	0.0	4.2	10.4	0.0
LnGrp LOS	A			A	B	
Approach Vol, veh/h	271			130	112	
Approach Delay, s/veh	5.2			4.2	10.4	
Approach LOS	A			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				10.1		6.5		10.1
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				53.5		27.5		53.5
Max Q Clear Time (g_c+I1), s				4.3		3.2		3.0
Green Ext Time (p_c), s				2.3		0.3		2.3

Intersection Summary	
HCM 2010 Ctrl Delay	6.1
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	29	10	12	273	480	24
Future Vol, veh/h	29	10	12	273	480	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	425	-	-	350
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	18	18	3
Mvmt Flow	32	11	13	297	522	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	845	522	522	0	-	0
Stage 1	522	-	-	-	-	-
Stage 2	323	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	332	553	1039	-	-	-
Stage 1	593	-	-	-	-	-
Stage 2	732	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	328	553	1039	-	-	-
Mov Cap-2 Maneuver	328	-	-	-	-	-
Stage 1	593	-	-	-	-	-
Stage 2	723	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.1	0.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1039	-	366	-	-
HCM Lane V/C Ratio	0.013	-	0.116	-	-
HCM Control Delay (s)	8.5	-	16.1	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	2	0	119	2	0	0	136	145	0	267	0
Future Vol, veh/h	0	2	0	119	2	0	0	136	145	0	267	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	22	3	3	3	18	22	3	18	3
Mvmt Flow	0	2	0	129	2	0	0	148	158	0	290	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	518	595	290	518	517	227	290	0	0	305	0	0
Stage 1	290	290	-	227	227	-	-	-	-	-	-	-
Stage 2	228	305	-	291	290	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.32	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.32	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.32	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.698	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	467	416	747	438	461	810	1266	-	-	1250	-	-
Stage 1	716	670	-	733	714	-	-	-	-	-	-	-
Stage 2	772	660	-	676	670	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	465	416	747	436	461	810	1266	-	-	1250	-	-
Mov Cap-2 Maneuver	465	416	-	436	461	-	-	-	-	-	-	-
Stage 1	716	670	-	733	714	-	-	-	-	-	-	-
Stage 2	770	660	-	674	670	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.7	16.8	0	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1266	-	-	416	436	-	1250	-	-
HCM Lane V/C Ratio	-	-	-	0.005	0.302	-	-	-	-
HCM Control Delay (s)	0	-	-	13.7	16.8	0	0	-	-
HCM Lane LOS	A	-	-	B	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	1.3	-	0	-	-

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	247	261	0	179	215
Future Volume (veh/h)	0	247	261	0	179	215
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1557	1557	0	1557	1557
Adj Flow Rate, veh/h	0	268	284	0	195	0
Adj No. of Lanes	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	22	22	0	22	22
Cap, veh/h	0	388	388	0	903	806
Arrive On Green	0.00	0.25	0.25	0.00	0.61	0.00
Sat Flow, veh/h	0	1557	1557	0	1483	1324
Grp Volume(v), veh/h	0	268	284	0	195	0
Grp Sat Flow(s),veh/h/ln	0	1557	1557	0	1483	1324
Q Serve(g_s), s	0.0	9.9	10.6	0.0	3.7	0.0
Cycle Q Clear(g_c), s	0.0	9.9	10.6	0.0	3.7	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	388	388	0	903	806
V/C Ratio(X)	0.00	0.69	0.73	0.00	0.22	0.00
Avail Cap(c_a), veh/h	0	1046	1046	0	903	806
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	21.5	21.8	0.0	5.6	0.0
Incr Delay (d2), s/veh	0.0	2.2	2.7	0.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.5	4.8	0.0	1.7	0.0
LnGrp Delay(d),s/veh	0.0	23.7	24.5	0.0	6.1	0.0
LnGrp LOS		C	C		A	
Approach Vol, veh/h		268	284		195	
Approach Delay, s/veh		23.7	24.5		6.1	
Approach LOS		C	C		A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				20.3		43.0		20.3
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				42.5		38.5		42.5
Max Q Clear Time (g_c+I1), s				11.9		5.7		12.6
Green Ext Time (p_c), s				3.2		0.6		3.2

Intersection Summary	
HCM 2010 Ctrl Delay	19.4
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	316	0	0	198	93	109
Future Volume (veh/h)	316	0	0	198	93	109
Number	4	14	3	8	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1557	0	0	1557	1557	1557
Adj Flow Rate, veh/h	343	0	0	215	101	0
Adj No. of Lanes	1	0	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	22	0	0	22	22	22
Cap, veh/h	655	0	0	655	161	144
Arrive On Green	0.42	0.00	0.00	0.42	0.11	0.00
Sat Flow, veh/h	1557	0	0	1557	1483	1324
Grp Volume(v), veh/h	343	0	0	215	101	0
Grp Sat Flow(s),veh/h/ln	1557	0	0	1557	1483	1324
Q Serve(g_s), s	3.1	0.0	0.0	1.8	1.2	0.0
Cycle Q Clear(g_c), s	3.1	0.0	0.0	1.8	1.2	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	655	0	0	655	161	144
V/C Ratio(X)	0.52	0.00	0.00	0.33	0.63	0.00
Avail Cap(c_a), veh/h	4357	0	0	4357	2133	1903
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.1	0.0	0.0	3.7	8.2	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.3	4.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.0	0.8	0.7	0.0
LnGrp Delay(d),s/veh	4.8	0.0	0.0	4.0	12.1	0.0
LnGrp LOS	A			A	B	
Approach Vol, veh/h	343			215	101	
Approach Delay, s/veh	4.8			4.0	12.1	
Approach LOS	A			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				12.5		6.6		12.5
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				53.5		27.5		53.5
Max Q Clear Time (g_c+I1), s				5.1		3.2		3.8
Green Ext Time (p_c), s				3.4		0.2		3.4

Intersection Summary	
HCM 2010 Ctrl Delay	5.6
HCM 2010 LOS	A

APPENDIX D

Traffic Index Analysis

PHELPS AVENUE

Existing Conditions (w/out Granite Construction Trips)
TI Calculation

SEGMENT = **Phelps Avenue (Eastbound)**

TRUCK CLASSIFICATION	ADTT 2019 COUNTS	GRANITE TRUCKS IN 2019 COUNTS (FROM SURVEY)	ADTT 2019 COUNTS W/OUT GRANITE TRUCKS	ANNUAL GROWTH RATE	EXPANDED ADTT	ESAL 20 YEAR CONSTANT		TOTAL 20 YEAR ESAL	
2-AXLE	21	0	21	2.0%	31	1380		43,064	
3-AXLE	13	2	11	2.0%	16	3680		60,153	
4-AXLE	5	5	0	2.0%	0	5880		0	
>5-AXLE	21	11	10	2.0%	15	13780		204,771	
							TOTAL	307,988	
								7.8	**8.0**

Existing Conditions **(w/out Granite Construction Trips)**
TI Calculation

SEGMENT = **Phelps Avenue (Westbound)**

TRUCK CLASSIFICATION	ADTT 2019 COUNTS	GRANITE TRUCKS IN 2019 COUNTS (FROM SURVEY)	ADTT 2019 COUNTS W/OUT GRANITE TRUCKS	ANNUAL GROWTH RATE	EXPANDED ADTT	ESAL 20 YEAR CONSTANT		TOTAL 20 YEAR ESAL	
2-AXLE	13	0	13	2.0%	19	1380		26,659	
3-AXLE	10	0	10	2.0%	15	3680		54,685	
4-AXLE	0	0	0	2.0%	0	5880		0	
>5-AXLE	30	14	16	2.0%	24	13780		327,633	
							TOTAL	408,977	
								8.1	**8.0**

Existing Conditions (w/ Granite Construction Trips)
TI Calculation

SEGMENT = **Jayne Avenue (Eastbound)**

TRUCK CLASSIFICATION	ADTT 2019 COUNTS	GRANITE TRUCKS IN 2019 COUNTS (FROM SURVEY)	ADTT 2019 COUNTS W/OUT GRANITE TRUCKS	GRANITE TRUCKS (1.5 MT SALES)	ADTT 2019 COUNTS WITH GRANITE TRUCKS	ANNUAL GROWTH RATE	EXPANDED ADTT	ESAL 20 YEAR CONSTANT		TOTAL 20 YEAR ESAL	
2-AXLE	65	0	65	0	65	2.0%	97	1380		133,294	
3-AXLE	20	0	20	0	20	2.0%	30	3680		109,370	
4-AXLE	16	5	11	0	11	2.0%	16	5880		96,114	
>5-AXLE	112	11	101	32	133	2.0%	182	13780		2,507,960	
		Granite Truck Trips will remain consistent with 1.5 MT of sales							TOTAL	2,846,738	
										10.2	**10.0**

Existing Conditions (w/ Granite Construction Trips)
TI Calculation

SEGMENT = **Jayne Avenue (Westbound)**

TRUCK CLASSIFICATION	ADTT 2019 COUNTS	GRANITE TRUCKS IN 2019 COUNTS (FROM SURVEY)	ADTT 2019 COUNTS W/OUT GRANITE TRUCKS	GRANITE TRUCKS (1.5 MT SALES)	ADTT 2019 COUNTS WITH GRANITE TRUCKS	ANNUAL GROWTH RATE	EXPANDED ADTT	ESAL 20 YEAR CONSTANT		TOTAL 20 YEAR ESAL	
2-AXLE	68	0	68	0	68	2.0%	101	1380		139,446	
3-AXLE	19	6	13	0	13	2.0%	19	3680		71,090	
4-AXLE	9	0	9	0	9	2.0%	13	5880		78,639	
>5-AXLE	146	16	130	32	162	2.0%	225	13780		3,100,500	
		Granite Truck Trips will remain consistent with 1.5 MT of sales							TOTAL	3,389,676	
										10.4	**10.5**

CALAVERAS AVENUE

Existing Conditions **(w/out Granite Construction Trips)**
TI Calculation

SEGMENT = **Calaveras Avenue (Northbound)**

TRUCK CLASSIFICATION	ADTT 2019 COUNTS	GRANITE TRUCKS IN 2019 COUNTS (FROM SURVEY)	ADTT 2019 COUNTS W/OUT GRANITE TRUCKS	ANNUAL GROWTH RATE	EXPANDED ADTT	ESAL 20 YEAR CONSTANT		TOTAL 20 YEAR ESAL	
2-AXLE	11	0	11	2.0%	16	1380		22,557	
3-AXLE	7	0	7	2.0%	10	3680		38,279	
4-AXLE	0	0	0	2.0%	0	5880		0	
>5-AXLE	43	14	29	2.0%	43	13780		593,835	
							TOTAL	654,672	
								8.6	**8.5**

Existing Conditions (w/out Granite Construction Trips)
TI Calculation

SEGMENT = **Calaveras Avenue (Southbound)**

TRUCK CLASSIFICATION	ADTT 2019 COUNTS	GRANITE TRUCKS IN 2019 COUNTS (FROM SURVEY)	ADTT 2019 COUNTS W/OUT GRANITE TRUCKS	ANNUAL GROWTH RATE	EXPANDED ADTT	ESAL 20 YEAR CONSTANT		TOTAL 20 YEAR ESAL	
2-AXLE	12	0	12	2.0%	18	1380		24,608	
3-AXLE	6	2	4	2.0%	6	3680		21,874	
4-AXLE	5	5	0	2.0%	0	5880		0	
>5-AXLE	41	11	30	2.0%	45	13780		614,312	
							TOTAL	660,794	
								8.6	**8.5**

Existing Conditions (w/ Granite Construction Trips)
TI Calculation

SEGMENT = **Calaveras Avenue (Northbound)**

TRUCK CLASSIFICATION	ADTT 2019 COUNTS	GRANITE TRUCKS IN 2019 COUNTS (FROM SURVEY)	ADTT 2019 COUNTS W/OUT GRANITE TRUCKS	GRANITE TRUCKS (1.5 MT SALES)	ADTT 2019 COUNTS WITH GRANITE TRUCKS	ANNUAL GROWTH RATE	EXPANDED ADTT	ESAL 20 YEAR CONSTANT		TOTAL 20 YEAR ESAL	
2-AXLE	11	0	11	0	11	2.0%	16	1380		22,557	
3-AXLE	7	0	7	0	7	2.0%	10	3680		38,279	
4-AXLE	0	0	0	0	0	2.0%	0	5880		0	
>5-AXLE	43	14	29	22	51	2.0%	65	13780		895,700	
		Granite Truck Trips will remain consistent with 1.5 MT of sales							TOTAL	956,537	
										9.0	**9.0**

Existing Conditions (w/ Granite Construction Trips)
TI Calculation

SEGMENT = **Calaveras Avenue (Southbound)**

TRUCK CLASSIFICATION	ADTT 2019 COUNTS	GRANITE TRUCKS IN 2019 COUNTS (FROM SURVEY)	ADTT 2019 COUNTS W/OUT GRANITE TRUCKS	GRANITE TRUCKS (1.5 MT SALES)	ADTT 2019 COUNTS WITH GRANITE TRUCKS	ANNUAL GROWTH RATE	EXPANDED ADTT	ESAL 20 YEAR CONSTANT		TOTAL 20 YEAR ESAL	
2-AXLE	12	0	12	0	12	2.0%	18	1380		24,608	
3-AXLE	6	2	4	0	4	2.0%	6	3680		21,874	
4-AXLE	5	5	0	0	0	2.0%	0	5880		0	
>5-AXLE	41	11	30	22	52	2.0%	67	13780		923,260	
		Granite Truck Trips will remain consistent with 1.5 MT of sales							TOTAL	969,742	
										9.0	**9.0**

JAYNE AVENUE

Existing Conditions (w/out Granite Construction Trips)
TI Calculation

SEGMENT = **Jayne Avenue (Eastbound)**

TRUCK CLASSIFICATION	ADTT 2019 COUNTS	GRANITE TRUCKS IN 2019 COUNTS (FROM SURVEY)	ADTT 2019 COUNTS W/OUT GRANITE TRUCKS	ANNUAL GROWTH RATE	EXPANDED ADTT	ESAL 20 YEAR CONSTANT		TOTAL 20 YEAR ESAL	
2-AXLE	65	0	65	2.0%	97	1380		133,294	
3-AXLE	20	0	20	2.0%	30	3680		109,370	
4-AXLE	16	5	11	2.0%	16	5880		96,114	
>5-AXLE	112	11	101	2.0%	150	13780		2,068,185	
							TOTAL	2,406,963	
								10.0	**10.0**

Existing Conditions (w/out Granite Construction Trips)
TI Calculation

SEGMENT = **Jayne Avenue (Westbound)**

TRUCK CLASSIFICATION	ADTT 2019 COUNTS	GRANITE TRUCKS IN 2019 COUNTS (FROM SURVEY)	ADTT 2019 COUNTS W/OUT GRANITE TRUCKS	ANNUAL GROWTH RATE	EXPANDED ADTT	ESAL 20 YEAR CONSTANT		TOTAL 20 YEAR ESAL	
2-AXLE	68	0	68	2.0%	101	1380		139,446	
3-AXLE	19	6	13	2.0%	19	3680		71,090	
4-AXLE	9	0	9	2.0%	13	5880		78,639	
>5-AXLE	146	16	130	2.0%	193	13780		2,662,020	
							TOTAL	2,951,196	
								10.2	**10.0**

Existing Conditions (w/ Granite Construction Trips)
TI Calculation

SEGMENT = **Jayne Avenue (Eastbound)**

TRUCK CLASSIFICATION	ADTT 2019 COUNTS	GRANITE TRUCKS IN 2019 COUNTS (FROM SURVEY)	ADTT 2019 COUNTS W/OUT GRANITE TRUCKS	GRANITE TRUCKS (1.5 MT SALES)	ADTT 2019 COUNTS WITH GRANITE TRUCKS	ANNUAL GROWTH RATE	EXPANDED ADTT	ESAL 20 YEAR CONSTANT		TOTAL 20 YEAR ESAL	
2-AXLE	65	0	65	0	65	2.0%	97	1380		133,294	
3-AXLE	20	0	20	0	20	2.0%	30	3680		109,370	
4-AXLE	16	5	11	0	11	2.0%	16	5880		96,114	
>5-AXLE	112	11	101	32	133	2.0%	182	13780		2,507,960	
		Granite Truck Trips will remain consistent with 1.5 MT of sales							TOTAL	2,846,738	
										10.2	**10.0**

Existing Conditions (w/ Granite Construction Trips)
TI Calculation

SEGMENT = **Jayne Avenue (Westbound)**

TRUCK CLASSIFICATION	ADTT 2019 COUNTS	GRANITE TRUCKS IN 2019 COUNTS (FROM SURVEY)	ADTT 2019 COUNTS W/OUT GRANITE TRUCKS	GRANITE TRUCKS (1.5 MT SALES)	ADTT 2019 COUNTS WITH GRANITE TRUCKS	ANNUAL GROWTH RATE	EXPANDED ADTT	ESAL 20 YEAR CONSTANT		TOTAL 20 YEAR ESAL	
2-AXLE	68	0	68	0	68	2.0%	101	1380		139,446	
3-AXLE	19	6	13	0	13	2.0%	19	3680		71,090	
4-AXLE	9	0	9	0	9	2.0%	13	5880		78,639	
>5-AXLE	146	16	130	32	162	2.0%	225	13780		3,100,500	
		Granite Truck Trips will remain consistent with 1.5 MT of sales							TOTAL	3,389,676	
										10.4	**10.5**

County of Fresno
DEPARTMENT OF PUBLIC WORKS AND PLANNING
STEVEN E. WHITE, DIRECTOR

Planning Commission Staff Report
Agenda Item No. 3
August 13, 2020

SUBJECT: **Initial Study (IS) Application No. 7029 and Unclassified Conditional Use Permit (CUP) Application No. 3512**

Allow the expansion of an existing aggregate mining operation on a 299.11-acre parcel in the AE-20 (Exclusive Agricultural, 20-acre minimum parcel size) Zone District in the unincorporated area of the County of Fresno and a 202.54-acre parcel in the MBL (Light Manufacturing/Business) Zone District in the City of Coalinga.

LOCATION: **The subject parcel/project site is located on the north side of Cambridge Avenue, between Monterey Avenue and State Route 198/33, adjacent to and within the city limits of the City of Coalinga (38940 Highway 33, Coalinga) (Sup. Dist. 4) (APN 070-060-86S and 89S).**

OWNER/APPLICANT: **Granite Construction Company**

STAFF CONTACT: **Chris Motta, Principal Planner**
(559) 600-4227

RECOMMENDATION:

- Adopt the Mitigated Negative Declaration prepared for Initial Study (IS) Application No. 7029; and
- Approve Unclassified Conditional Use Permit (CUP) Application No. 3512 with recommended Findings and the Mitigation Measures and Conditions of Approval (attached as Exhibit 1); and
- Direct the Secretary to prepare a Resolution documenting the Commission's action.

EXHIBITS:

1. Mitigation Monitoring, Conditions of Approval and Project Notes
2. Location Map
3. Existing Zoning Map
4. Existing Land Use Map
5. Site Plan and Project Phasing
6. Conveyor Elevation
7. Project Operational Statement
8. Project Reclamation Plan
9. Summary of Initial Study Application No. 7029
10. Proposed Mitigated Negative Declaration
11. Conditions of Approval – Conditional Use Permit Nos. 915 and 2320
12. Public Correspondence

SITE DEVELOPMENT AND OPERATIONAL INFORMATION:

Criteria	**Existing**	**Proposed**
General Plan Designation	Agriculture (Coalinga Community Plan)	No change
Zoning	AE-20 (Exclusive Agricultural, 20-acre minimum parcel size)	No change
Parcel Size	299.11 acres (unincorporated) and 202.5 (City of Coalinga)	No change
Project Site	Aggregate (rock, sand, gravel) mining operation approved by CUP No. 915 (1970) and No. 2320 (1988); fallow agricultural land	Allow expansion of the aggregate mining operation into the 299-acre parcel, which will occur over six phases for a period of 55 years Note: Mining will also occur on a 202.5-acre parcel located within the jurisdiction of the City of Coalinga. The Reclamation Plan covers both parcels.

Criteria	Existing	Proposed
Structural Improvements	Existing shop and associated structures including recycle operation; equipment parking area; oil and chemical storage area; QC/QA lab; water well; and fencing	Electric-powered conveyor structure and occasional use of connex (metal storage container) boxes for on-site storage
Nearest Residence	2,220 feet to the southeast 0.50 mile to the south	1,200 feet to the south and east of the project mining area
Surrounding Development	Oil field development to the west; aggregate mining and processing to the north; State Route 33, agriculture and single-family residences to the east; and recreation and single-family residences to the south	No change
Operational Features	Aggregate mining operation Approximately 1.5 million tons of material produced by rock plant and sold annually	Allow expansion of the existing aggregate mining operation. Estimated tonnage of material over a 55-year project life will vary by phase (six phases total) and by year; a general average is approximately 14 million tons/phase; estimated mining rate is 1.5 million tons/per year
Employees	10 to 20 employees on site	10 to 20 employees on site in expansion area (no change from baseline)
Customers	N/A – only miscellaneous service and delivery vehicles and occasional point of sale pickup	No changes from existing operation
Traffic Trips	Existing project site trips: 480 daily truck trips* (144 trips/peak hour**) 20 employee trips* (20 trips peak hour**) *One-Way Trip **Peak Hour = 7:00-9:00 AM and 4:00-6:00 PM	No changes from existing operation

Criteria	Existing	Proposed
Lighting	Portable light towers and permanent light fixtures	Portable light towers and permanent light fixtures – all lighting shielded and arranged/controlled so to not illuminate adjacent properties or public right-of-way
Hours of Operation	6:00 a.m. to 5:00 p.m. Monday through Friday and on weekends and at night as needed to meet client demands	No change to permitted hours of operation

EXISTING VIOLATION (Y/N) AND NATURE OF VIOLATION: N

ENVIRONMENTAL ANALYSIS:

An Initial Study (IS) was prepared for the project by County staff in conformance with the provisions of the California Environmental Quality Act (CEQA). Based on the IS, staff has determined that a Mitigated Negative Declaration is appropriate. A summary of the Initial Study is below and included as Exhibit 9.

Notice of Intent to Adopt a Mitigated Negative Declaration publication date: July 6, 2020

PUBLIC NOTICE:

Notices were sent to 178 property owners within 1,320 feet of the subject parcel, exceeding the minimum notification requirements prescribed by the California Government Code and County Zoning Ordinance.

PROCEDURAL CONSIDERATIONS:

An Unclassified Conditional Use Permit for a mining operation may be approved only if five Findings specified in the Fresno County Zoning Ordinance, Section 873-F are made by the Planning Commission. In addition to findings required by Section 873, the approval of a Conditional Use Permit for a surface mining operation shall be subject to the following finding: The Mining and Reclamation Plan has been reviewed for compliance with the Regulations for Surface Mining and Reclamation in All Districts, Section 858, and meets the applicable requirements therein.

The decision of the Planning Commission on an Unclassified Conditional Use Permit Application is final, unless appealed to the Board of Supervisors within 15 days of the Commission's action.

BACKGROUND INFORMATION:

Historic mining activities have occurred on the project site since 1945.

On September 21, 1965, Conditional Use Permit No. 650 was approved to allow a rock crushing plant, hot mix asphalt plant and quarry. Subsequently, on December 7, 1965, Conditional Use Permit No. 650A was approved to allow expansion of the mined area approved under CUP No.

650, extending the mining to the easterly side of Monterey Avenue between Gale Avenue and the northerly boundary of the former Coalinga Municipal Airport.

On March 31, 1970, Unclassified Conditional Use Permit No. 915 was approved to allow a sand and gravel extraction operation on 440 acres. The permit was filed by the Owl-Folsom Rock Company. Subsequently, Granite acquired the project site in 1977.

On January 10, 1989, Unclassified Conditional Use Permit No. 2320 was approved by the Board of Supervisors (on appeal – upheld Planning Commission's approval action) to allow the expansion of an existing rock, sand and gravel extraction and processing operation including an asphalt and concrete plant on a 472-acre parcel with an operating life of at least 60 years.

On April 26, 2001, Unclassified Conditional Use Permit No. 2954 was approved to allow an asphaltic concrete solid waste processing facility on 25 acres located just north of and adjacent to the current project site.

The subject proposal (CUP No. 3512) would extend the physical mining and reclamation into 338+/- acres with an additional 30+/- acres in ancillary use and setback areas, of which approximately 230 acres are located within the jurisdiction of unincorporated Fresno County, and a remaining 138 acres are located within the jurisdiction of the City of Coalinga, over a period of 60 years (55 years for mining activities and five years for reclamation). It is noted that the City of Coalinga will process their own land use clearances for those portions of the project within their jurisdiction, although they have allowed the County to act as lead on the CEQA document (Mitigated Negative Declaration prepared for Initial Study No. 7029) and as the Lead Agency on the Reclamation Plan. The City has reviewed and concurred with the County's conclusions in IS No. 7029. No other changes in intensity, hours of operation, or volume would occur from this proposal.

Finding 1: *That the site of the proposed use is adequate in size and shape to accommodate said use and all yards, spaces, walls and fences, parking, loading, landscaping, and other features required by this Division, to adjust said use with land and uses in the neighborhood*

	Current Standard:	**Proposed Operation:**	**Is Standard Met (y/n)**
Setbacks	Front: 35 feet Street Side: 35 feet Side: 20 feet Rear 20 feet 50 feet from finish grade for mining activity	No change	Yes, of Section 858 of the Fresno County Zoning Ordinance
Parking	One (1) off-street parking space for each two (2) permanent employees	No change to the existing on-site parking for employees	Yes
Lot Coverage	No requirement	N/A	N/A
Space Between Buildings	Six-foot minimum	N/A	N/A

	Current Standard:	Proposed Operation:	Is Standard Met (y/n)
Wall Requirements	No requirement	No requirement	N/A
Septic Replacement Area	100 percent	100 percent	N/A
Water Well Separation	Septic tank: 50 feet; Disposal field: 100 feet; Seepage pit: 150 feet	N/A	N/A

Reviewing Agency/Department Comments Regarding Site Adequacy:

Zoning Section of the Fresno County Department of Public Works and Planning: All proposed building and structures built after 1958 without permit will need plans, permits, and inspections. Recommend Site Plan Review as Condition of Approval.

Water and Natural Resources Division of Fresno County Department of Public Works and Planning: The smallest setback being proposed on the mine plan is 50 feet; the finish grade for all the reclaimed slopes will be 1.5:1 or flatter which is consistent with the County Zoning Ordinance. If mining activity were to occur inside 50 feet of the property line, the required slope is 2:1. The slopes while mining as can be steeper provided the reclaimed slope, post mining, is 1.5:1 (or 2:1 depending upon if cut and backfill occurs).

No other comments specific to the adequacy of the site were expressed by reviewing Agencies or Departments.

Analysis:

The subject proposal would extend the life and expand the mined area of an existing aggregate mining operation authorized by prior conditional use permits (see Background Information). If approved, the mining operations will continue for an additional 55 years, plus five years for site reclamation (total of 60 years as proposed).

Most existing physical improvements associated with the operation are located to the north and northeast of the expansion area. Existing improvements include a 4,900 square-foot shop; rock, asphalt, concrete, and recycle plants; equipment parking area; oil and chemical storage area; Quality Control/Quality Assurance lab; water well; and fencing. An exception is an on-site electric-powered conveyor that will move aggregate around the new excavation area and across Los Gatos Creek. The conveyor bridge which will cross the creek is approximately 15 feet above the flood plain, or approximately 20 feet above the creek bank, and spans approximately 230 feet in length. Other improvements associated with the existing mining operation such as the scale, scale house, plants, and an equipment storage area are located in existing and approved excavation areas covered under the prior conditional use permits.

The Zoning Ordinance precludes any extraction of material or overburden within 25 feet of the property lines and within 50 feet of a road right-of-way. In addition, no stockpiled material is permitted closer than 25 feet from a property boundary. Staff review of the Site Plan indicates that excavation will continue to maintain distance from property lines and the right-of-way for SR 33 and Cambridge Avenue as required by Section 858 of the County Zoning Ordinance. Staff is recommending a condition requiring that all applicable Conditions of Approval imposed under

Conditional Use Permit No. 915 remain in full force and effect for this proposal, except that conditions of the permit shall supersede the conditions of prior Conditional Use Permit Nos. 915 and 2320 in any areas where the three overlap. No changes to on-site employee parking will occur and all internal haul roads within the site boundaries will continue to be maintained as mandated by prior use permit approvals and/or regulation and best practices.

Based upon the above considerations, staff believes that the project site is adequate in size and shape to accommodate the proposed use.

Recommended Conditions of Approval:

None.

Conclusion:

Finding 1 can be made.

Finding 2: *That the site for the proposed use relates to streets and highways adequate in width and pavement type to carry the quantity and kind of traffic generated by the proposed use*

		Existing Conditions	**Proposed Operation**
Public Road Frontage	Yes	State Route 33: Good condition	No change
Direct Access to Public Road	Yes	Existing Access from Elm Avenue/State Route 33	No changes to the current site access off State Route 33/no direct access to expansion area from State Route 33 or Cambridge Avenue
Road ADT		5,075	No change
Road Classification		State Route 33: Good condition	No change
Road Surface		Asphalt concrete paved	No change
Traffic Trips		Based on existing conditions to date	No change
Traffic Impact Study (TIS) Prepared	Yes	No TIS required for the current mining operation authorized by CUP Nos. 915 and 2320	VRPA Technologies assessed the site traffic most recently in 2019 and provided their findings in a November 2019 Traffic Impact Study Report.

		Existing Conditions	Proposed Operation
Road Improvements Required		Good; no improvements required by the California Department of Transportation	No improvements required. A pro-rata share for off-site improvements required as traffic mitigation.

Reviewing Agency/Department Comments Regarding Adequacy of Streets and Highways:

California Department of Transportation (Caltrans): Based on the *Operational Statement for the Coalinga Mine Expansion Project* prepared for Granite Construction by Compass Land Group (dated August 25, 2015), no new access connections to State Route 33 are being proposed with the expansion project. *Note: Caltrans also requested pro-rata shares for improvements for identified road segments based on TIS analysis. This has been made a Mitigation Measure and is described in greater detail below.*

Design Division of the Fresno County Department of Public Works and Planning: No concerns with the proposal with incorporated Mitigation Measures.

No other comments specific to the adequacy of streets and highways were expressed by reviewing Agencies or Departments.

Analysis:

Currently there is one access point from SR 33 approved by prior use permit applications. Access to the project site is from State Route (SR) 33 through an existing/approved mining area to the north. Expansion area associated with CUP No. 3512 is accessed through internal haul roads with no direct access to state-maintained or local roads, and the subject application proposes no new access or changes to the existing access point to the site.

During application development, the Applicant retained a third-party traffic consultant (VRPA Technologies), who coordinated with the County Public Works Department to prepare a Traffic Impact Study (TIS). The TIS included a roadway segment capacity analysis, intersection capacity analysis, and traffic index analysis.

The roadway segment analysis included roadway segment volumes and levels of service with Project traffic. The analysis showed that the roadway segments used by Project traffic will meet acceptable levels of service and no mitigation is required.

The intersection capacity analysis involved the number of trips generated by the Project at selected Caltrans' intersections: I-5 NB Off Ramp and Jayne Avenue, SR 33 and Jayne Avenue, SR 33 and Juniper Ridge Boulevard, SR 33 and 5th Street, and SR 33 and 3rd Street. Caltrans identified that these intersections require improvements in order to accommodate future traffic, and specified fair-share cost for those improvements.

The Traffic Index (TI) analysis revealed that Project traffic on Phelps Avenue between SR 33 and Calaveras Avenue, Calaveras Avenue between Phelps Avenue and SR 33, and Jayne Avenue between SR 33 and I-5 results in a TI increase of 0.5, which requires a fair-share maintenance contribution per County standards.

VRPA Technologies, Inc. assessed the site traffic and produced a final/revised Traffic Impact Study Report in November of 2019. This report and its associated trip generation was reviewed by staff of both the Design Division and Road Maintenance and Operations Division of the Fresno County Department of Public Works and Planning and the California Department of Transportation (Caltrans). Resultant project mitigation included pro-rata share amounts for Caltrans-identified segments and identified road segment upgrades per the County Department of Public Works and Planning.

Potential impacts associated with transportation would be less than significant with implementation of Mitigation Measures 17 through 19.

Based upon the above considerations, staff believes that State Route 33 and other impacted segments will remain adequate to accommodate traffic generated by the proposal.

Recommended Conditions of Approval:

See Mitigation Measures, Conditions of Approval and Project Notes attached as Exhibit 1.

Conclusion:

Finding 2 can be made.

Finding 3: *That the proposed use will have no adverse effect on abutting property and surrounding neighborhood or the permitted use thereof*

Surrounding Parcels				
	Size:	Use:	Zoning:	Nearest Residence:
North	320 acres	Aggregate Mining and Processing	AE-20	N/A
South	55.31 acres	Developed and undeveloped residential Undeveloped Recreation (City)	Residential (City) Recreation (City)	N/A N/A
East		Agricultural lands, State Route 33 and residential subdivisions (Coalinga)	Varies (AE-20 and City zoning)	N/A
West	320 acres	Oil fields and fallow agricultural land	AE-20	N/A

Reviewing Agency/Department Comments:

Water and Natural Resources Division of the Fresno County Department of Public Works and Planning: Relating to excavation area, the smallest setback proposed is 50 feet and the finish grade for all the reclaimed slopes will be 1.5:1 or flatter, which is consistent with the Zoning Ordinance. If the operator mines inside 50 feet of the property line, the required slope is 2:1.

The slopes while mining, as is proposed, can be steeper, provided the reclaimed slope post mining is 1.5:1 (or 2:1 depending upon cut and backfill).

Fresno County Department of Public Health, Environmental Health Division: Implementation of noise mitigation measures as stated in the Noise Assessment Study is required to comply with the Fresno County Noise Ordinance. The following shall be included as a Mitigation Measure: The noise mitigation measures as proposed in the Noise Assessment Study prepared by Edward L. Pack Associates, Inc. (dated July 23, 2015) shall be implemented. The following shall be included in Project Notes: within 30 days of the occurrence of any of the following events, the Applicant/operators shall update their online Hazardous Materials Business Plan (HMBP) and site map if there is a 100% or more increase in the quantities of a previously-disclosed material, or the facility begins handling a previously-undisclosed material at or above the HMBP threshold amounts. The business shall certify that a review of the business plan has been conducted at least once every three years and that any necessary changes were made and that the changes were submitted to the local agency. Contact the Certified Unified Program Agency at (559) 600-3271 for more information. All hazardous waste shall be handled in accordance with requirements set forth in the California Code of Regulations (CCR), Title 22, Division 4.5. This Division discusses proper labeling, storage and handling of hazardous wastes.

These requirements have been included as Mitigation Measures or Project Notes.

San Joaquin Valley Air Pollution Control District (Air District): The proposed project may be subject to the following rules: Regulation VIII (Fugitive PM10 Prohibitions), Rule 4601 (Architectural Coatings), Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt Paving and Maintenance Operations), and Rule 4002 (National Emission Standards for Hazardous Air Pollutants) in the event an existing building will be renovated, partially demolished or removed. The District had no additional comments on the Health Risk Assessment prepared for the project in conjunction with the additional response letter from 2016 and APS technical memo.

California Regional Water Quality Control Board: Please be advised that the project may be required to get coverage under the Construction and Industrial Program Storm Water Permits.

California Department of Conservation, Office of Mine Reclamation: The proposed expansion of Coalinga Pit 2 will increase the area permitted for mining from 120 to 368 acres within a 502-acre site. Three potential slope configurations are presented in the Amended Reclamation Plan (1.5H:1V cut slope with no backfill, 0.5H:1V cut slope with backfill at 2H:1V to full slope height, or 0.5H:1V cut slope with backfill at 2H:1V to a distance of 50 vertical feet or less form the top of slope). The July 2015 slope stability evaluation prepared by Golder Associates Incorporated should be supplemented to include a site-specific discussion of hydrologic conditions. The ARP should incorporate test plots per CCR Section 3705(b) to address revegetation.

California Department of Conservation Division of Oil, Gas and Geothermal Resources: The project is located within the boundaries of the Coalinga oil field. Records indicate 22 known oil or gas wells located with the project boundary. The Division categorically advices against building over, or in any way impeding access to oil, gas or geothermal wells. The Division advised that all wells identified on the development parcel prior to or during development activities be tested for liquid and gas leakage. No well work may be performed on any oil, gas or geothermal well without written approval from the Division. To ensure that present and future property owners are aware of the existence of all wells on the property and potentially significant issues associated with any improvements near oil or gas wells, the Division recommends that information regarding identified wells and any other pertinent information be communicated to

the appropriate county recorder for inclusion in the title information of the subject real property. The Division recommends that any soil containing hydrocarbons be disposed of in accordance with local, state, and federal laws.

These requirements have been included as Project Notes.

Dumna Wo Wah Tribal Government: A consultation between the Tribe and the County (per Assembly Bill 52) has concluded and resulted in the inability to reach a consensus on the presence of Tribal Cultural Resources on the subject property. (See the following Analysis.)

State Water Resources Control Board, Division of Drinking Water; Fresno County Fire Protection District; Fresno County Department of Agriculture; Site Plan Review Section and Building/Safety Sections of the Fresno County Department of Public Works and Planning; United States Fish and Wildlife Service; California Department of Fish and Wildlife; Table Mountain Rancheria, Tribal Government Office: No concerns with the proposal.

No other comments specific to land use compatibility were expressed by reviewing Agencies or Departments.

Analysis:

The subject 502-acre project site is in an area of limited agricultural and oil field activities. A large portion of the site consists of the former Coalinga Airport, which has since moved to another location farther from the city limits. Residential subdivisions, a school, the City of Coalinga's Recreational Park and commercial development are located to the south across Cambridge Avenue within the City of Coalinga. Resource extraction/industrial uses border the site to the north; State Routes 198/33, with agriculture and residential uses, are located east of the site; and to the west are undeveloped lands and oil fields farther west.

The subject proposal would extend the life and expand the mined area of an existing commercial aggregate mining operation authorized by Conditional Use Permit Nos. 650, 650A, and 915, and Unclassified Conditional Use Permit No. 2320. CUP No. 2320 allowed the expansion of an existing rock, sand and gravel extraction and processing operation including an asphalt and concrete plant on a 472-acre parcel with an operating life of at least 60 years. This proposal will allow an additional 55 years of aggregate mining to occur within an expanded mining area and an additional five years for reclamation. The proposal will remain within the scope of CUP Nos. 915 and 2320 with no changes in intensity, hours of operation or volume.

An Initial Study prepared for the project has identified potential impact to aesthetics, biological resources, cultural resources, noise, transportation, and tribal cultural resources. To mitigate aesthetics impact, all outdoor lighting will be hooded and be directed downward to avoid glare on adjoining properties. To mitigate biological impact, the project will adhere to Mitigation Measures for both nesting bird, kit fox and blunt-nosed leopard lizard preconstruction surveys; and nesting bird, kit fox and blunt-nosed leopard lizard avoidance measures. Further, Mitigation Measures addressing the elevated conveyor system include obtaining all necessary permits from state and federal agencies for the Los Gatos Creek crossing, utilizing a containment system to catch and collect side-casts, and installing the conveyor system when flowing water is absent or at a minimum flow (April 1 through October 31).

To mitigate cultural resources impact, any cultural resources discovered during excavation will require all project-related activities halted until an archeologist evaluates the discovery. Should human remains be discovered, the County Sheriff-Corner will be notified, and protocols will be

followed including the involvement of the NAHC. If paleontological resources are discovered, they will require evaluation by a qualified paleontologist. To mitigate noise impact, earthen berms will be erected within specified distances from noted sensitive receptors per the July 23, 2015 Noise Assessment Study prepared by Edward L. Pack and Associates. These requirements have been included as Mitigation Measures (Exhibit 1).

Potential transportation impacts were addressed with fair share cost mitigation for identified road segments as identified by the State of California Department of Transportation. Impacts to local roads will be addressed by completing upgrades to the impacted County road segments per their required Traffic Index as detailed in the November of 2019 Traffic Impact Study completed by VRPA. Further, no less than one year prior to mining in the project area, the Applicant shall provide plans for review and approval by the County of Fresno Department of Public Works and Planning and the Applicant shall immediately obtain all necessary permits and construct the necessary upgrades. Within five years of the projected time of initiating mining in the project area, the Applicant shall provide annual written updates to the County regarding the projected timeline of initiating mining in the project area.

Potential impacts related to air quality, geology and soils, hazards and hazardous materials, and hydrology and water quality are less than significant. The project will comply with the San Joaquin Valley Air Pollution Control District rules and regulations for air quality; adhere to a Storm Water Pollution Prevention Plan (SWPPP); handle hazardous material on the property according to the State and local ordinances; retain additional runoff generated by mining activities on site; and require any structures located within the flood hazard area be raised to or above the Base Flood Elevation (BFE). These requirements have been included as Conditions of Approval and Project Notes.

Pursuant to AB (Assembly Bill) 52, County staff initiated consultation with the Dumna Wo Wah Tribal Government to determine the project's potential impact to Tribal Cultural Resources (TCRs). As part of this process, reports pertaining to archeological resources were made available to the Tribe, and information about TCRs that could be significantly impacted by the proposal was sought from the Tribe. In the absence of any identified TCRs from the Tribe and based on the available evidence regarding archeological surveys on the property, staff was unable to come to a consensus on the presence of TCRs or the need for site-specific mitigation. However, given the fact that the project site is located in an area of moderate archeological sensitivity, staff feels the Mitigation Measure included in the Initial Study (Exhibit 9; Section V. Cultural Resources) will suffice in reducing impact on Tribal Cultural Resources possibly resulting from this proposal.

Based on the above information, and with adherence to the Mitigation Measures, Conditions of Approval, and mandatory Project Notes, staff believes that the proposal will not have an adverse effect upon surrounding properties.

Recommended Conditions of Approval:

See Mitigation Measure and recommended Conditions of Approval attached as Exhibit 1.

Conclusion:

Finding 3 can be made.

Finding 4: *That the proposed development is consistent with the General Plan*

Relevant Policies:	Consistency/Considerations:
General Plan Policy LU-A.3: County may allow by discretionary permit in areas designated Agriculture certain non-agricultural uses, subject to the following Criteria: a) Use shall provide a needed service to surrounding agricultural area which cannot be provided within urban areas; b) Use shall not be sited on productive agricultural lands if less productive lands are available; c) Use shall not have a detrimental impact on water resources or the use or management of surrounding properties within ¼-mile radius; d) Probable workforce located nearby or readily available.	With regard to Criteria "a", the subject proposal would allow continued aggregate (rock, sand, gravel) mining and reclamation operations with incidental facilities in an expanded area on a 368-acre portion of a 502-acre parcel. Mining activity on adjacent parcels was authorized through prior conditional use permits. With regard to Criteria "b", the project site is designated as Farmland of Local Importance, Grazing Land, and Vacant or Disturbed Land on the 2014 Fresno County Important Farmland Map, and adjacent areas have been actively mined for decades. With regard to Criteria "c", the mining operation uses a combination of well water and recycled processing water pumped from on-site settling ponds to reduce water demand. Water used is limited to dust control with no change anticipated from baseline conditions. With regard to Criteria "d", the nearby community of Coalinga will continue to provide a probable workforce.
General Plan Policy LU-A.12: In adopting land use policies, the County shall seek to protect agricultural activities from encroachment of incompatible land uses. General Plan Policy LU-A.13: The County shall protect agricultural operations from conflicts with non-agricultural uses by requiring buffers between proposed non-agricultural uses and adjacent agricultural operations. General Plan Policy LU-A.14: The County shall ensure that the review of discretionary permits includes an assessment of the conversion of productive agriculture land and that mitigation be required where appropriate.	The project is compatible with agricultural zoning and is an allowed use on land designated for agriculture with discretionary approval and adherence to the applicable General Plan Policies. The project proposes to allow mining operation for an additional 55 years. Adjacent mining operations were determined to be consistent with the General Plan under prior conditional use permits. The proposed expansion will adhere to Mitigation Measures and Conditions of Approval included in this report. The project is consistent with the subject policies.
General Plan Policy OS-C.3: The operation and reclamation of surface mines shall be consistent with the State Surface Mining and Reclamation Act (SMARA) and applicable Zoning Ordinance provisions. General Plan Policy OS-C.4: The County shall impose conditions to minimize or	A Reclamation Plan for the project was prepared by the Applicant and reviewed by the California Department of Conservation, Division of Mine Reclamation. The mining and reclamation activities will comply with the Reclamation Plan consistent with the State Surface Mining and Reclamation Act (SMARA) and applicable Zoning Ordinance provisions, including Mitigation Measures,

Relevant Policies:	Consistency/Considerations:
eliminate potential adverse impacts of mining operations upon surrounding properties. General Plan Policy OS-C.5: Reclamation of all surface mines shall be conducted in a manner consistent with SMARA.	Conditions of Approval, and mandatory Project Notes included in the Initial Study prepared for the project (Exhibit 9). The project is consistent with the subject policies.

Reviewing Agency Comments:

Policy Planning Section of the Fresno County Department of Public Works and Planning: The project site is designated Agricultural in the Fresno County-adopted Coalinga Community Plan. Provisions in the Fresno County General Plan provide for mineral extraction operations such as proposed by this application. Policy LU-A.3 allows non-agricultural uses by discretionary permit if they meet certain criteria. Policy LU-A.12, Policy LU-A.13 and Policy LU-A.14 of the General Plan require protection of agricultural activities from encroachment of incompatible uses, buffers between proposed non-agricultural uses and adjacent agricultural operations, and an assessment of the conversion of productive agricultural land and application of mitigation where appropriate. Policy OS-C.3 of the General Plan requires the operation and reclamation of surface mines consistent with the State Surface Mining and Reclamation Act (SMARA) and applicable Zoning Ordinance provisions. Additionally, Policy OS-C.4 of the General Plan requires implementation of conditions to minimize or eliminate potential adverse impacts of mining operations upon surrounding properties. Further, Policy OS-C.5 of the General Plan requires reclamation of all surface mines in a manner consistent with SMARA. The entire 502-acre project site is not subject to a Williamson Act Land Conservation Contract.

No other comments specific to General Plan Policy were expressed by reviewing Agencies or Departments.

Analysis:

As discussed above in General Plan Consistency/Consideration, the subject Use Permit application meets the intent of Policy LU-A.3. Concerning consistency with Policy LU-A.12, Policy LU-A.13, and Policy LU-A.14, the project is compatible with agricultural zoning and established surrounding land uses to the north; is an allowed use on land designated for agriculture with discretionary approval and adherence to the applicable General Plan Policies; and adjacent activities were determined to be consistent with the General Plan under prior conditional use permits. Concerning consistency with Policy OS-C.3, Policy OS-C.4 and Policy OS-C.5, all mining activities will comply with the Reclamation Plan consistent with the State Surface Mining and Reclamation Act (SMARA) and applicable Zoning Ordinance provisions and the Mitigation Measures, Conditions of Approval, and Project Notes included in the Initial Study and the staff report prepared for the project.

Recommended Conditions of Approval:

None.

Conclusion:

Finding 4 can be made.

Based on the above information, staff believes the proposal is consistent with the Fresno County General Plan.

Finding 5: *That the proposed use has been reviewed for compliance with Zoning Ordinance Section 858 - Regulations for Surface Mining and Reclamation in all Districts and meets the applicable requirements therein.*

Reviewing Agencies/Department Comments:

California Department of Conservation, Division of Mine Reclamation: The passage of Assembly Bill (AB) 1142 in 2016 (PRC Section 2772.1) has changed the administrative requirements for submitting, reviewing, and approving reclamation plans and reclamation plan amendments. The County must comply with the Pre-Approval Procedures and the Post-Approval Procedures for Reclamation plans as mandated by AB 1142.

Zoning Section of the Fresno County Department of Public Works and Planning: No concerns with the proposal.

Analysis:

The subject proposal would allow continued aggregate mining and reclamation operations on a 368-acre portion of 502 acres consisting of two parcels, partially located within the City Limits of Coalinga. The unincorporated portions of the project are in the AE-20 (Exclusive Agricultural, 20-acre minimum parcel size) Zone District. This proposal would allow an additional 55 years of mining operation with five years following for reclamation. The mining and reclamation activities resulting will remain within the scope of CUP Nos. 915 and 2320 with no changes in intensity, hours of operation, volume, or site access. An estimated 1.5 million tons of aggregate material will be removed annually.

Section 858 of the Fresno County Zoning Ordinance, "Regulations for Surface Mining and Reclamation in All Districts," outlines the primary components of what constitutes an adequate reclamation plan for a surface mining site. Section 858 states that the plan shall include a description of the planned reclamation indicating the methods used to accomplish the reclamation, a schedule showing the timing and phasing of the reclamation activities, a soil salvage plan, the disposition of any equipment or structures used for the excavation or processing operation, and how the reclamation of the site may affect future on-site mining and the mining of the surrounding area. The reclamation plan shall include a site plan of the reclamation showing any proposed vegetation, irrigation land, and water features. The site plan shall also show access to the site and the treatment of that access.

The Zoning Section of the Fresno County Department of Public Works and Planning reviewed this proposal and expressed no concerns with the project. Further, the Applicant has prepared a Reclamation Plan for the project. The California Department of Conservation, Division of Mine Reclamation (DMR) reviewed the Plan and required that revised/supplemental information about Geology and Geotechnical, Topsoil Considerations, and Revegetation shall be provided. Additionally, as part of the Pre-Approval procedure for the Plan, DMR also required that the County provide a written response to the agency's comments at least 30 days prior to approving the Plan. The County provided DMR a letter on December 11, 2015 including the Reclamation Plan for the Expansion Project, referred to as the "Coalinga Pit #2 Expansion Project ". DMR provided a response to this letter on January 28, 2016. In response to DMR's comments, the Reclamation Plan was revised in 2020. After the County of Fresno completed its review of the revised Reclamation Plan, the amended Plan and supporting documents were provided for

DMR for review on June 29, 2020. As part of Post-Approval procedures for the Plan, the County will notify DMR within 30-days of the approval of the Plan and provide an official copy of the approved Plan within 60-days thereafter. With adherence to these requirements, staff believes the subject proposal complies with the requirements of Assembly Bill (AB) 1142 and Section 858 of the County Zoning Ordinance.

Recommended Conditions of Approval:

None.

Conclusion:

Finding 5 can be made.

Finding 6: *That the conditions stated in the resolution are deemed necessary to protect the public health, safety and general welfare.*

Per Section 873-F of the Zoning Ordinance, Finding 6 addresses the question of whether the included Conditions can be deemed necessary to protect the public health, safety and general welfare of the public and other such conditions as will make possible the development of the County in an orderly and efficient manner and in conformity with the intent and purposes set forth in this Division. The required Conditions of Approval will be addressed through the Site Plan Review process required for this project. The Site Plan Review process and requirements are contained in Section 874 of the Fresno County Zoning Ordinance.

The Mitigation Measures proposed for this project are required to reduce the identified adverse impacts such that they are considered to be “less than significant”. For additional detail regarding the analysis of environmental impacts, please see the Initial Study which has been attached to this staff report as Exhibit 9.

Per Section 858 of the County Zoning Ordinance, a Site Plan Review will be required for the surface mining project. The Site Plan Review is necessary to ensure compliance with the Zoning Ordinance and the conditions of this CUP application and restrict the Applicant to development of what was approved (*i.e.*, the site plan, detail drawings and elevations, and reclamation plan). This restriction is necessary to ensure that new impacts are not generated as a result of deviation from the documents reviewed by the Commission. Mitigation Measures which address aesthetic, noise, traffic and cultural resources impacts have been required of the project, and project design with large setbacks between sensitive receptors and active mining area and the installation of berms will provide some visual screening to protect the existing natural views of residential development to the south.

For reference purposes, Conditions of Approval for prior Conditional Use Permit Nos. 915 and 2320 have been attached as Exhibit 11. Staff has also included a Condition of Approval which states that the conditions for Unclassified Conditional Use Permit No. 3512 will supersede the prior conditions of approval for CUP Nos. 915 and 2320 in any areas where the three overlap.

No other Conditions are proposed. The Project Notes represent existing regulations to which the Applicant/developer is subject and are provided to aid the Applicant/developer during construction and/or operation.

Reviewing Agencies/Department Comments:

Refer to comments under Findings 1 through 5 of this report.

Recommended Conditions of Approval:

See Mitigation Monitoring, Conditions of Approval and Project Notes attached as Exhibit 1.

Conclusion:

Finding 6 can be made.

PUBLIC COMMENT:

One letter of support for the operation from Terry Johnson Trucking, Inc. was received on July 21, 2020. It has been attached as Exhibit 12.

CONCLUSION:

Based on the factors cited in the analysis, staff believes the required Findings for granting the Unclassified Conditional Use Permit and adoption of the Reclamation Plan can be made. Staff therefore recommends adoption of the Mitigated Negative Declaration prepared for the project and approval of Unclassified Conditional Use Permit No. 3512 and associated Reclamation Plan, subject to the recommended Conditions.

PLANNING COMMISSION MOTIONS:

Recommended Motion (Approval Action)

- Move to adopt the Mitigated Negative Declaration prepared for Initial Study Application No. 7029; and

- Move to determine the required Findings can be made and move to approve Unclassified Conditional Use Permit No. 3512 and its associated Reclamation Plan, subject to the Mitigation Measures, Conditions of Approval and Project Notes listed in Exhibit 1; and

- Direct the Secretary to prepare a Resolution documenting the Commission's action.

Alternative Motion (Denial Action)

- Move to determine that the required Findings cannot be made (state basis for not making the Findings) and move to deny Unclassified Conditional Use Permit No. 3512; and

- Direct the Secretary to prepare a Resolution documenting the Commission's action.

Mitigation Measures, Recommended Conditions of Approval and Project Notes:

See attached Exhibit 1.

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Mitigation Monitoring and Reporting Program
Initial Study No. 7029/Unclassified Conditional Use Permit No. 3512
(Including Conditions of Approval and Project Notes)

Mitigation Measures					
Mitigation Measure No.*	**Impact**	**Mitigation Measure Language**	**Implementation Responsibility**	**Monitoring Responsibility**	**Time Span**
1.	Aesthetics	All outdoor lighting shall be hooded and directed as not to shine toward adjacent properties and public streets.	Operator	Operator/Fresno County Department of Public Works and Planning (PWP)	Ongoing; for duration of the project
2.	Biological Resources – Nesting Bird Pre-construction Surveys	If construction or ground-disturbance activities are initiated during the nesting season (typically February 1st to August 31st), a qualified biologist shall conduct a pre-construction survey of the construction areas and the immediate vicinity (0.25 mile radius for Swainson's hawk) for active nests/burrows within 30 days of initiation of Project activities.	Operator	Operator/PWP	As noted
3.	Biological Resources – Nesting Bird Avoidance	If active nests/burrows are observed during pre-construction surveys conducted pursuant to Mitigation Measure No. 2 above, impacts to nests/burrows shall be avoided by establishing a 300-foot construction-free buffer around the nest/burrow until the nest/burrow becomes inactive as determined by a qualified biologist. If an active Swainson's hawk nest is identified, a 750-foot buffer shall be established. With prior approval of the California Department of Fish & Wildlife, work may occur within the buffer zone(s).	Operator	Operator/ U.S. Fish and Wildlife Service/ California Department of Fish and Wildlife (USFWS/ CDFW)	Ongoing; for duration of the project
4.	Biological Resources – Kit Fox Pre-construction Surveys	Preconstruction/pre-activity surveys for kit fox dens shall be conducted by a qualified biologist no less than 14 days and no more than 30 days prior to the beginning of construction or ground-disturbance activities within a new phase boundary.	Operator	Operator/PWP	As noted
5.	Biological Resources –	If a kit fox den is identified in the Project area, exclusion zones shall be placed in accordance with USFWS recommendations, as follows:	Operator	Operator/ USFWS/CDFW	Ongoing; for duration of the project

	Kit Fox Avoidance	• Potential Den: 50-foot radius • Known Den: 100-foot radius • Natal/Pupping Den: (Occupied and Unoccupied) Contact USFWS for guidance • Atypical Den: 50-foot radius Work shall not occur within the exclusion zone(s) until approved by USFWS. If a natal/pupping den is discovered within the Project area, USFWS shall be immediately notified and under no circumstances should the den be disturbed or destroyed without prior authorization.			
6.	Biological Resources – Blunt-Nosed Leopard Lizard Pre-construction Surveys	The blunt-nosed leopard lizard (BNLL) is listed as federally and state endangered and is a state fully-protected species. Since CDFW is not able to issue any form of "take" permit for the blunt-nosed leopard lizard due to its status as a fully-protected animal under the California Fish and Game Code §5050, detection of species presence on a Project site is crucial. Protocol surveys for blunt-nose leopard lizard shall be conducted by a qualified biologist in the Project area no more than one (1) year prior to the initiation of ground-disturbance activities. The biologist(s) shall identify and clearly mark the location of areas where any BNLL were observed. A 50 ft. buffer will be established around all sightings with highly visible markers. BNLL protocol surveys will be used to help determine the presence/absence of San Joaquin kit fox and burrowing owl, and the suitability of the site to support these species well before project-related disturbance activities.	Operator	Operator/PWP	As noted
7.	Biological Resources – Blunt-Nosed Leopard Lizard Avoidance	If the presence of a blunt-nosed leopard lizard is detected, 50-ft buffer zones shall be established from any observed blunt-nosed leopard lizard location. The buffer zones shall be demarcated by construction fencing (or similar) to ensure that construction crews do not enter the avoidance zone. CDFW and USFWS shall be notified immediately in the event of a detection of the species, and work shall not occur within the buffer zone until approved by both agencies and any other Mitigation Measures recommended by the agencies have been fully implemented.	Operator	Operator/ USFWS/CDFW	Ongoing; for duration of the project

8	Biological Resources	Prior to installation of the crossing over Los Gatos Creek, all necessary permits shall be obtained for conducting work in and adjacent to jurisdictional waters, and may include an Army Corps of Engineers Section 404 permit, Regional Water Quality Control Board Section 401 Water Quality Certification, and California Department of Fish and Wildlife (CDFW) (Section 1602 Streambed Alteration Agreement) agreement.	Operator	Operator/ USFWS/ CDFW/PWP/ Noted Federal Agencies	As noted
9	Biological Resources	If an elevated conveyor system is utilized spanning Los Gatos Creek, a containment system shall be designed and installed to catch and collect side-cast sands and gravels to prevent inadvertent fill of the jurisdictional waters. The containment system shall be regularly maintained as part of normal operations during the life of the Project.	Operator	Operator/PWP	Ongoing; for duration of the project
10	Biological Resources	Installation of the elevated conveyor system and associated infrastructure in the floodplain shall occur between April 1 – October 31 when flowing water is absent from the stream or at a minimum flow.	Operator	Operator/PWP	As noted
11	Cultural Resources	If cultural resources are unearthed during ground-disturbing activities, all work shall be halted in the area of the find. A professional archeologist shall be called to evaluate the findings and make any necessary mitigation recommendations. If human remains are unearthed during ground-disturbing activities, no further disturbance is to occur until the Fresno County Sheriff-Coroner has made the necessary findings as to origin and disposition. All normal evidence procedures shall be followed by photos, reports, video, etc. If such remains are determined to be Native American, the Sheriff-Coroner must notify the Native American Commission within 24 hours.	Operator	Operator/PWP/ Fresno County Sheriff's Office	As noted
12	Cultural Resources	In the event archaeological materials are encountered during grading or construction, the operator shall cease all ground-disturbing activities within 50 feet of the find. A professional archaeologist shall evaluate the significance of the resources and recommend appropriate treatment measures. Per CEQA Guidelines §15126.4(b)(3)(A). Consistent with CEQA Guidelines §15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the professional archaeologist shall develop additional treatment measures in consultation with the County, which may include data recovery or other appropriate measures.	Operator	Operator/PWP	As noted

<table>
<tr><td>13</td><td>Geology and Soils</td><td>If paleontological resources are discovered during Project-related activities, all work shall be stopped in the area of the find and a qualified paleontologist shall be called to assess the find. The paleontologist shall make any necessary recommendations, including any procedures to further investigate or mitigate impacts to the find as required by law.</td><td>Operator</td><td>Operator/PWP</td><td>As noted</td></tr>
<tr><td>14</td><td>Noise</td><td>Prior to mining within 2,300 ft. of the Elks Lodge property line, 6 ft. high earthen berms shall be constructed along the Project mine boundary in the eastern pit. (See July 23, 2015 Noise Assessment Study Prepared by Edward L. Pack and Associates, Inc., Figure 4, for the approximate locations of the noise control berms.)</td><td>Operator</td><td>Operator/ Department of Public Health, Environmental Health Division (Health Department)/ PWP</td><td>As noted</td></tr>
<tr><td>15</td><td>Noise</td><td>Prior to mining within 2,200 ft. of the school/residential property lines on the south side of Cambridge Avenue, 6 ft. high earthen berms shall be constructed along the expansion boundary to the south parallel with Cambridge Avenue. The berms will extend from the west boundary and turn along the flood plain/mining boundary to the west of Los Gatos Creek to terminate at a distance of 2,200 ft. from the school/residential property lines on the south side of Cambridge Avenue. (See July 23, 2015 Noise Assessment Study Prepared by Edward L. Pack and Associates, Inc., Figure 4, for the approximate locations of the noise control berms.)</td><td>Operator</td><td>Operator/Health Department/ PWP</td><td>As noted</td></tr>
<tr><td>16</td><td>Transportation</td><td>Within one year of project approval, the Applicant shall pay Caltrans the following fair-share cost:
<table>
<tr><th>INTERSECTION</th><th>ESTIMATED COST</th><th>COST / TRIP</th><th>PROJECT TRUCK TRIPS</th><th>FAIR SHARE COST</th></tr>
<tr><td>I-5 NB Off Ramp at Jayne Avenue</td><td>$1,200,00</td><td>$925</td><td>5</td><td>$4,625</td></tr>
<tr><td>SR 33 at Jayne Avenue</td><td>$173,000</td><td>$90</td><td>34</td><td>$3,060</td></tr>
<tr><td>SR 33 at Juniper Ridge Boulevard</td><td>$173,000</td><td>$90</td><td>17</td><td>$1,530</td></tr>
<tr><td>SR 33 at 5th Street</td><td>$470,000</td><td>$162</td><td>19</td><td>$3,078</td></tr>
<tr><td>SR 33 at 3rd Street</td><td>$470,000</td><td>$218</td><td>19</td><td>$4,142</td></tr>
</table></td><td>Operator</td><td>Operator/ Caltrans</td><td>As noted</td></tr>
</table>

17	Transportation	Prior to any production mining in the project area, the Applicant shall be responsible for completing upgrades to the impacted segments on Phelps Avenue between SR 33 and Calaveras Avenue, Calaveras Avenue between Phelps Avenue and SR 33, and Jayne Avenue between SR 33 and I-5 to their required Traffic Index as detailed in the Traffic Impact Study completed by VRPA dated November of 2019. No less than one (1) year prior to production mining in the project area, the Applicant shall provide plans for review and approval by the County of Fresno Department of Public Works and Planning. Upon receipt of approval of the plans, the Applicant shall immediately obtain all necessary permits and construct the necessary upgrades. The Applicant is responsible for all permits and fees including staff time.	Operator	Operator/PWP	As noted
18	Transportation	Within five years of the projected time of initiating mining in the project area, the Applicant shall provide annual written updates to the County regarding the projected timeline of initiation mining in the project area. The annual written updates are due by January 31st of every year.	Operator	Operator/PWP	As noted
19	Tribal Cultural Resources	If tribal cultural materials (*i.e.*, flaked stone artifacts, ground stone, historical glass, bone, etc.) or features (*e.g.*, hearths, structural foundations, privies, etc.) are discovered during Project-related activities, all work will stop in the area of the find and a professional archeologist shall assess and make any necessary recommendations, including any procedures to further investigate or mitigate impacts to the find as required by law. If the cultural resource is associated with the past lifeways of California Native Americans, evaluation, recommendations for further investigation, and/or mitigation shall be determined in consultation with the most likely descendent.	Operator	Operator/NAHC/ PWP	As noted
20	Tribal Cultural Resources	If unanticipated human remains are discovered: a. Work will immediately stop at the discovery location and any nearby area reasonably suspected to overlie adjacent human remains. The Fresno County Sheriff-Coroner shall immediately be contacted to determine if the cause of death must be investigated. If the Sheriff-Coroner has reason to believe that the remains are of Native American origin, he or she will contact NAHC by telephone within 24 hours (PRC § 7050.5).	Operator	Operator/NAHC/ PWP	As noted

		b. The NAHC and landowner will follow prescribed steps in PRC Section 5097.98, which include, but are not limited to, the following: The NAHC will notify those persons it believes to be the most likely descended from the deceased Native American. The most likely descendant may recommend to the landowner the means of treating and disposing of, with appropriate dignity, the human remains and any associated grave goods. The landowner shall ensure the immediate vicinity of the Native American human remains is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations. The Applicant shall work with the NAHC to develop and execute an agreement between themselves and the most likely descendant(s) of Native Americans who may be buried in the vicinity by which the human remains and associated burial items will be treated or disposed, with appropriate dignity.			

Conditions of Approval	
1.	Development and operation of the use shall be in conformance with the site plan, elevation drawings, operational statement, and Reclamation Plan approved by the Commission.
2.	All mining operations within the approved expansion area defined by Unclassified Conditional Use Permit No. 3512 shall cease fifty-five (55) years from commencement of mining operations. All reclamation shall be completed within five (5) years of the cessation of mining operations.
3.	Mine activities within the expansion area authorized by this permit shall be limited to the hours of 6:00 a.m. to 5:00 p.m. weekdays except during periods of public emergency or public works projects, in which case weekends and nights may be permitted. Maintenance of mobile and plant equipment may extend beyond the 6:00 a.m. to 5:00 p.m. weekday limits.
4.	The conditions of this permit shall supersede the conditions of prior Conditional Use Permit Nos. 915 and 2320 in any areas where the three overlap.
5.	A water truck shall be utilized on site and water shall be applied to unpaved portions of internal haul roads and working areas as frequently as necessary to prevent fugitive dust emissions. In lieu of water application, alternative methods, such as the application of dust palliatives or gravel, may be applied to the internal haul roads to minimize fugitive dust.
6.	Perimeter fencing at least four (4) feet in height consisting of not less than three (3) strands of barbed wire (or an approved equivalent) will be installed consistent with this Standard. Fencing shall be installed immediately prior to excavation of each affected area.

7.	The extraction operation within the expansion area shall consist of not less than six (6) separate phases as illustrated on the approved Site Plan in as described in the approved Operational Statement and Reclamation Plan.
8.	The Conditional Use Permit approval shall be conditioned upon acceptance of Financial Assurances by the Fresno County Department of Public Works and Planning.
9.	To ensure that reclamation shall proceed in accordance with the approved Mining and Reclamation Plan, the County shall require, as a condition of approval, security which will be released upon satisfactory performance.

*MITIGATION MEASURE – Measure specifically applied to the project to mitigate potential adverse environmental effects identified in the environmental document.
Conditions of Approval reference recommended Conditions for the project.

Notes	
The following Notes reference mandatory requirements of Fresno County or other Agencies and are provided as information to the project Applicant.	
1.	This Use Permit will become void unless there has been substantial development within two years of the effective date of approval (substantial development approval includes Site Plan Review approval, site maintenance, and compliance with California Division of Mine Reclamation requirements prior to actual mining activity).
2.	Pursuant to the provision identified in Zoning Ordinance Section 858.E.4, a Site Plan Review shall be submitted and approved for the entire area shown for the mining and reclamation plan prior to commencing mining activities.
3.	All proposed building and structures built in the project area after 1958 without permits will need plans, permits and inspections.
4.	According to the FEMA Panel 3211H, a portion of the subject property is subject to flooding from the one percent (1%)-chance rain. Any structures located within the flood hazard area shall be raised to or above the Base Flood Elevation (BFE) or be flood-proofed per the Fresno County Flood Hazard Ordinance Chapter 15.48.
5.	Within 30 days of the occurrence of any of the following events the Applicant/operators shall update their online Hazardous Materials Business Plan and site map through the Environmental Health Division of Fresno County's Department of Public Health (https://www.fresnocupa.com/ or http://cers.calepa.ca.gov/): 1. There is a 100% or more increase in the quantities of a previously-disclosed material; 2. The facility begins handling a previously-undisclosed material at or above the HMBP threshold amounts. The business shall certify that a review of the business plan has been conducted at least once every three years and that any necessary changes were made and that the changes were submitted to the local agency. Contact the Certified Unified Program Agency at (559) 600-3271 for more information.
6.	All hazardous waste shall be handled in accordance with requirements set forth in the California Code of Regulations (CCR), Title 22, Division 4.5. This Division discusses proper labeling, storage and handling of hazardous wastes.
7.	Facilities using and/or storing hazardous materials and/or hazardous wastes shall meet the requirements set forth in the California Health and Safety Code (HSC), Division 20, Chapter 6.95, and the California Code of Regulations (CCR), Title 22, Division 4.5.
8.	Any business that handles a hazardous material or hazardous waste may be required to submit a Hazardous Materials

Notes	
	Business Plan pursuant to the HSC, Division 20, Chapter 6.95.
9.	Based on information provided to the San Joaquin Valley Air Pollution Control District, the proposed project is subject to District permits; as such, this project is not subject to District Rule 9510 (Indirect Source Review).
10.	Prior to the start of construction, the project proponent should contact the San Joaquin Valley Air Pollution Control District's Small Business Assistance Office at (559) 230-5888 to determine if an Authority to Construct (ATC) is required.
11.	The proposed project may be subject to the following San Joaquin Valley Air Pollution Control District's rules: Regulation VIII (Fugitive PM10 Prohibitions), Rule 4102 (Nuisance), Rule 4601 (Architectural Coatings), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt Paving and Maintenance Operations). In the event an existing building will be renovated, partially demolished or removed, the project may be subject to District Rule 4002 (National Emission Standards for Hazardous Air Pollutants).

CM:cwm:ksn
C:\Users\knovak\Desktop\CUP 3512 Web Docs\Exhibit 1 Mitigation, Conditions, Notes.docx

CUP 3512

LOCATION MAP

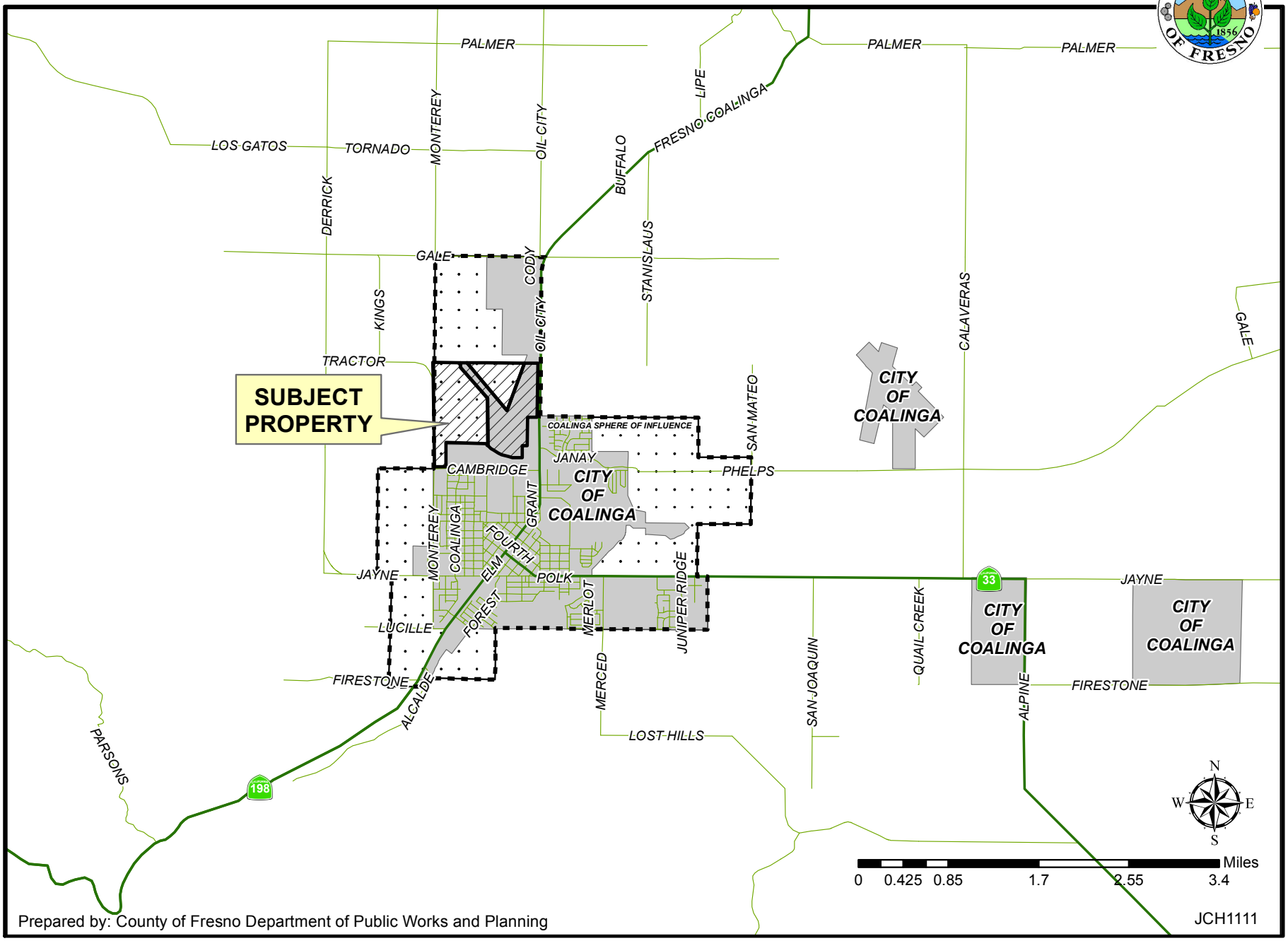
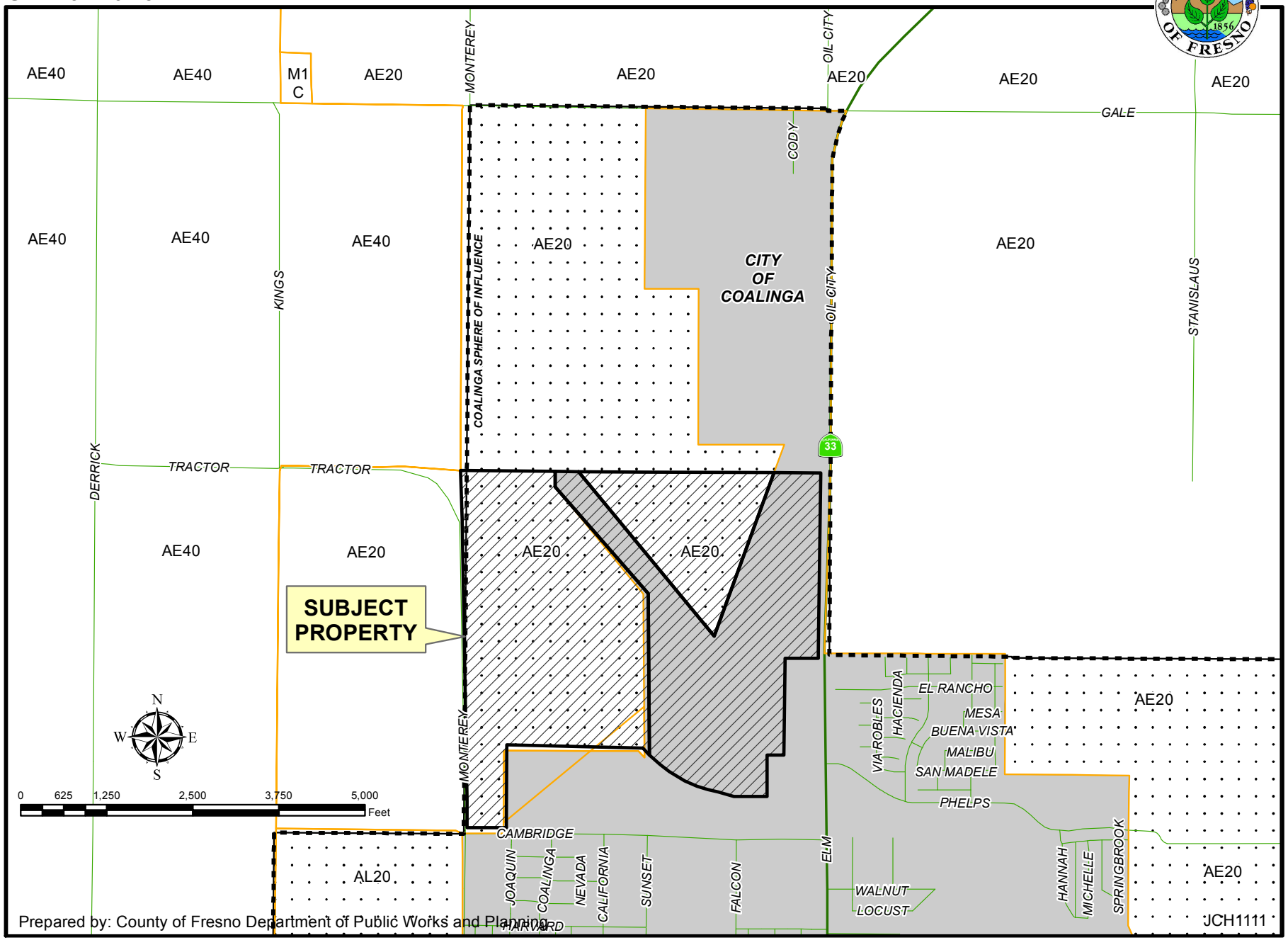


EXHIBIT 2

EXHIBIT 2

CUP 3512
STR 29 - 20/15

EXISTING ZONING MAP



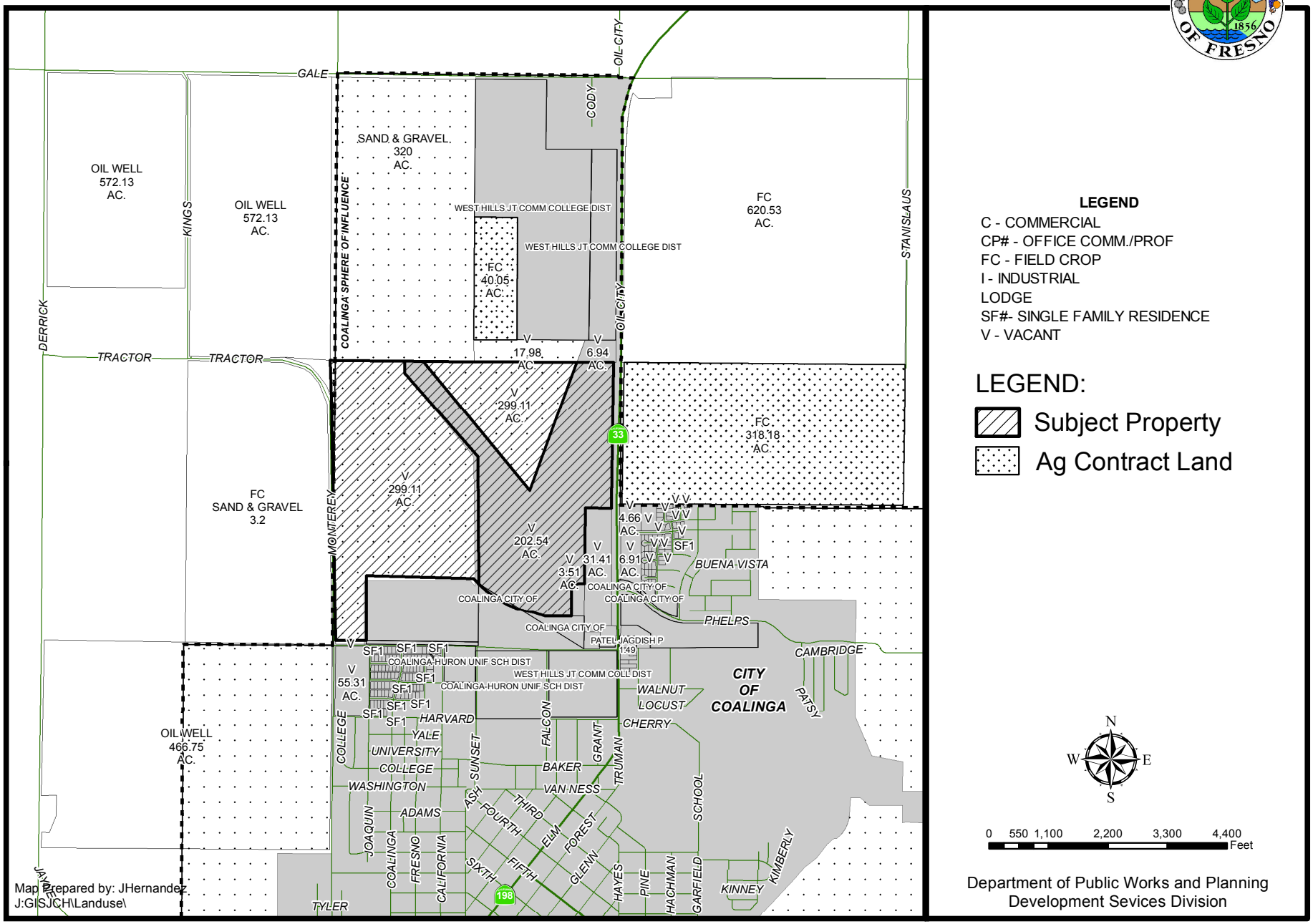
Prepared by: County of Fresno Department of Public Works and Planning

EXHIBIT 3

EXHIBIT 3

CUP 3512

EXISTING LAND USE MAP



LEGEND

C - COMMERCIAL
CP# - OFFICE COMM./PROF
FC - FIELD CROP
I - INDUSTRIAL
LODGE
SF#- SINGLE FAMILY RESIDENCE
V - VACANT

LEGEND:

Subject Property

Ag Contract Land

N
W E
S

0 550 1,100 2,200 3,300 4,400 Feet

Department of Public Works and Planning
Development Sevices Division

EXHIBIT 4

EXHIBIT 4

GRANITE CONSTRUCTION COMPANY

COALINGA MINE EXPANSION PROJECT

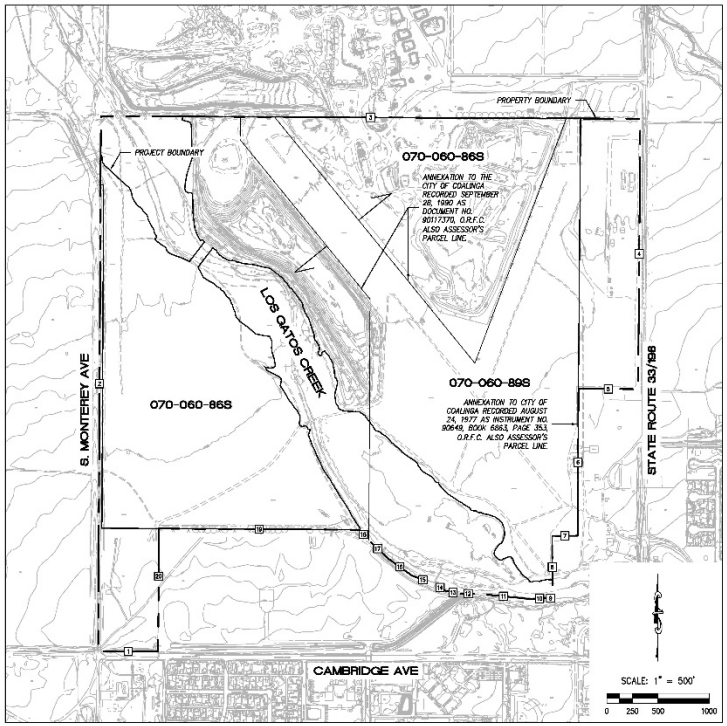
COUNTY OF FRESNO
CITY OF COALINGA

PROPERTY LINE METES AND BOUNDS				
NO.	DELTA OR BRG.	RADIUS(ft)	LENGTH(ft)	REMARKS
1	N89°37'31"E	------	585.65	*
2	N00°31'17"W	------	5268.47	*
3	N89°27'27"E	------	5274.10	*
4	S00°20'54"E	------	2638.50	*
5	S89°29'54"W	------	583.02	*
6	N00°17'29"E	------	1432.57	**
7	N89°26'43"E	------	250.07	**
8	N00°31'22"W	------	698.23	**
9	N83°58'01"W	------	39.97	**
10	N85°42'59"E	------	174.62	*
11	S85°30'22"E	------	534.12	*
12	N88°15'38"E	------	157.61	*
13	S80°00'13"E	------	138.64	*
14	S82°49'46"E	------	137.20	*
15	S70°04'16"E	------	231.95	*
16	S54°57'23"E	------	289.01	*
17	S47°23'00"E	------	270.31	*
18	S42°42'33"E	------	118.26	*
19	N89°32'21"E	------	1955.92	*
20	N00°27'18"W	------	1200.00	*

* METES AND BOUNDS ARE PER FEBRUARY 2007 ALTA/ACSM LAND TITLE SURVEY BY MCPHEETERS AND ASSOCIATES, INC. PROJECT BOUNDARY SHOWN ON THESE PLANS IS APPROXIMATED FROM ALTA SURVEY.

** METES AND BOUNDS ESTIMATED FROM CAD FILE

VICINITY MAP
NOT TO SCALE



SITE OVERVIEW MAP
SCALE: 1" = 500'

OWNER/OPERATOR/APPLICANT

GRANITE CONSTRUCTION COMPANY
ATTN: CANDICE LONGNECKER
2716 GRANITE COURT
FRESNO, CA. 93706
PHONE: 559-441-5700

ENGINEER

CHANG CONSULTANTS
WAYNE CHANG, PE
P.O. BOX 9496
RANCHO SANTA FE, CA 92067-4496
MOBILE: 858-692-0760
FAX: 858-832-1402

TOPOGRAPHY SOURCE

PREPARED BY:
VERTICAL MAPPING RESOURCES, INC.
153 BLUE RAVINE ROAD, SUITE 150
FOLSOM, CA 95630
PHONE: 916-817-1486
FAX: 916-817-1487

PHOTO DATE: SEPTEMBER 30, 2014

ASSESSOR'S PARCEL NUMBERS

APN 070060086s (FRESNO COUNTY) AND
APN 070060089s (CITY OF COALINGA)

LEGAL DESCRIPTION

A PORTION OF SECTION 29, TOWNSHIP 20 SOUTH, RANGE 15 EAST, MOUNT DIABLO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF;

NOTES

1. PROJECT BOUNDARY INCLUDES THE MINING AREA, SETBACK AREAS, NOISE CONTROL BERMS, AND PERIMETER ACCESS ROADS.
2. THE LOS GATOS CREEK 100-YEAR FLOODPLAIN SHOWN ON THESE PLANS WAS OBTAINED FROM THE ANALYSIS IN CHANG CONSULTANTS JULY 16, 2015 REPORT, "HYDROLOGIC AND HYDRAULIC ANALYSES FOR GRANITE CONSTRUCTION COMPANY'S COALINGA MINE EXPANSION PROJECT." MINING SETBACKS FROM EXISTING FLOODPLAIN WERE BASED ON HYDRAULIC RESULTS AND VARY (50 FEET MINIMUM FROM NEW EXCAVATION AREAS).
3. THE PROJECT AND PROPERTY BOUNDARIES COINCIDE ALONG METES AND BOUNDS ITEMS 6, 7, AND 19 AS WELL AS A PORTION OF ITEMS 2, 3, AND 8.
4. FINAL MINING FOOTPRINT, SLOPES AND DEPTH MAY VARY DEPENDING ON FIELD CONDITIONS, ACCESSIBILITY OF PRODUCT, MARKET CONDITIONS, ABILITY OF OPERATOR TO MINE AND MEET THE RECLAMATION REQUIREMENTS, AND MARKET DEMAND.

LEGEND

EXISTING CONTOUR — 500

PARCEL BOUNDARY (501.65 ACRES)

PROPERTY BOUNDARY (501.65 ACRES)

PROJECT BOUNDARY (368.58 ACRES)

SHEET INDEX

REGISTERED PROFESSIONAL ENGINEER WAYNE W. CHANG No. 46548 Exp. 6/30/17 CIVIL STATE OF CALIFORNIA

SHEET 1 OF 7

GRANITE CONSTRUCTION COMPANY
2716 GRANITE COURT
FRESNO, CA 93706

GRANITE CONSTRUCTION COMPANY
COALINGA MINE EXPANSION PROJECT
TITLE SHEET

ChangConsultants
Civil Engineering • Hydrology • Hydraulics • Sedimentation
P.O. Box 9496 Rancho Santa Fe, CA 92067-4496 T (858) 692-0760 F (858) 832-1402
Wayne@changconsultants.com • www.changconsultants.com

D		
C		
B		
A		
	Date	Revision

AUGUST 6, 2015

EXHIBIT 5

EXHIBIT 5

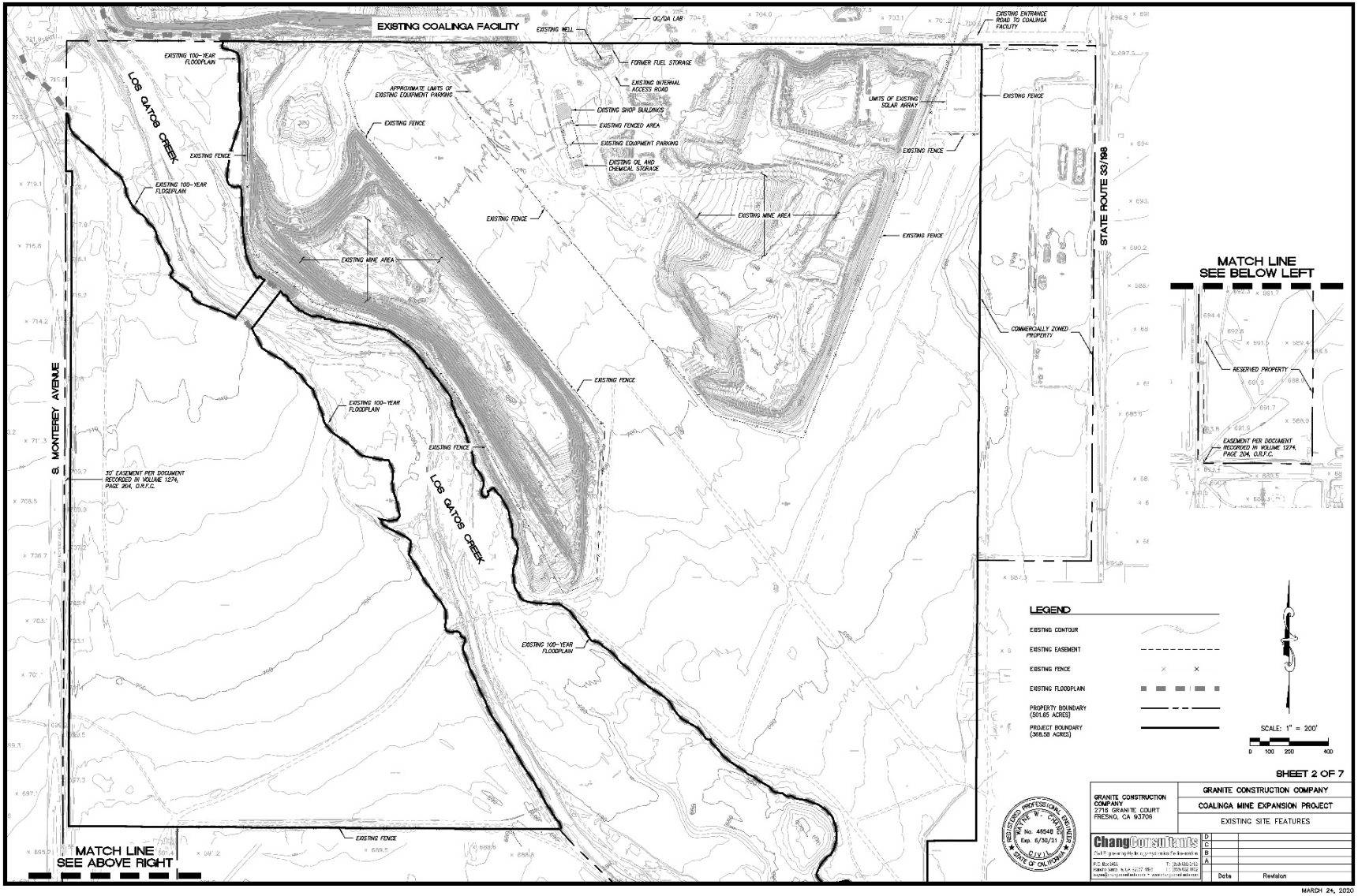


Exhibit 5 – Page 2

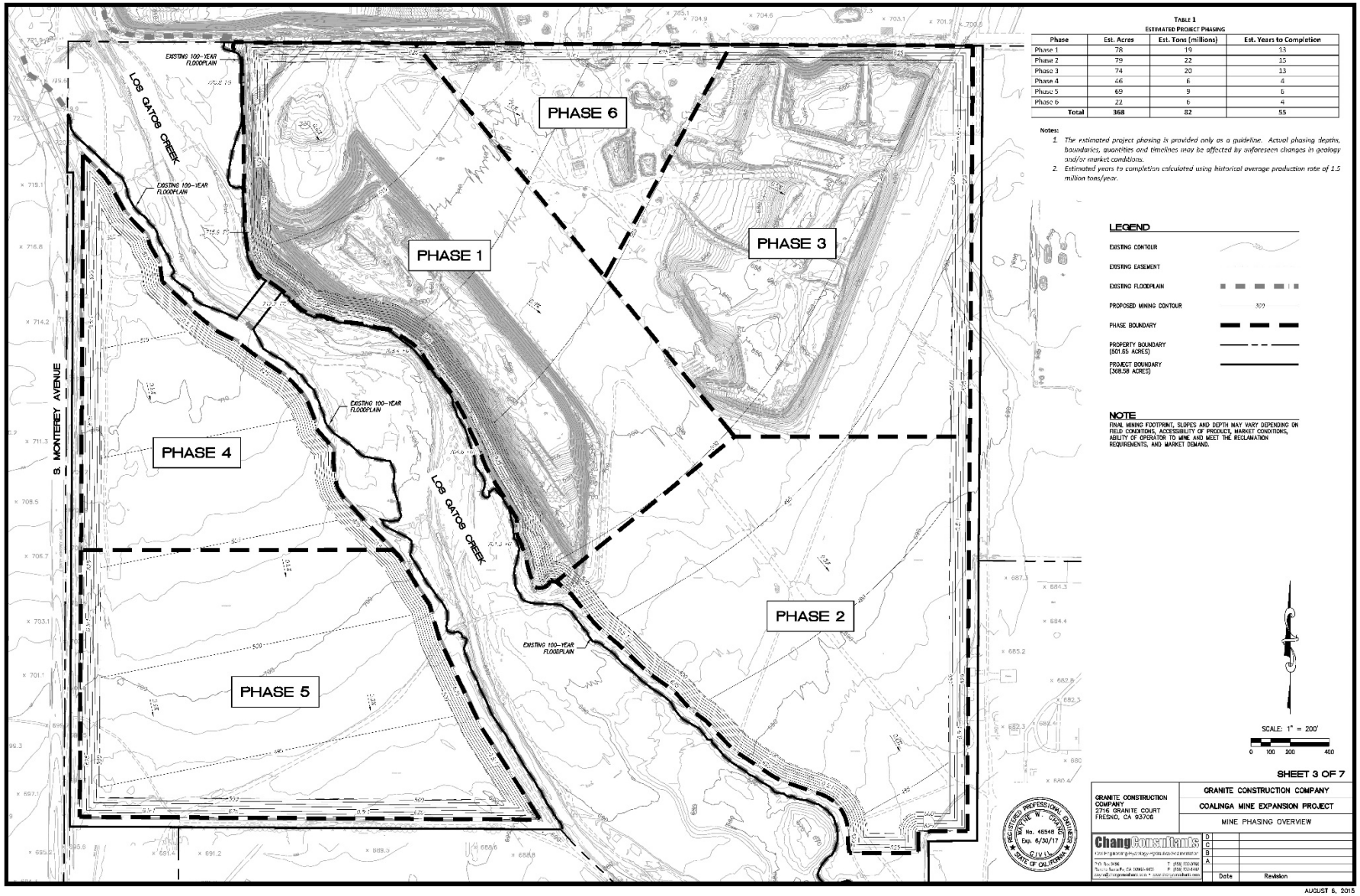
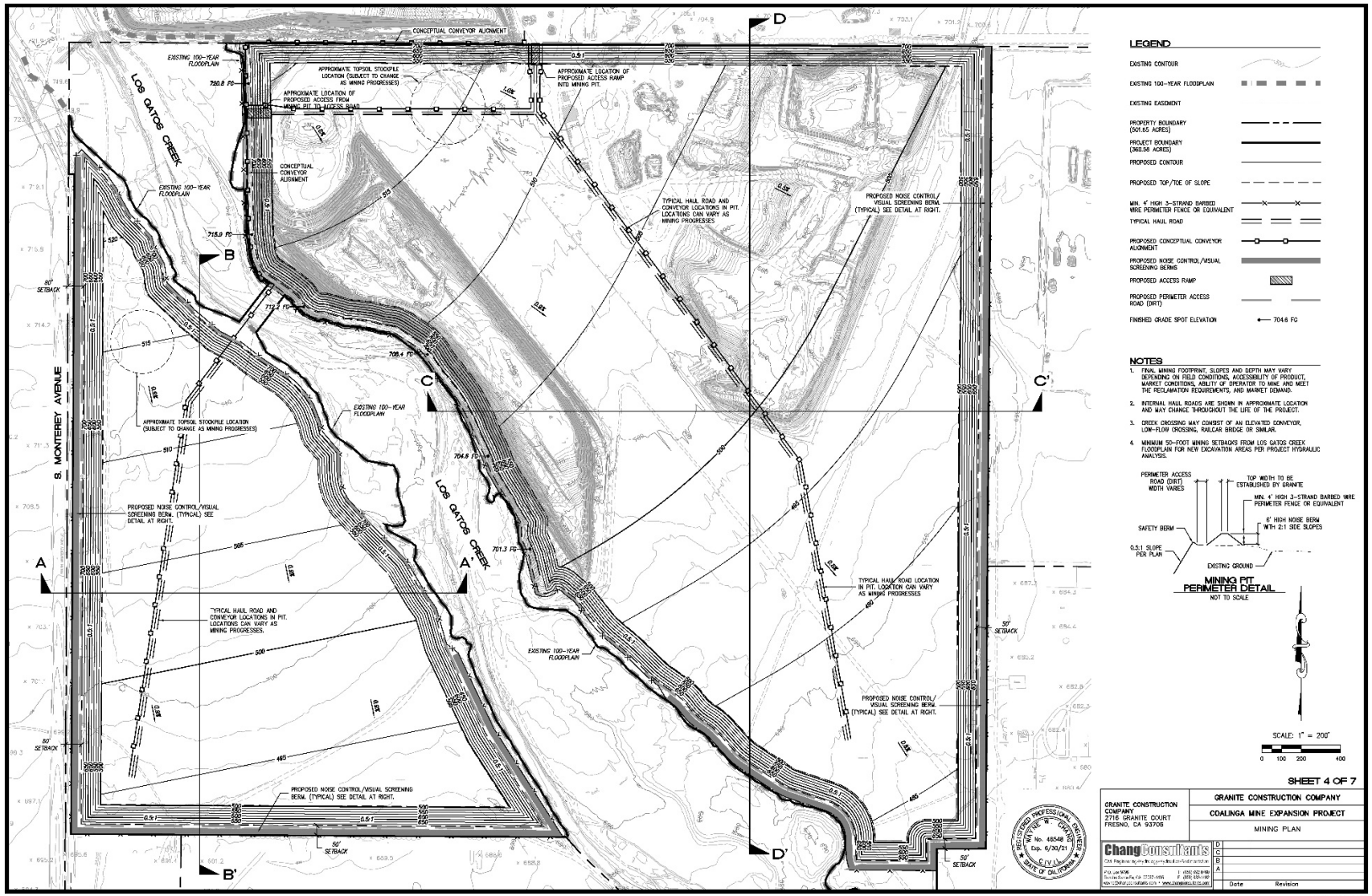


TABLE 1
ESTIMATED PROJECT PHASING

Phase	Est. Acres	Est. Tons (millions)	Est. Years to Completion
Phase 1	78	19	13
Phase 2	79	22	15
Phase 3	74	20	13
Phase 4	46	6	4
Phase 5	69	9	6
Phase 6	22	6	4
Total	**368**	**82**	**55**

Notes:

1. *The estimated project phasing is provided only as a guideline. Actual phasing depths, boundaries, quantities and timelines may be affected by unforeseen changes in geology and/or market conditions.*
2. *Estimated years to completion calculated using historical average production rate of 1.5 million tons/year.*



LEGEND

- EXISTING CONTOUR
- EXISTING 100-YEAR FLOODPLAIN
- EXISTING EASEMENT
- PROPERTY BOUNDARY (501.65 ACRES)
- PROJECT BOUNDARY (368.56 ACRES)
- PROPOSED CONTOUR
- PROPOSED TOP/TOE OF SLOPE
- MIN. 4' HIGH 3-STRAND BARBED WIRE PERIMETER FENCE OR EQUIVALENT
- TYPICAL HAUL ROAD
- PROPOSED CONCEPTUAL CONVEYOR ALIGNMENT
- PROPOSED NOISE CONTROL/VISUAL SCREENING BERMS
- PROPOSED ACCESS RAMP
- PROPOSED PERIMETER ACCESS ROAD (DIRT)
- FINISHED GRADE SPOT ELEVATION ← 704.8 FG

NOTES

1. FINAL MINING FOOTPRINT, SLOPES AND DEPTH MAY VARY DEPENDING ON FIELD CONDITIONS, ACCESSIBILITY OF PRODUCT, MARKET CONDITIONS, ABILITY OF OPERATOR TO MINE AND MEET THE RECLAMATION REQUIREMENTS, AND MARKET DEMAND.
2. INTERNAL HAUL ROADS ARE SHOWN IN APPROXIMATE LOCATION AND MAY CHANGE THROUGHOUT THE LIFE OF THE PROJECT.
3. CREEK CROSSING MAY CONSIST OF AN ELEVATED CONVEYOR, LOW-FLOW CROSSING, RAILCAR BRIDGE OR SIMILAR.
4. MINIMUM 50-FOOT MINING SETBACKS FROM LOS GATOS CREEK FLOODPLAIN FOR NEW EXCAVATION AREAS PER PROJECT HYDRAULIC ANALYSIS.

MINING PIT PERIMETER DETAIL
NOT TO SCALE

SCALE: 1" = 200'
0 100 200 400

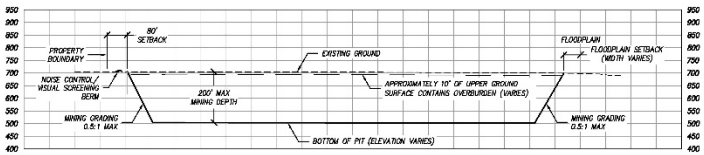
SHEET 4 OF 7

GRANITE CONSTRUCTION COMPANY 2716 GRANITE COURT FRESNO, CA 93706	GRANITE CONSTRUCTION COMPANY COALINGA MINE EXPANSION PROJECT MINING PLAN
Chang Consultants Civil Engineering • Surveying • Land Development P.O. Box 5976 Bakersfield, CA 93388-5976 T (661) 862-8888 F (661) 616-1100 info@changconsultants.com • www.changconsultants.com	D C B A Date Revision

MARCH 24, 2020

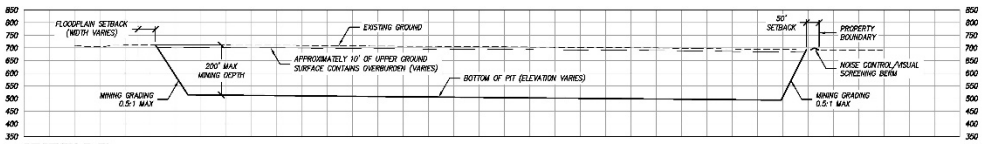
NOTES

1. GROUNDWATER DEPTHS ARE GENERALLY 100 FEET ON AVERAGE OR MORE BELOW PROPOSED BOTTOM OF PITS.
2. FINAL MINING FOOTPRINT, SLOPES AND DEPTH MAY VARY DEPENDING ON FIELD CONDITIONS, ACCESSIBILITY OF PRODUCT, MARKET CONDITIONS, ABILITY OF OPERATOR TO MINE AND MEET THE RECLAMATION REQUIREMENTS, AND MARKET DEMAND.



SECTION: A-A'

SCALE: HORIZ. 1"=200' VERT. 1"=200'



SECTION: B-B'

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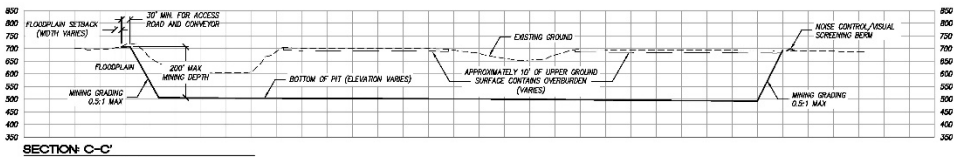

SECTION: C-C'

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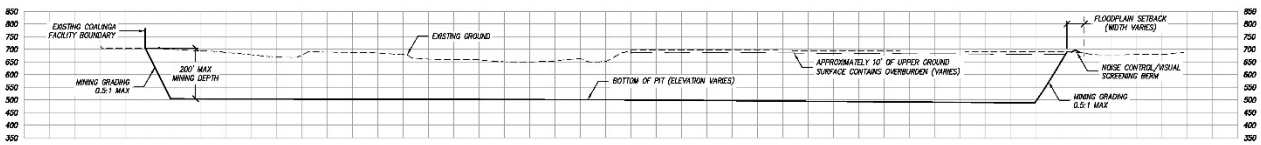


SECTION: D-D'

SCALE: HORIZ. 1"=200' VERT. 1"=200'

SCALE: 1" = 200'

0 100 200 400

SHEET 5 OF 7

REGISTERED PROFESSIONAL ENGINEER WAYNE W. CHANG No. 46548 Exp. 6/30/17 CIVIL STATE OF CALIFORNIA

GRANITE CONSTRUCTION COMPANY 2716 GRANITE COURT FRESNO, CA 93706	GRANITE CONSTRUCTION COMPANY
	COALINGA MINE EXPANSION PROJECT
	MINING PLAN CROSS-SECTIONS
Chang Consultants Civil Engineering • Land Development P.O. Box 7408 T (559) 692-8790 Fresno, California 93747 F (559) 692-1987 email@changconsultants.com • www.changconsultants.com	D C B A Date / Revision

AUGUST 6, 2015

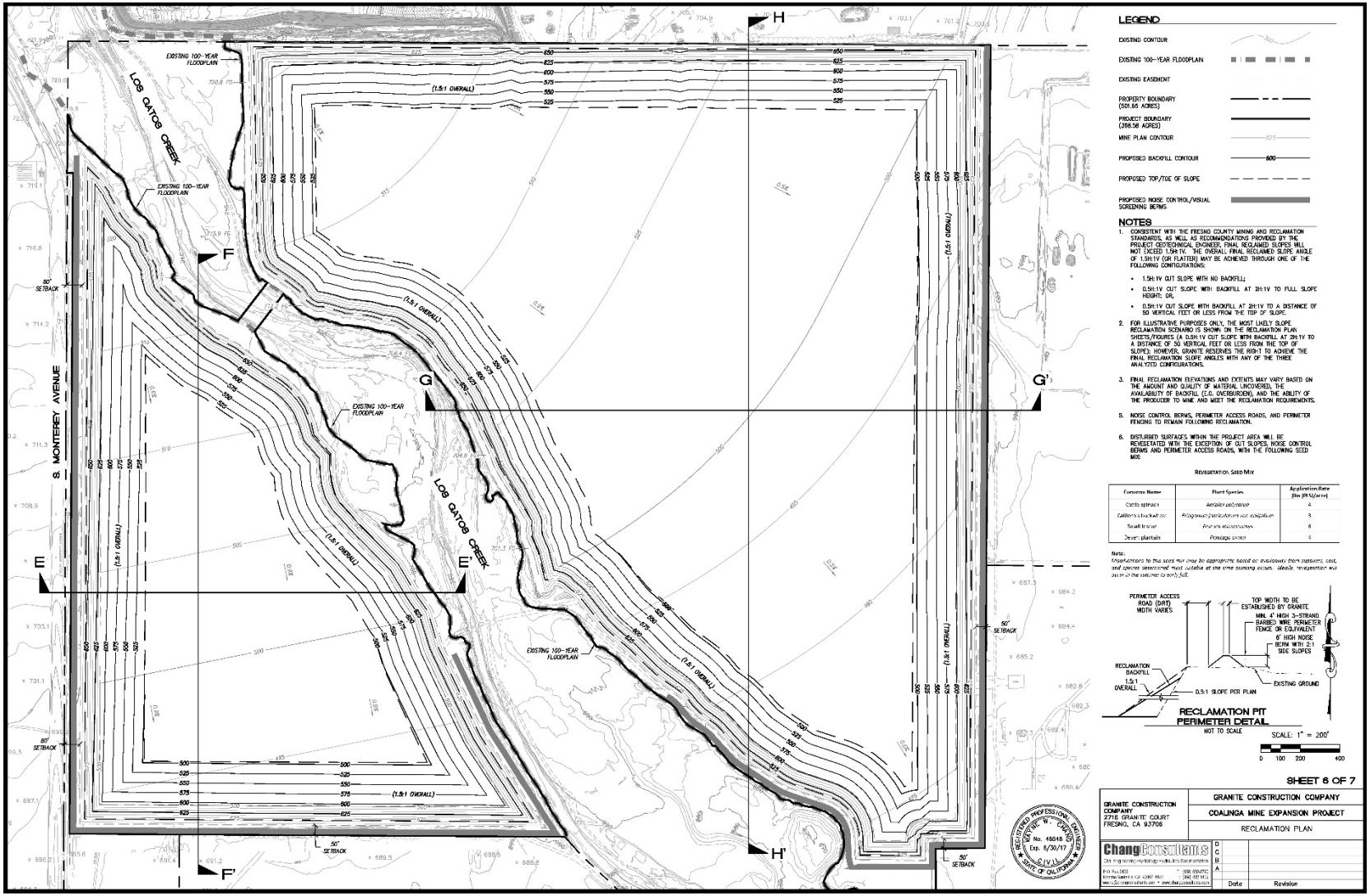
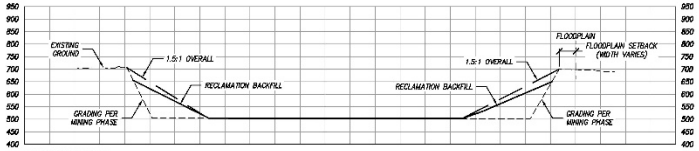


Exhibit 5 – Page 6



SECTION E-E'

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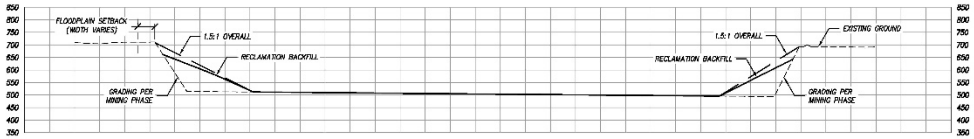

SECTION F-F'

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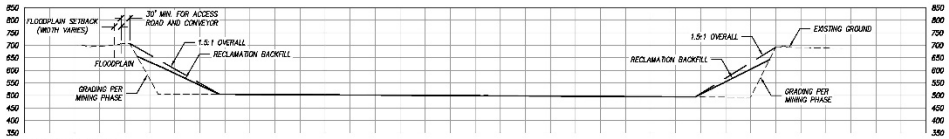

SECTION G-G'

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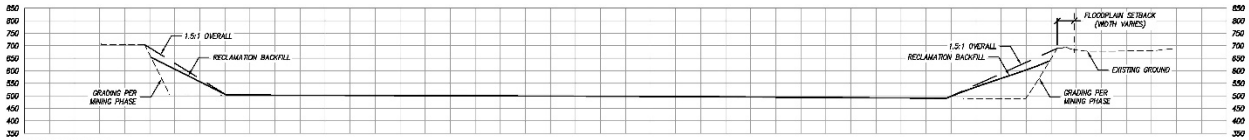

SECTION H-H'

SCALE: HORIZ. 1"=200' VERT. 1"=200'

NOTES

1. CONSISTENT WITH THE FRESNO COUNTY MINING AND RECLAMATION STANDARDS, AS WELL AS RECOMMENDATIONS PROVIDED BY THE PROJECT GEOTECHNICAL ENGINEER, FINAL RECLAIMED SLOPES WILL NOT EXCEED 1.5H:1V. THE OVERALL FINAL RECLAIMED SLOPE ANGLE OF 1.5H:1V (OR FLATTER) MAY BE ACHIEVED THROUGH ONE OF THE FOLLOWING CONFIGURATIONS:
   - 1.5H:1V CUT SLOPE WITH NO BACKFILL;
   - 0.5H:1V CUT SLOPE WITH BACKFILL AT 2H:1V TO FULL SLOPE HEIGHT; OR,
   - 0.5H:1V CUT SLOPE WITH BACKFILL AT 2H:1V TO A DISTANCE OF 50 VERTICAL FEET OR LESS FROM THE TOP OF SLOPE.
2. FOR ILLUSTRATIVE PURPOSES ONLY, THE MOST LIKELY SLOPE RECLAMATION SCENARIO IS SHOWN ON THE RECLAMATION PLAN SHEETS/FIGURES (A 0.5H:1V CUT SLOPE WITH BACKFILL AT 2H:1V TO A DISTANCE OF 50 VERTICAL FEET OR LESS FROM THE TOP OF SLOPE); HOWEVER, GRANITE RESERVES THE RIGHT TO ACHIEVE THE FINAL RECLAMATION SLOPE ANGLES WITH ANY OF THE THREE ANALYZED CONFIGURATIONS.
3. FINAL RECLAMATION ELEVATIONS AND EXTENTS MAY VARY BASED ON THE AMOUNT AND QUALITY OF MATERIAL UNCOVERED, THE AVAILABILITY OF BACKFILL (E.G. OVERBURDEN), AND THE ABILITY OF THE PRODUCER TO MINE AND MEET THE RECLAMATION REQUIREMENTS.
4. NOISE CONTROL BERMS, PERIMETER ACCESS ROADS, AND PERIMETER FENCING TO REMAIN FOLLOWING RECLAMATION.

SCALE: 1" = 200'

0 100 200 400

SHEET 7 OF 7

REGISTERED PROFESSIONAL ENGINEER — WAYNE W. CHANG — No. 46548 — Exp. 6/30/17 — CIVIL — STATE OF CALIFORNIA

GRANITE CONSTRUCTION COMPANY 2716 GRANITE COURT FRESNO, CA 93706	GRANITE CONSTRUCTION COMPANY COALINGA MINE EXPANSION PROJECT RECLAMATION PLAN CROSS-SECTIONS	
ChangConsultants Civil Engineering • Land Development • Water Resources P.O. Box 3403, Fresno, CA 93650-3403 T: (559) 233-2153 F: (559) 233-8092 • www.changconsultants.com	D	
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	B	
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	Date	Revision

AUGUST 5, 2015

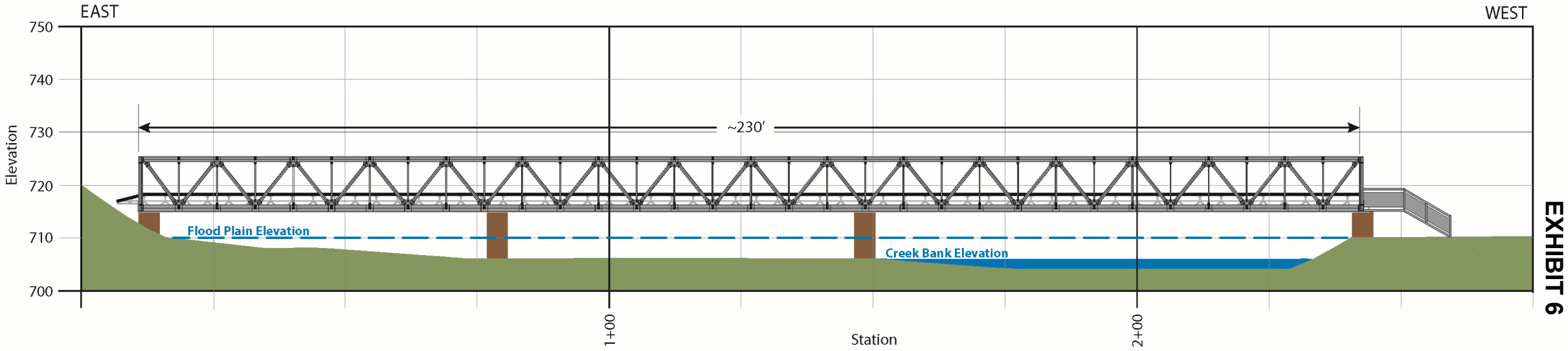


EXHIBIT 6

Conceptual Bridge Conveyor Schematic Coalinga Mine Expansion Project Fresno County, California

EXHIBIT 6

GRANITE™

March 2020

OPERATIONAL STATEMENT
FOR THE
COALINGA MINE EXPANSION PROJECT

Prepared for:

Granite Construction Company
2716 Granite Court
Fresno, CA 93706

Prepared by:

Compass Land Group
3140 Peacekeeper Way, Suite 102
McClellan, CA 95652

August 25, 2015
Updated July 2020

TABLE OF CONTENTS

COMPASS LAND GROUP

FIGURES

SHEETS

APPENDICES

Reclamation Plan Figures and Exhibits

Sheets: See Exhibit 5 of Planning Commission Staff Report

Appendices: See pages 131 through 590 of documents included with Initial Study Application No. 7029 located at https://www.co.fresno.ca.us/home/showdocument?id=46694

INTRODUCTION

This Operational Statement has been prepared in support of Granite Construction Company's ("Granite's") proposed Coalinga Mine Expansion Project ("Project") in Fresno County, California (see Figure 1, Site and Vicinity Map and Sheet 1, Title Sheet). The Operational Statement provides an overview of key Project elements and is organized around the County's "Operational Statement Checklist", attached hereto.

OPERATIONAL STATEMENT CHECKLIST

1. Nature of the operations

Granite owns and operates an existing, permitted aggregate mining and processing operation in western Fresno County known as the Coalinga Facility. The Coalinga Facility consists of multiple permitted mining areas under CA Mine ID Nos. 91-10-0005 and 91-10-0007, which are governed by Fresno County Conditional Use Permit ("CUP") and Reclamation Plan Nos. 2320, and 915, respectively. In addition to mining and reclamation, existing permitted uses at the Coalinga Facility include aggregate, asphalt and concrete processing plants, as well as ancillary uses such as aggregate stockpiling/loading/sales, construction materials recycling, and equipment storage and maintenance. The Coalinga Facility is a regionally important source of high-quality construction aggregate material that has helped serve the building and infrastructure needs of the local market for approximately fifty (50) years.

Under the proposed project, Granite would entitle a new mining area on Granite-owned property directly south and southeast of the existing Coalinga Facility. Project parcels total approximately 502 acres, and straddle two jurisdictions: 1) County of Fresno (APN# 07006086s, 299.11 acres); and, 2) City of Coalinga (APN# 07006089s, 202.54 acres). Mining and related project activities would be conducted on approximately 368 acres of the Project parcels, with the remainder left undisturbed (e.g., the majority of the Los Gatos Creek floodplain) or reserved for alternative uses (e.g., commercially zoned property in the northeast corner) (see Figure 2, Site Overview Map and Sheet 2, Existing Site Features). The proposed Project area contains an estimated eighty two (82) million tons of aggregate reserves, which would allow for greater than fifty (50) years of additional operational life at historical average production levels.

As described below, the Project will require a new entitlement from the City of Coalinga, as well as modifications to existing entitlements from the County of Fresno (see Figure 3, Existing and Proposed Entitlements Map):

1. New CUP for the portion of APN# 07006089s that lies within the City of Coalinga jurisdictional limits;
2. Modification of CUP 915 to include a new extraction area that lies west of Los Gatos Creek on APN# 07006086s in the County of Fresno; and,

3. Modification of the Reclamation Plan associated with CUP 915 to include the Project areas on APN# 07006086s and APN# 07006089s.

   (Note: CUP/Reclamation Plan 2320 would not be modified by the proposed Project.)

Mining operations will be performed in a manner consistent with current practices at the existing Coalinga Facility and would be initiated by the removal of vegetation, topsoil/growth media, and overburden materials which lie above marketable sand and gravel deposits. The overlying materials will be removed using scrapers aided by a motor grader and a bull dozer, as needed. After overlying materials are removed, marketable sand and gravel will be excavated using a combination of scrapers, front-end loaders, hydraulic excavators, bulldozers and other support equipment. In new excavation areas, mining will not occur within 50 feet of the Los Gatos Creek floodplain, consistent with the Project's hydraulic analysis. Following excavation, the sand and gravel will be transported via conveyor and/or internal haul roads to the existing processing plants where it will be processed and/or sold for use in construction materials. *Note that the proposed project involves only mining/reclamation and transportation of mined aggregates to the existing processing plants. Beyond construction materials recycling (current practice) and potentially limited initial screening of aggregates, no processing is anticipated in the Project area.* Mining methods will be consistent with current operations at the existing Coalinga Facility, and no changes to baseline mining production levels are proposed[1].

Transport of sand and gravel from the east side of Los Gatos Creek (Phase 4 and Phase 5) to the west side of Los Gatos Creek will occur via an elevated conveyor system (see Sheet 4, Mining Plan). The elevated conveyor system will consist of a belt conveyor on a steel truss frame supported by two 4-foot diameter columns in the floodplain (but outside of the Creek channel) and two 4-foot diameter columns outside of the floodplain. The conveyor system will be situated above the 100-year flood elevation, which is approximately 710.17 feet (see Appendix E, Hydrologic and Hydraulic Analysis). The belt conveyor will be equipped with water spray nozzles to minimize dust. Conveyor wiper blades will be used to prevent material build-up on the belt and the steel truss frame will be equipped with a spill pan, which will catch any side-cast sand and gravel and prevent sedimentation in Los Gatos Creek. The elevated conveyor crossing will be constructed to the appropriate scale and intensity of use (see Figure 7, Conceptual Bridge Conveyor Schematic).

The elevated conveyor crossing will be installed in the non-rainy season and will not involve removal of riparian species, or removal, filling, or hydrological interruption of Los Gatos Creek. Proper permits will be obtained, as necessary, prior to installation of the crossing.

[1] An operational baseline was determined by averaging the annual aggregate production totals between 2003 and 2014, which resulted in an average annual production of approximately 1.5 million tons per year. A 12-year average was determined to be an appropriate range for an accurate baseline, as it captures economic changes as a result of fluctuating market demands that directly affect sales and production of material.

Mining will progress in a phased manner to allow for concurrent reclamation (to the extent practicable) (see Sheet 3, Mining Phasing Overview). Final reclamation, consisting of slope reclamation, replacement of growth media, and revegetation will commence as soon as final excavation grades are achieved. The proposed end use for the site following reclamation will be open space, consistent with the existing reclamation plans for the Coalinga Facility. An estimated time schedule for reclamation of the areas disturbed by mining activities is provided in Table 1, below.

TABLE 1
ESTIMATED PROJECT PHASING

Phase	Est. Acres	Est. Tons (millions)	Est. Years to Completion
Phase 1	78	19	13
Phase 2	79	22	15
Phase 3	74	20	13
Phase 4	46	6	4
Phase 5	69	9	6
Phase 6	22	6	4
Total	**368**	**82**	**55**

Notes:

1. *The estimated project phasing is provided only as a guideline. Actual phasing depths, boundaries, quantities and timelines may be affected by unforeseen changes in geology and market conditions.*
2. *Estimated years to completion calculated using historical average production rate of 1.5 million tons/year.*

See accompanying Reclamation Plan and supportive technical studies for additional details regarding the proposed Project.

2. Operational time limits

No change to the existing permitted hours of operation is requested.

3. Number of customers or visitors

With the exception of miscellaneous service and delivery vehicles (e.g., electrical, maintenance, industrial deliveries) and occasional point of sale pickup of fill, pit run, or screened material, Granite does not anticipate customers and/or visitors within the Project area. The majority of customers and visitors will continue to access defined areas of the Coalinga Facility, consistent with existing practices. No change anticipated from baseline conditions.

4. Number of employees

Consistent with current practices at the existing Coalinga Facility, Granite estimates 10-20 employees associated with mining in the expansion area. No change anticipated from baseline conditions.

5. Service and delivery vehicles

As mentioned above, Granite anticipates only occasional access by service and delivery vehicles (e.g., electrical, maintenance, industrial deliveries) within the Project area. Granite may, from time to time, utilize subcontract haulers to transport aggregate internally from the Project area to the existing processing plants. No change anticipated from baseline conditions.

6. Access to site

Primary access to the Project area will occur via internal access roads from the existing Coalinga Facility (which itself is accessed via an existing encroachment off of State Route 198/33) (see Figure 2, Site Overview Map and Sheet 2, Existing Site Features). From time to time, employees and equipment may access the Phase 4 and 5 mining areas west of Los Gatos Creek utilizing encroachment(s) off of Monterey Avenue (see Sheet 3, Mine Phasing Overview).

7. Number of parking spaces?

Consistent with existing practices, the majority of parking will occur at the shop area of the Coalinga Facility, which currently has ~50 parking spaces for heavy equipment and employee/vendor vehicles. Availability of parking space is not a concern, as the Project area and the existing Coalinga Facility have sufficient space to accommodate parking for employees, customers, and service/delivery drivers (see Sheet 2, Existing Site Features). No change anticipated from baseline conditions.

8. Are any goods to be sold on-site? If so, are these goods grown or produced on-site or at some other location?

With the exception of occasional point of sale pickup of fill, pit run, or screened material, Granite does not anticipate direct sales from the Project area. Instead, Granite will transport mined material to the existing processing plants for processing and sale. Mining methods and intensity will be consistent with operations at the existing Coalinga Facility, and no changes to baseline mining production levels are proposed.

9. What equipment is used?

Mining and construction equipment will be similar to that currently in use at the Coalinga Facility, including: scrapers, bulldozers, motor graders, excavators, loaders, backhoes, water

trucks, haul trucks, conveyor belts, and miscellaneous support equipment (e.g., service trucks, forklifts, cranes). No change anticipated from baseline conditions.

Vehicle idling will be limited to less than 5 minutes unless a longer time is necessary for safety, equipment will be maintained in good condition and in proper tune per manufacture specifications, and equipment maintenance records and equipment design specification data sheets will be kept on-site. The off-road mining and construction equipment will have Tier 4 final engines or better.

10. What supplies or materials are used and how are they stored?

Consistent with current practices, materials used in association with mining activities include various grades of fuels and lube oils for the site equipment. Storage of the materials will primarily occur at the existing shop and processing plants, and will be performed in accordance with local, state and federal regulations (see Figure 2, Site Overview Map and Sheet 2, Existing Site Features). Materials stored onsite are maintained in accordance with requirements of the Certified Unified Program Agency under a Hazardous Materials Business Plan ("HMBP") and Spill Prevention, Control, and Countermeasure Plan ("SPCCP"). In the event that additional materials storage occurs within the Project area, the HMBP and SPCCP will be updated accordingly. No change anticipated from baseline conditions.

11. Does the use cause an unsightly appearance? Noise? Glare? Dust? Odor? If so, how will this be eliminated?

Granite completed a number of technical studies to analyze the potential impacts of the proposed Project and incorporated measures into the Project design to prevent or minimize adverse effects on the environment and surrounding uses.

Appearance

The Project area is highly disturbed with widespread evidence of historical industrial activity (e.g., former airport landing strip and existing mining pits) and off-road vehicle use. Existing vegetation cover ranges from very sparse and almost nonexistent to small, dense patches of weedy species. Aside from Los Gatos Creek, no evidence of wetlands or other aquatic features exist within the Project area.

A portion of the Project area includes existing permitted mining pits, and the entire Project area is designated by the City of Coalinga for resource extraction (mining). Surrounding land uses include Granite's existing Coalinga Facility to the north, undeveloped land and industrial uses to the west, and scattered commercial, recreational and residential uses to the east and south. The closest residences are greater than 1,000 feet from the Project area and are separated by Highway 198/33 and Cambridge Avenue.

The Project will involve the phased removal of vegetation, topsoil/growth media, and overburden materials. After stripping the overlying materials, marketable sand and gravel will be excavated below-grade using a combination of loaders, excavators, etc. In each phase, overburden material will be used to build earthen screening berms, which also serve as noise control berms (see Noise section below), around the majority of the Project boundary (see Sheet 4, Mining Plan). Once the proposed berm is built in each phase, the below-grade excavation will not be visible at eye-level from the surrounding areas. As a result, the Project will not impact the visual quality of the area.

Noise

Edward Pack and Associates conducted a site-specific noise study for the proposed Project (see Appendix H). Noise study methodology included on-site noise level recordings of mining activities at the existing Coalinga Facility, as well as the establishment of background noise conditions at the closest receptor locations. The measured noise levels and noise exposures were compared to the City of Coalinga Noise Element of the General Plan, the County of Fresno Noise Element of the General Plan and the County of Fresno Noise Ordinance.

The noise analysis indicates that, absent noise mitigation, the Project has the potential to result in exceedances of the applicable City/County noise standards. These exceedances would occur once stripping operations are within 2,200 feet of a residential or school receptor location or within 2,300 feet of the Elks Lodge property line. However, the Project design incorporates noise control/visual screening berms six feet in height along the eastern and southern mining boundaries, which serve to decrease noise levels for compliance with the applicable noise standards.

With the installation of the noise control berms, the project-generated noise levels and noise exposures will be in compliance with the standards of the City of Coalinga Noise Element and the Fresno County Noise Element and Noise Ordinance. The noise study indicates that no further noise mitigation measures are required.

Glare

Consistent with existing practices, portable light towers and permanent light fixtures will be utilized to provide for a safe operating environment. Lighting will be shielded and arranged/controlled so as not to illuminate public rights-of-way or adjacent properties.

Dust

Consistent with activities at the existing Coalinga Facility, the Project will comply with the San Joaquin Valley Air Pollution Control District ("SJVAPCD") regulations related to fugitive dust. More specifically, the Project will incorporate applicable control measures outlined within SJVAPCD's Rules related to control of fugitive dust during excavation and earthmoving activities (Regulation VIII), including the following:

1. Prior to removal of topsoil and overburden, the excavation area will be wetted by water trucks if removal occurs during the dry season.

2. Conveyors will be equipped with water spray nozzles at appropriate transfer points to minimize dust.

3. A water truck will be utilized at the site and water will be applied to unpaved portions of internal haul roads and working areas as frequently as necessary to prevent fugitive dust emissions. The number of daily applications of water varies depending on factors such as daily surface disturbance activities, temperature, and wind conditions. Alternately, other methods, such as the application of dust palliatives or gravel, may be applied to the internal haul roads to minimize fugitive dust.

It should be noted that the Project involves only mining/reclamation and transportation of mined aggregates to the existing processing plants. Beyond potentially limited initial screening of aggregates in the mining area, no processing is anticipated in the expansion area. Therefore, the above measures will be sufficient to address potential dust generating activities associated with the Project.

Odor

Odors have not historically been a concern with the operations at the existing Coalinga Facility. The Project would not modify the current production levels, hours of operation, materials to be mined, equipment types, or mining methods. In addition, odors dissipate with distance and the nearest sensitive receptor is located greater than 1,000 feet from the Project area. Furthermore, the nearest receptor to the site will be separated from the Project area by perimeter berms, fencing, and either State Highway 33 or Cambridge Avenue.

It should be noted that the SJVAPCD regulates objectionable odors on a complaint basis. If complaints are received, the SJVAPCD investigates the complaint and determines a solution for the source of the complaint, which could include operational modifications. Thus, although not anticipated, if odor complaints are made, the operator and/or the SJVAPCD would ensure that such odors are addressed and any potential odor effects reduced to less than significant.

12.List any solid or liquid wastes to be produced.

Consistent with current operations, mining and reclamation activities in the Project area are expected to produce the following solid/liquid wastes:

a. Refuse: Any incidental refuse or garbage will be hauled off-site and disposed of in accordance with local and state standards.
b. Mine waste rock: Overburden materials consist of material not suitable for use in aggregate production. Approximately 4.4 million cubic yards (cy) of overburden material

is anticipated within the Project area. Overburden will either be sold as a product (e.g., fill) or used in reclamation.

c. Used equipment: Used equipment such as heavy equipment parts, conveyor belts, tires and other replacement or extra equipment pieces will be kept within a designated area for reuse or recycling. Used parts potentially containing petroleum products (i.e., lubricants, hydraulic oil, etc.) will be stored using Best Management Practices to prevent contamination of soil or storm water runoff. Used equipment storage areas may change location during the life of the operation.
d. Domestic sewage: Granite's sewage systems at the existing Coalinga Facility will be utilized, and may be supplemented with serviced portable toilets within the Project area.
e. Used oil/antifreeze: Used petroleum products and antifreeze will be managed in accordance with applicable local, State, and Federal regulations, and will be picked up by approved haulers for recycling and/or disposal.

13. Estimated volume of water to be used (gallons per day); source of water?

Water usage associated with mining and reclamation activities in the Project area will be limited to that needed for dust control and will be supplied by on-site wells, and/or by recycled water from on-site settling ponds. Estimated daily water use is 100,000 gallons/day; this amount will vary depending on the weather. No change anticipated from baseline conditions.

14. Describe any proposed advertising including size, appearance, and placement.

No advertising signage is currently anticipated in the Project area. Granite will post plant identification and safety signage consistent with internal policies and regulatory agency requirements (e.g., on-site speed limits, spill response procedures, MSHA, Proposition 65). The signage will be designed/placed consistent with applicable County/City signage requirements, if any.

15. Will existing buildings be used or new buildings be constructed?

Within the Project area, Granite will continue to utilize the existing shop and associated structures (see Figure 2, Site Overview Map and Sheet 2, Existing Site Features). No additional buildings are anticipated. Granite may utilize conex boxes (or similar) for miscellaneous on-site storage (e.g., parts, materials).

16. Explain which building or what portion of buildings will be used in the operation.

See answer to Question 15, above.

17. Will any outdoor lighting or outdoor sound amplification systems be used?

Consistent with existing practices, portable light towers and permanent light fixtures will be utilized to provide for a safe operating environment. Lighting will be shielded and arranged/controlled so as not to illuminate public rights-of-way or adjacent properties. Mining and reclamation activities will not involve the use of any sound amplification system.

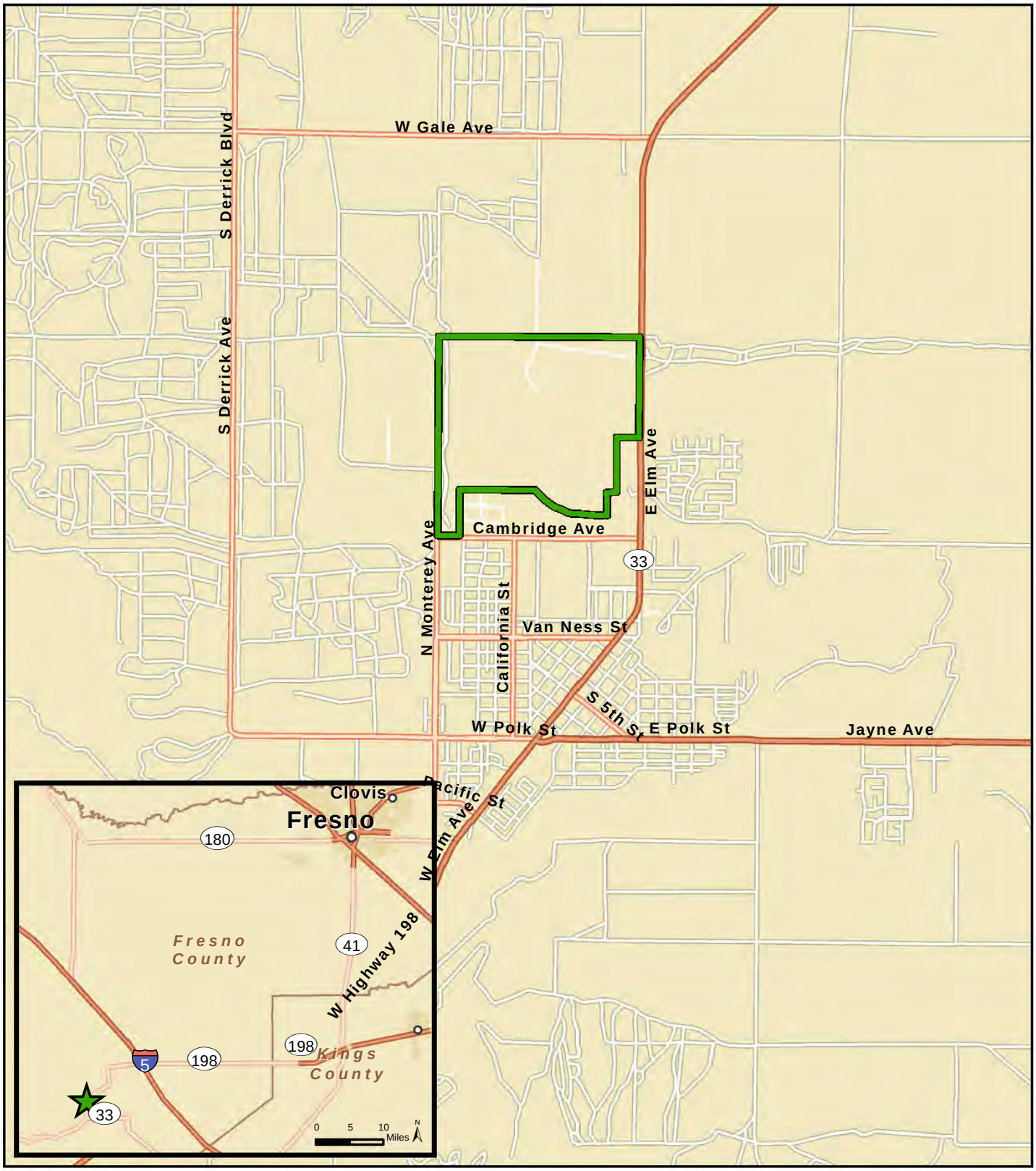
18. Landscaping or fencing proposed?

Perimeter fencing at least four (4) feet in height consisting of not less than three (3) strands of barbed wire (or an approved equivalent) will be installed consistent with Mining and Reclamation Standard H.4, Section 858 of Fresno County's Ordinance Code. Visual screening of the site will be achieved through the use of noise control/visual screening berms consistent with Mining and Reclamation Standard H.5, Section 858 of Fresno County's Ordinance Code.

See Sheet 4, Mining Plan.

19. Any other information that will provide a clear understanding of the project or operation:

See accompanying Reclamation Plan and supportive technical studies for additional details regarding the proposed Project.



Site Boundary

Location

Figure 1: Site and Vicinity Map
Coalinga Mine Expansion Project
Fresno County, California

0 0.5 1 Miles N

July 2015
Sage Thurmond - GIS Intern
Note: Boundaries are approximate based on GIS data.

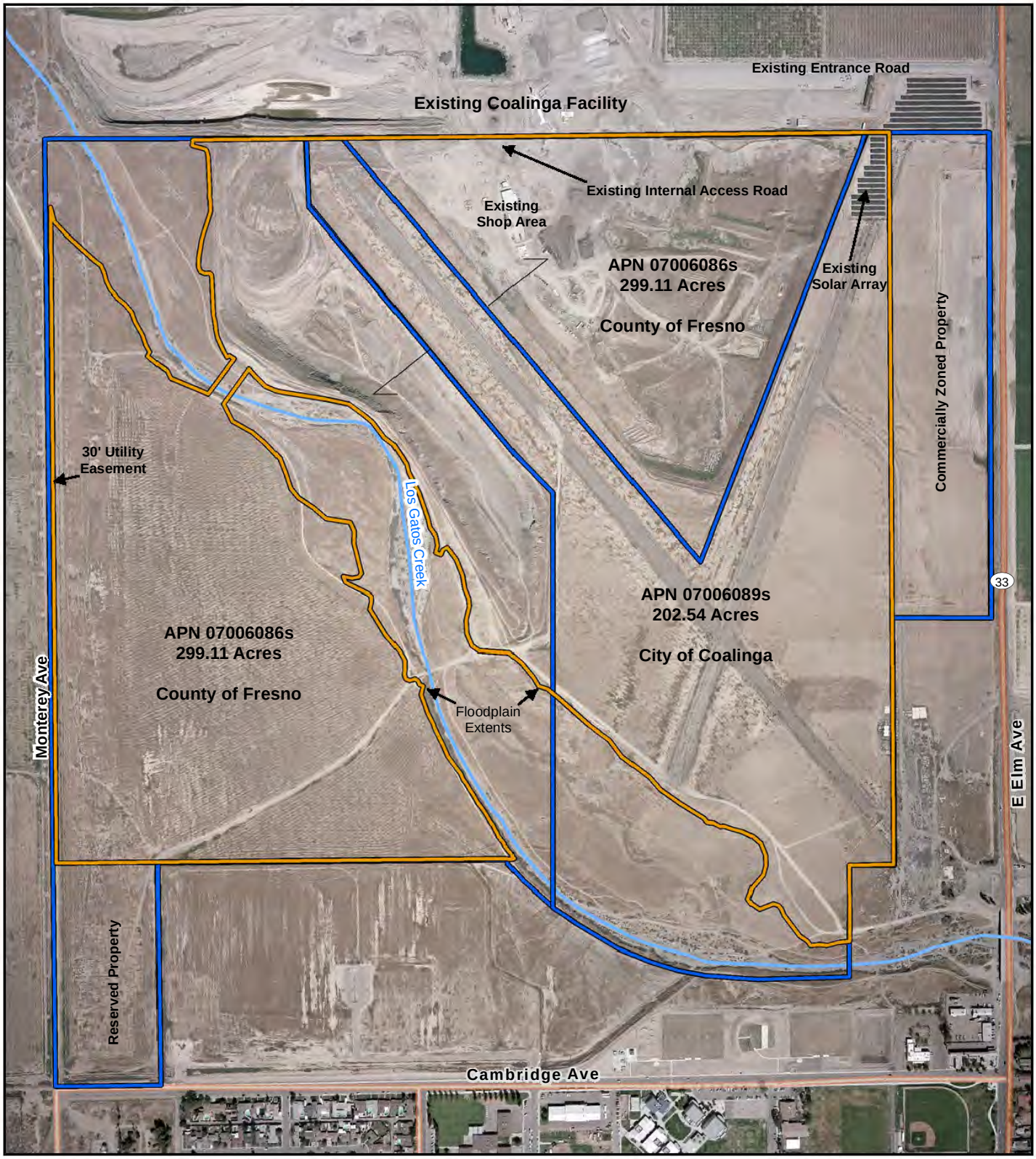


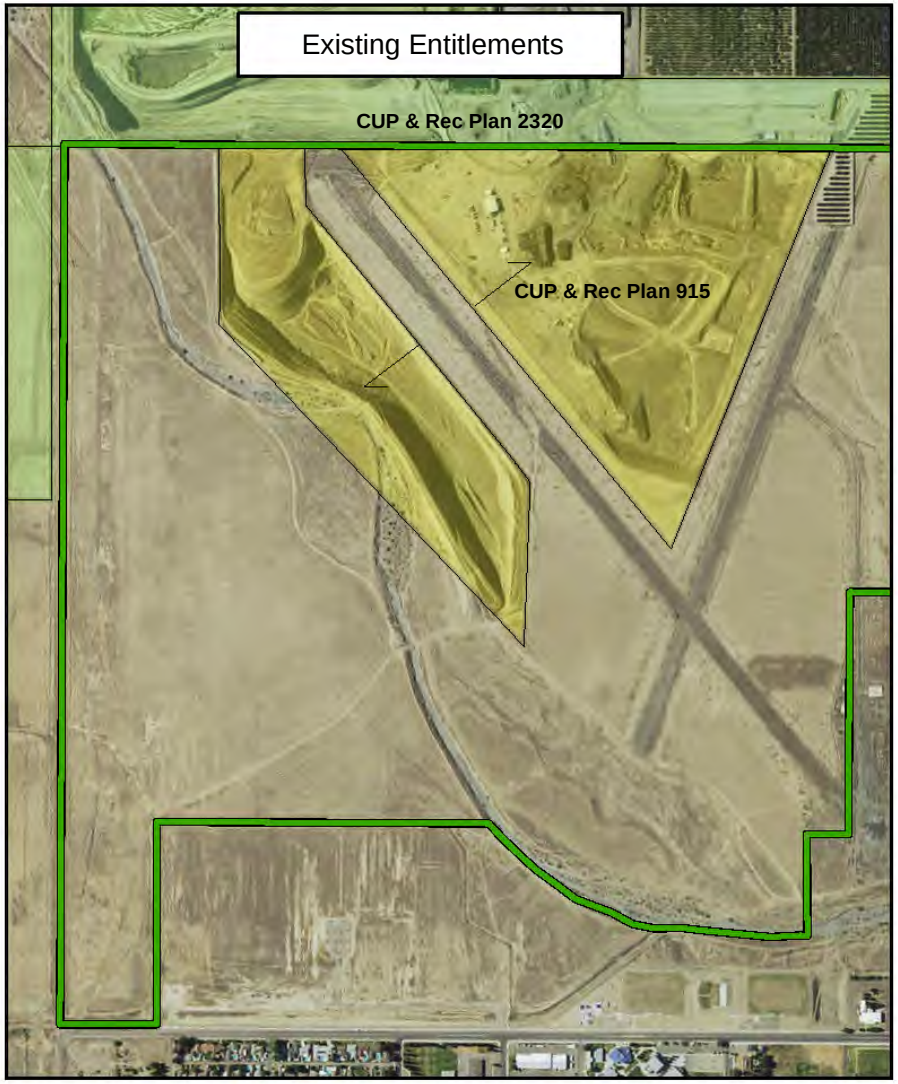
Figure 2: Site Overview Map
Coalinga Mine Expansion Project
Fresno County, California

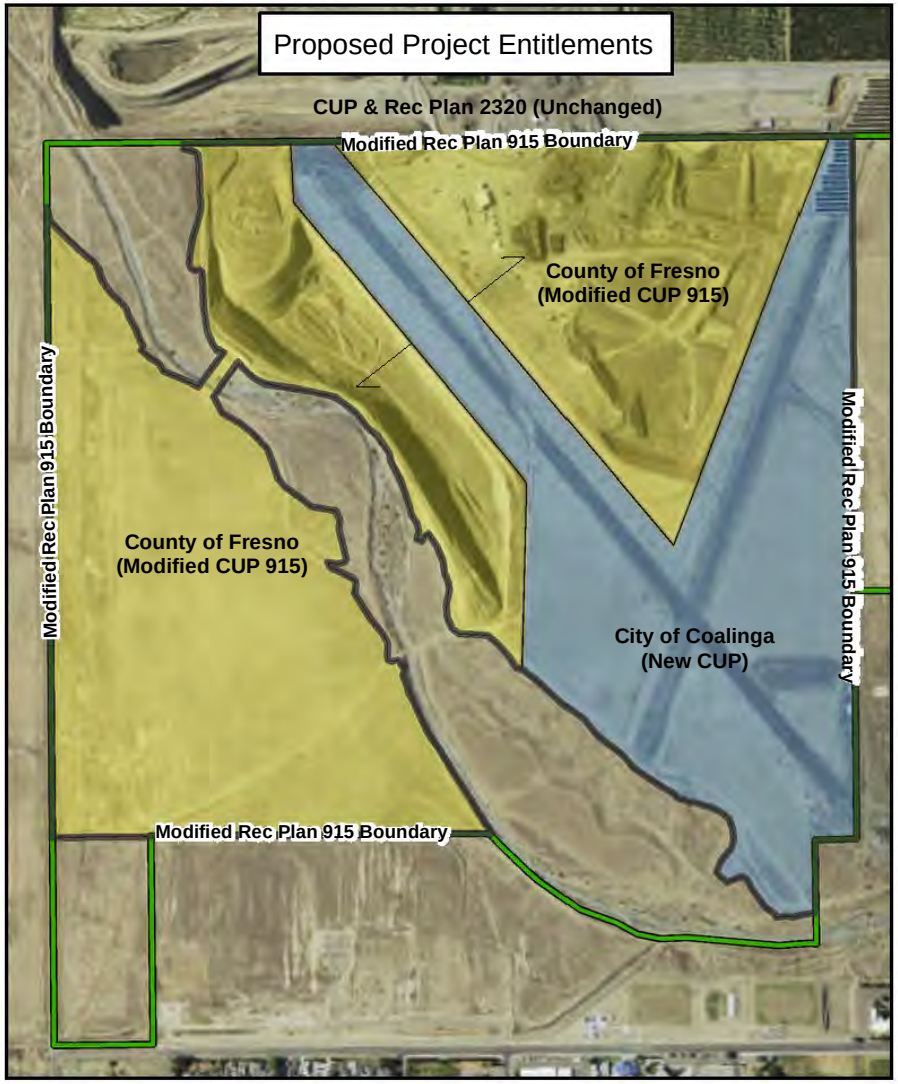
GRANITE

Creek
Project Boundary (~368 Acres)
Parcel Boundaries (~502 Acres)

N 0 500 1,000 1,500 Feet

July 2015
Sage Thurmond - GIS Intern
Note: Boundaries are approximate based on GIS data.





Site Boundary
CUP & Rec Plan 2320, Fresno County
CUP & Rec Plan 915, Fresno County

Figure 3: Existing and Proposed Entitlements
Coalinga Mine Expansion Project
Fresno County, California

Site Boundary
Modified Rec Plan 915 Boundary
Modified CUP 915, Fresno County
New CUP, City of Coalinga

N 0 1,000 2,000 3,000 Feet

July 2015
Sage Thurmond - GIS Intern
Note: Boundaries are approximate based on GIS data.

GRANITE

Note: Boundaries are approximate based on GIS data

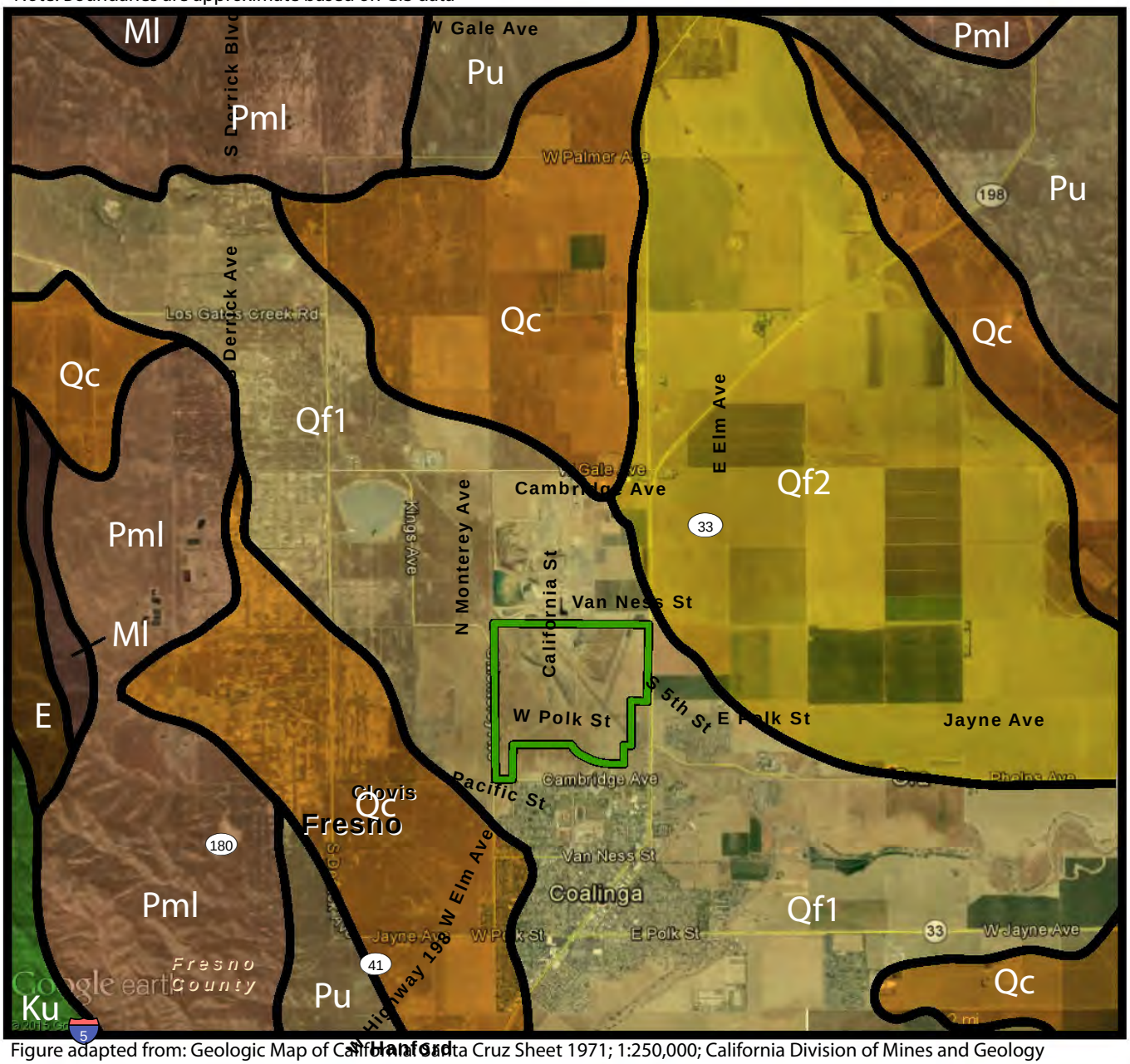


Figure adapted from: Geologic Map of California Santa Cruz Sheet 1971; 1:250,000; California Division of Mines and Geology

Qf1	Quaternary Fan Deposits sourced from the northwest	Qc	Pleistocene non-marine	Pml	Mid/Lower Pleistocene marine	E	Eocene marine
Qf2	Quaternary Fan Deposits sourced from the north	Pu	Upper Pleistocene marine	Ml	Lower Miocene marine	Ku	Upper Cretaceous marine

Site Boundary

Location

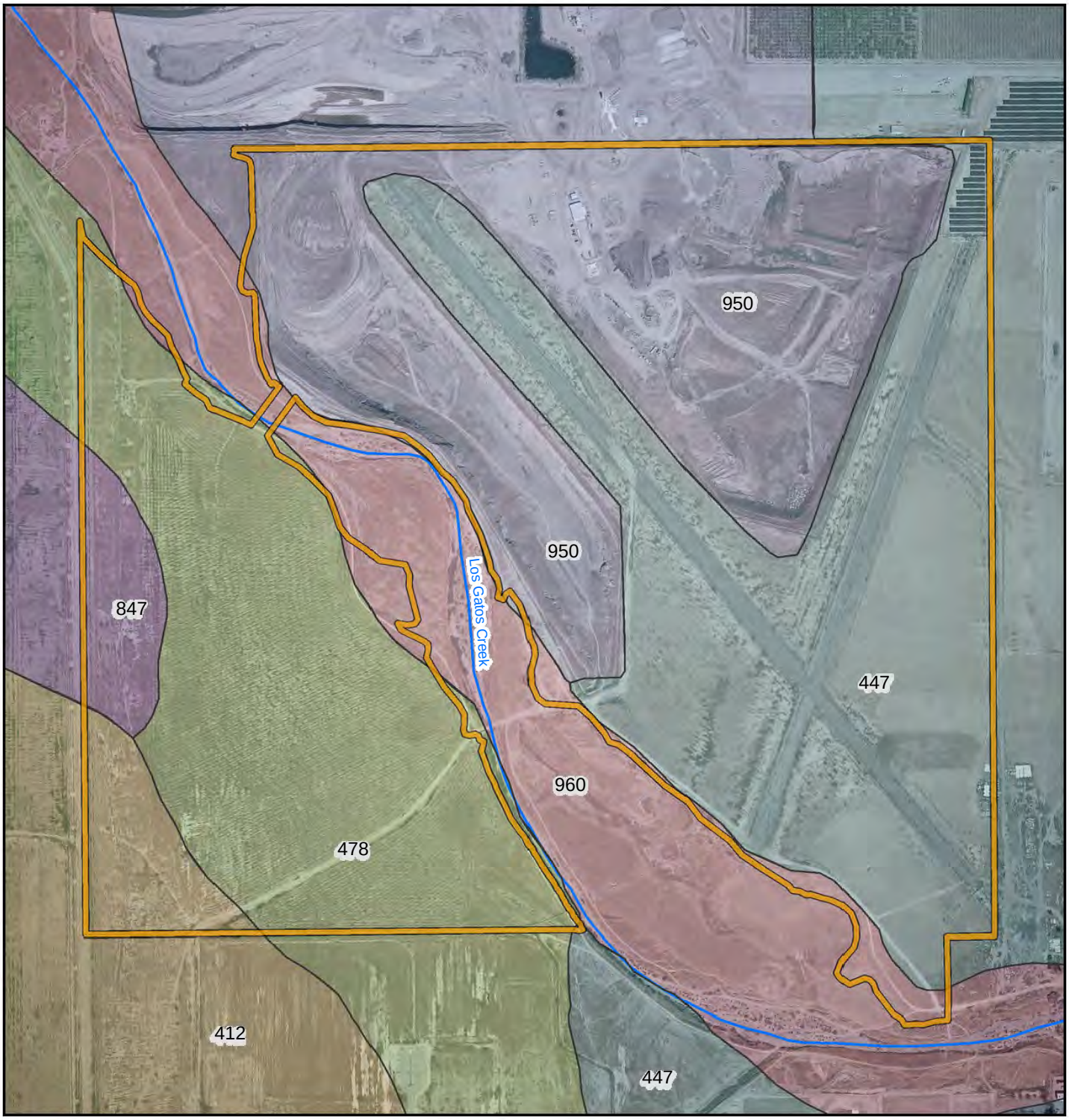
Figure 4: Site Geology Map
Coalinga Mine Expansion Project
Fresno County, California

0 1 2 Miles

N

GRANITE

July 2015
Jeff Light: Geologist



Project Boundary
Creek
950 - Pits, gravel
478 - Cerini sandy loam
412 - Yribarren clay loam
847 - Carranza gravelly sandy loam
445 - Excelsior sandy loam, MLRA 17
447 - Excelsior sandy loam, sandy substratum
960 - Excelsior, sandy substratum-westhaven association, flooded

Figure 5: Site NRSC Soils Map
Coalinga Mine Expansion Project
Fresno County, California

GRANITE™

N 0 500 1,000 1,500 Feet

July 2015
Sage Thurmond - GIS Intern
Note: Boundaries are approximate based on GIS data.

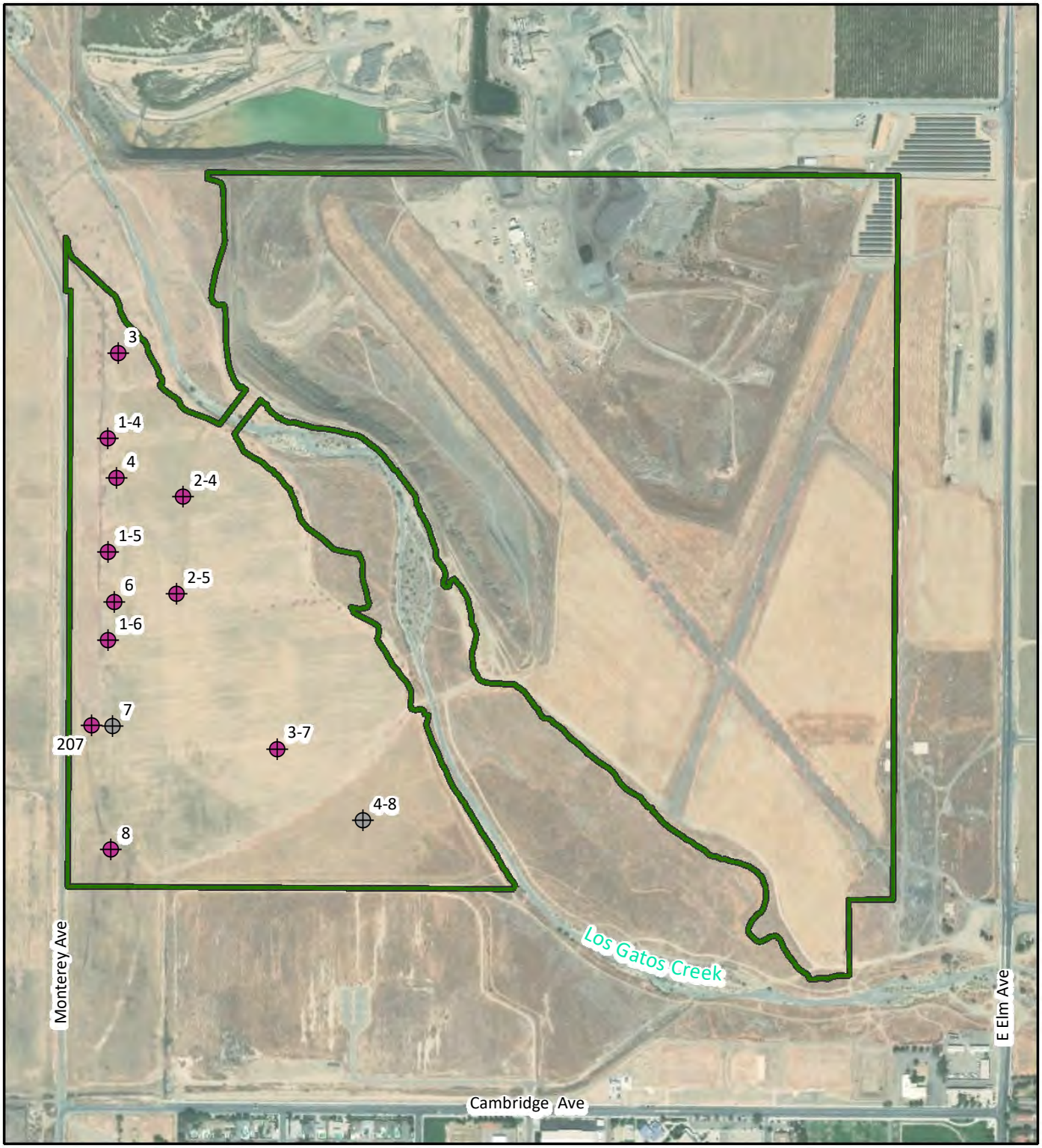


Figure 6: Wells in Project Footprint
Coalinga Mine Expansion Project
Fresno County, California

GRANITE

Project Boundary
Plugged Oil & Gas Well (Well Designation #)
Plugged Dry Hole Well (Well Designation #)

N
0 600 1,200 Feet

March 2020
Sage Thurmond - Compass Land Group
Data Source: Granite Co. & CalGEM
Note: Boundaries are approximate based on GIS data.

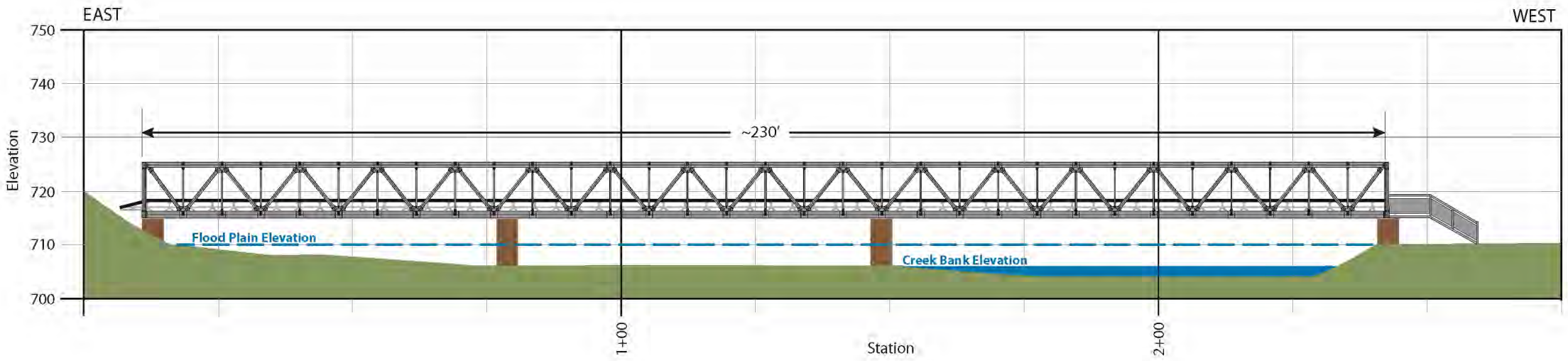


Figure 7: Conceptual Bridge Conveyor Schematic
Coalinga Mine Expansion Project
Fresno County, California

GRANITE™

March 2020

Photograph Date: 3/9/2020.

Figure 8: Conceptual Bridge Conveyor Visual Simulation
Coalinga Mine Expansion Project
Fresno County, California

March 2020

RECLAMATION PLAN
FOR THE
COALINGA MINE EXPANSION PROJECT

Prepared for:

Granite Construction Company
2716 Granite Court
Fresno, CA 93706

Prepared by:

Compass Land Group
3140 Peacekeeper Way, Suite 102
McClellan, CA 95652

March 2020

TABLE OF CONTENTS

FIGURES

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CHART OF SMARA CONTENTS [PRC §2770.5]

SMARA Section		Location in Plan (e.g., Page #s)	Lead Agency Checklist
SMARA Statutes (California PRC Sections 2772, 2773 and 2773.3)			
2772(b)	Chart of contents	v (this chart)	☐ YES ☐ NO ☐ N/A
2772(c)(1)	Operator and agent contact info	1, 3	☐ YES ☐ NO ☐ N/A
2772(c)(2)	Quantity and type of materials	4	☐ YES ☐ NO ☐ N/A
2772(c)(3)	Initiation and termination dates	4	☐ YES ☐ NO ☐ N/A
2772(c)(4)	Maximum anticipated depth	4	☐ YES ☐ NO ☐ N/A
2772(c)(5)	Reclamation plan maps	4, Sheets 1 - 7	☐ YES ☐ NO ☐ N/A
2772(c)(6)	Mining description and schedule	5-6	☐ YES ☐ NO ☐ N/A
2772(c)(7)	Proposed or potential end uses	8	☐ YES ☐ NO ☐ N/A
2772(c)(8)	Reclamation description	8, 15-19	☐ YES ☐ NO ☐ N/A
2772(c)(9)	Effect on future mining in area	6	☐ YES ☐ NO ☐ N/A
2772(c)(10)	Statement of responsibility	20, Appendix C	☐ YES ☐ NO ☐ N/A
2772(c)(11)	Lead agency requirements	21-27	☐ YES ☐ NO ☐ N/A
2773(a)	Site specific reclamation plan	1-27, Sheets 1 - 7	☐ YES ☐ NO ☐ N/A
2773.3	Requirements for metallic mines	N/A	☐ YES ☐ NO ☐ N/A
SMARA Regulations, Article 1, Surface Mining and Reclamation Practice (Title 14, California CCR §3500 et seq.)			
3502(a)	Reclamation objectives	1, 8, 15-19	☐ YES ☐ NO ☐ N/A
3502(b)(1)	Environmental setting	13-14	☐ YES ☐ NO ☐ N/A
3502(b)(2)	Public health and safety	7	☐ YES ☐ NO ☐ N/A
3502(b)(3)	Final slopes	9, Appendix D	☐ YES ☐ NO ☐ N/A
3502(b)(4)	Borrow and settlement of fills	9-10	☐ YES ☐ NO ☐ N/A
3502(b)(5)	Disposition of old equipment	7	☐ YES ☐ NO ☐ N/A
3502(b)(6)	Stream and watershed diversions	12-13	☐ YES ☐ NO ☐ N/A
3503(a)	Soil erosion control	11-12, 15	☐ YES ☐ NO ☐ N/A
3503(b)	Water quality / watershed control	10-11	☐ YES ☐ NO ☐ N/A
3503(c)	Protection of fish / wildlife habitat	14	☐ YES ☐ NO ☐ N/A
3503(d)	Disposal of waste / overburden	12	☐ YES ☐ NO ☐ N/A
3503(e)	Erosion and drainage	11	☐ YES ☐ NO ☐ N/A
3503(f)	Resoiling	15-16	☐ YES ☐ NO ☐ N/A
3503(g)	Revegetation	16-17	☐ YES ☐ NO ☐ N/A
SMARA Regulations, Article 9, Reclamation Standards (Title 14, California CCR §3700 et seq.)			
3703	Wildlife and habitat protection	14-15, Appendix H	☐ YES ☐ NO ☐ N/A
3704	Backfill, grading and slopes	9-10, 14-15	☐ YES ☐ NO ☐ N/A
3704.1	…for metallic mines	N/A	☐ YES ☐ NO ☐ N/A
3705	Revegetation	16-19	☐ YES ☐ NO ☐ N/A
3706	Water quality, drainage, runoff	10-13	☐ YES ☐ NO ☐ N/A
3707	Standards for prime agriculture	8, 15-16	☐ YES ☐ NO ☐ N/A
3708	Standard for other agriculture	8	☐ YES ☐ NO ☐ N/A
3709	Equipment storage and removal	7	☐ YES ☐ NO ☐ N/A
3710	Surface / groundwater protection	10-14, Appendix E	☐ YES ☐ NO ☐ N/A
3711	Topsoil salvage and redistribution	15-16	☐ YES ☐ NO ☐ N/A
3712	Mine waste disposal	12	☐ YES ☐ NO ☐ N/A
3713	Drill holes and water wells	7	☐ YES ☐ NO ☐ N/A

INTRODUCTION

This Reclamation Plan (or "Plan") has been prepared in support of surface mining reclamation activities associated with Granite Construction Company's ("Granite") Coalinga Mine Expansion Project ("Project") in western Fresno County, California (see Figure 1, Site and Vicinity Map and Sheet 1, Title Sheet). The Project involves a new mining area on Granite-owned property directly south and southeast of Granite's existing, permitted aggregate mining and processing operation known as the Coalinga Facility. Project parcels total approximately 502 acres, and straddle two jurisdictions: 1) County of Fresno (APN 070-060-86s, 299.11 acres); and, 2) the City of Coalinga (APN 070-060-89s, 202.54 acres). Mining and related project activities would be conducted on approximately 368 acres of the Project parcels, with the remainder left undisturbed (e.g., the majority of the Los Gatos Creek floodplain) or reserved for alternative uses (e.g., commercially zoned property in the northeast corner) (see Figure 2, Site Overview Map and Sheet 2, Existing Site Features).

As described below, the Project will require a new entitlement from the City of Coalinga, as well as modifications to existing entitlements from the County of Fresno (see Figure 3, Existing and Proposed Entitlements Map):

1. New CUP for the portion of APN# 07006089s that lies within the City of Coalinga jurisdictional limits;
2. Modification of CUP 915 to include a new extraction area that lies west of Los Gatos Creek on APN# 07006086s in the County of Fresno; and,
3. Modification of the Reclamation Plan associated with CUP 915 to include the Project areas on APN# 07006089s and APN# 07006086s.

   (Note: CUP/Reclamation Plan 2320 would not be modified by the proposed Project.)

The purpose of this Plan is to describe a process that will minimize environmental effects so that mined lands are reclaimed to a useable condition that is readily adaptable for alternate land uses and creates no danger to public health and safety. While the purpose of this Plan is to describe reclamation activities, the surface mining activities associated with the Project are described and referenced throughout for contextual purposes.

In August 2015, Granite submitted an initial draft Reclamation Plan, including supportive technical analyses, for the expansion project. A revised Reclamation Plan was submitted in February 2016 in response to comments received from the County of Fresno and other responsible agencies following their review of the August 2015 submittal. This revised March 2020 Reclamation Plan has been developed to address updates to the California Surface Mining and Reclamation Act (SMARA), comments received from the California Department of Conservation (Division of Oil, Gas, and Geothermal Resources), and clarify information related to the bridge conveyor crossing at Los Gatos Creek.

Plan Organization

Part A of this Plan provides an overview of reclamation activities and is organized around the State of California Division of Mine Reclamation's ("DMR's") "Reclamation Plan Review Checklist" (see Appendix A). Part B of this Plan addresses specific Fresno County (Lead Agency) requirements, where those requirements supplement or amplify the requirements of Part A.

This Plan has been prepared pursuant to the following requirements associated with the reclamation of mined lands:

- SMARA ;
- Fresno County General Plan;
- City of Coalinga General Plan; and
- Fresno County Ordinance Section 858, Regulations for Surface Mining and Reclamation in all Districts.

PART A: SURFACE MINING AND RECLAMATION ACT CHECKLIST

Mining Operation and Closure

SMARA §2770.5. 100-year flood, Caltrans contact.

Whenever a new surface mining operation is proposed that involves mining within the 100-year floodplain and within one mile of a State Highway Bridge, the County (lead agency) is required to notify the State Department of Transportation ("DOT") that the application has been received. The Project is located within one mile of the Hwy. 198/33 bridge that crosses Los Gatos Creek. Although mining will not occur within the floodplain, certain project activities will (as described below). The County will notify Caltrans in accordance with PRC §2770.5, as appropriate.

The 100-year floodplain in and around the Project area has been mapped by the Federal Emergency Management Agency ("FEMA"). Mining will not occur within the 100-year floodplain, and setbacks have been incorporated in the engineering design to help ensure that mining will remain outside of the floodplain in the event of future physical changes.

While the mining areas will be setback from and avoid the existing floodplain, transport of sand and gravel from the east side of Los Gatos Creek (Phase 4 and Phase 5) to the west side of Los Gatos Creek will occur via an elevated conveyor system (see Sheet 4, Mining Plan). The elevated conveyor system will consist of a belt conveyor on a steel truss frame supported by two 4-foot diameter columns in the floodplain (but outside of the Creek channel) and two 4-foot diameter columns outside of the floodplain (see Figure 7, Conceptual Bridge Conveyor Schematic). The conveyor system will be situated above the 100-year flood elevation, which is approximately 710.17 feet. Other than the elevated conveyor and support columns, the Project proposes to avoid encroaching into the floodplain. A proposed condition hydraulic analysis was performed to assess the impacts from a potential conveyor crossing of Los Gatos Creek. The results show that the conveyor crossing support columns would result in a minimal rise in water surface elevations (<1 foot) at the crossing location. This minimal rise would be completely contained within Granite's site boundaries, have no off-site impacts, and would meet Fresno County floodplain regulation requirements (see Appendix E, Hydrologic and Hydraulic Analysis).

SMARA §2772(c)(1). Name and address of operator/agent.

<u>Surface Mining Operator:</u>
Granite Construction Company
2716 Granite Court
Fresno, CA 93706

<u>Operator's Agent(s):</u>
Jordan Main
Compass Land Group
3140 Peacekeeper Way, Suite 102
McClellan, CA 95652

SMARA §2772(c)(2). Quantity & type of mineral to be mined.

Mining will produce an anticipated 82 million tons of sand and gravel over the life of the project.

SMARA §2772(c)(3). Initiation and termination dates.

Total life of the project is estimated at approximately fifty-five (55) years for mining operations, with an additional five (5) years to complete reclamation activities, for a total project life of sixty (60) years. Based on current mine planning, Granite anticipates depleting its reserves at the existing Coalinga Facility prior to moving into the Project area. Until that time, ancillary surface mining activities will take place in the Project area (e.g., stockpile management, fence installation, property maintenance, etc.). For the purposes of satisfying SMARA informational requirements, the estimated initiation date is January 1, 2021, and the estimated termination date is December 31, 2080. However, the actual termination date will occur five (5) years following the completion of surface mining operations.

SMARA §2772(c)(4). Maximum anticipated depth of mining.

The maximum anticipated depth of excavation is two hundred (200) feet below ground surface (bgs) to elevation 484 above mean sea level (AMSL). Actual depth may vary depending on soil/geologic conditions.

SMARA §2772(c)(5). Reclamation Plan map requirements.

The Project is located in western Fresno County and encompasses a portion of Section 29, Township 20 South, Range 15 East, Mount Diablo Base and Meridian. More specifically, the Project is located south of Granite's existing Coalinga Facility, north of Cambridge Avenue, West of State Route 198/33, and east of Monterey Avenue. The Project area encompasses 368± acres of a larger 502± acre property bearing Assessor Parcel Numbers 070-06-086s and 070-06-089s. Mining is proposed on 338± acres of the Project area with the remainder (30± acres) in ancillary use and setback areas.

Predominant land uses in the vicinity of the Project are as follows:

- North: Resource extraction/industrial (Granite's existing Coalinga Facility)
- South: The City of Coalinga's recreational park, with scattered commercial, residential, and school facilities bordering Cambridge Avenue farther south
- East: State Route 198/33, with agriculture and residential farther east
- West: Monterey Avenue, with undeveloped land and oil fields farther west

Site zoning is Exclusive Agricultural for APN 07006086s, and a combination of Light Manufacturing/Business and Service Commercial for APN 07006089s. The General Plan Land Use Designation is Agriculture for APN 07006086s, and a combination of Commercial Service and Manufacturing/Business with a Resource Extraction Overlay for APN 07006089s.

Legal Description

Please see Appendix B, Site Legal Description.

Site Geology

The geology of the site is shown on Figure 4, Site Geology Map.

Streams, Roads, Railroads and Utilities

The most prominent drainage feature in the vicinity of the Project is Los Gatos Creek, which flows in a southeasterly direction through the site. The Creek flows west of the existing Coalinga Facility and bisects the Project area.

Primary access to the Project area will occur via internal access roads from the existing Coalinga Facility (which itself is accessed via an existing encroachment off of State Route 198/33). From time to time, equipment may access the Phase 4 and 5 mining areas west of Los Gatos Creek utilizing encroachment(s) off of Monterey Avenue.

Other than the transmission line that runs adjacent to Monterey Avenue on the western boundary of the Project, as well as utilities associated with the existing Coalinga Facility and surrounding developments, no other notable utilities are present in the vicinity of the Project.

There are no railroads on or adjacent to the lands to be reclaimed.

See Figure 2, Site Overview Map and Sheet 2, Existing Site Features.

Ownership of Surface and Mineral Interests

Surface and mineral interests on the Project site are owned by:

Granite Construction Company
2716 Granite Court
Fresno, CA 93706

SMARA §2772(c)(6). Mining description and time schedule .

A description of the mining operation, while not specifically regulated under SMARA, is provided here in order to facilitate understanding of the proposed Plan. Mining methods and practices will conform to the conditions of the surface mining use permits issued by Fresno County and the City of Coalinga. The Project involves only mining/reclamation and transportation of mined aggregates to the existing Coalinga Facility. Beyond construction materials recycling (current practice) and potentially limited initial screening of aggregates, no processing is anticipated in the Project area.

Mining Methods

Mining operations will be performed in a manner consistent with current practices at the existing Coalinga Facility, and will be initiated by the removal of vegetation, topsoil/growth media, and overburden materials which lie above marketable sand and gravel deposits. The overlying materials will be removed using scrapers aided by a motor grader and a bull dozer, as needed. After overlying materials are removed, marketable sand and gravel will be excavated using a combination of scrapers, front-end loaders, hydraulic excavators, bulldozers and other support equipment. Following excavation, the sand and gravel will be transported via conveyor and/or internal haul roads to the existing Coalinga Facility where it will be processed and/or sold for use in construction materials.

Phasing

Mining will progress in a phased manner to allow for concurrent reclamation (to the extent practicable) (see Sheet 3, Mining Phasing Overview). Final reclamation, consisting of slope reclamation, replacement of growth media, and revegetation will commence as soon as final excavation grades are achieved. The proposed end use for the site following reclamation will be open space, consistent with the current condition of the property and existing reclamation plans for the Coalinga Facility. An estimated time schedule for reclamation of the areas disturbed by mining activities is provided in Table 1, below.

TABLE 1
ESTIMATED PROJECT PHASING

Phase	Est. Acres	Est. Tons (millions)	Est. Years to Completion
Phase 1	78	19	13
Phase 2	79	22	15
Phase 3	74	20	13
Phase 4	46	6	4
Phase 5	69	9	6
Phase 6	22	6	4
Total	**368**	**82**	**55**

Notes:

1. *The estimated project phasing is provided only as a guideline. Actual phasing depths, boundaries, quantities and timelines may be affected by unforeseen changes in geology and market conditions.*
2. *Estimated years to completion calculated using a historical average production rate of 1.5 million tons/year.*

SMARA §2772(c)(9). Impact of reclamation on future mining.

The proposed Plan and proposed end use of the site will not preclude future mining in the area.

CCR §3502(b)(2). Public health and safety (exposure).

CCR §3713(a). Drill holes, water wells, monitoring wells completed or abandoned in accordance with laws.

CCR §3713(b). All portals, shafts, tunnels, or openings, gated or protected from public entry, but preserve access for wildlife.

The Project will not jeopardize public health and safety at any time during mining, reclamation or post-reclamation activities. Safety measures such as fencing, signs, and setbacks will be implemented as necessary to ensure public safety (see Sheet 4, Mining Plan). Fencing may be used for public safety, but will not prevent access for wildlife (avian species) foraging and may be removed at final reclamation at the owner's discretion. No portals, shafts, tunnels or other openings are proposed.

According to the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources' (DOGGR's) CalGEM Well Finder Map, 11 abandoned oil and gas wells and 2 abandoned "dry hole" wells are located within the proposed mining footprint (see Figure 6, Wells in Project Footprint). Granite will locate and flag the abandoned wells in the proposed mining footprint prior to mining. Granite will either avoid the wells with a 20-foot setback or properly abandon the wells according to DOGGR requirements and guidelines prior to mining within 20 feet.

No new water wells or monitoring wells are anticipated in the expansion area. In the event that additional water wells are deemed necessary in the Project area, they will be properly abandoned at final reclamation in accordance with state and local standards, or will be kept to facilitate the approved end use.

CCR §3502(b)(5). Disposition of old equipment.

CCR §3709(a). Equipment stored in designated area and waste disposed of according to ordinance.

CCR §3709(b). Structures and equipment dismantled and removed.

Equipment used in mining and reclamation will be stored in designated areas during the life of the Project (see Sheet 2, Existing Site Features). Any incidental refuse or garbage will be hauled off-site and disposed of in accordance with state and local standards.

Facilities, structures, and equipment associated with mining and processing will be removed from the site following final reclamation with the exception of: property line fencing, perimeter berms, and perimeter access roads.

End Land Use

SMARA §2772(c)(7). Proposed or potential end uses.

The proposed end use for the site following reclamation will be open space, consistent with the current condition of the property and existing reclamation plan for the adjacent Coalinga Facility. The owner's acknowledgment of this end use is evidenced by the execution of the statement of reclamation responsibility found at the end of this Plan (see Appendix C).

SMARA §2772(c)(8). Reclamation measures adequate for end use.

Reclamation will be conducted in the following manner to support the open space end use:

- Prior to the stripping of overburden, approximately six-to-twelve inches of topsoil/growth media will be excavated in a separate lift and stockpiled/segregated (with signage as needed) for use in reclamation (see Sheet 4, Mining Plan, for anticipated stockpile locations).
- Final reclamation slope angles have been designed with adequate factors of safety for the open space end use.
- During reclamation, stockpiled topsoil/growth media will be redistributed in preparation for revegetation.
- Revegetation areas will be ripped, disked and/or scarified as needed to establish a suitable root zone in preparation for plantings.
- Any incidental refuse or garbage will be hauled off-site and disposed of in accordance with state and local standards.
- Facilities, structures, and equipment associated with mining and processing will be removed from the site following final reclamation with the exception of: property line fencing, perimeter berms and perimeter access roads.
- With the exception of the cut slopes and perimeter access roads, disturbed surfaces will be revegetated with a native seed mix recommended for the site.

CCR §3707 & §3708. Agricultural fertility performance standards.

CCR §3707(a). *Return prime ag to fertility level specified in approved plan.*

CCR §3707(c). *Productivity rates equal pre-project or similar site for two consecutive years. Rates set forth in plan.*

CCR §3708. *Other ag capable of sustaining crops common to area.*

The Project area does not contain prime farmland, and the proposed end use is open space.

Geotechnical Requirements

CCR §3502(b)(3). Final slopes: slope angles flatter than critical gradient.

CCR §3704(f). Final cut slopes have minimum factor of safety for end use and conform with surrounding topography and/or approved end use.

Consistent with the Fresno County Mining and Reclamation Standards, as well as recommendations provided by the Project geotechnical engineer, final reclaimed slopes will not exceed 1.5H:1V (see Sheet 6, Reclamation Plan and Sheet 7, Reclamation Plan Cross-Sections). The overall final reclaimed slope angle of 1.5H:1V (or flatter) may be achieved through one of the following configurations:

- 1.5H:1V cut slope with no backfill;
- 0.5H:1V cut slope with backfill at 2H:1V to full slope height; or,
- 0.5H:1V cut slope with backfill at 2H:1V to a distance of 50 vertical feet or less from the top of slope.

The slope stability analysis prepared for the project demonstrates that the finished slope angles (in any of the above configurations) have an adequate factor of safety for the open space end use (See Appendix D, Slope Stability Evaluation).

CCR §3502(b)(4). Disposition of fill materials considered. Foundation fills for end use in conformance with good engineering practice.

CCR §3704(a). For urban use, fill compacted in accordance with UBC, local grading ordinance, or other methods approved by the Lead Agency.

CCR §3704(b). For resource conservation, compact to standard for that end use.

Backfill is not proposed for urban use or resource conservation purposes. Backfill of mining areas and slopes, where performed, will be achieved using mobile equipment such as scrapers that will provide an appropriate level of compaction for the desired open space end use.

CCR §3704(d). Final reclamation fill slopes not exceed 2:1, except when allowed by site-specific engineering analysis, and can be revegetated.

As stated above, final reclaimed slopes will not exceed 1.5H:1V. The overall final reclaimed slope angle of 1.5H:1V (or flatter) may be achieved through one of the following configurations:

- 1.5H:1V cut slope with no backfill;
- 0.5H:1V cut slope with backfill at 2H:1V to full slope height; or,
- 0.5H:1V cut slope with backfill at 2H:1V to a distance of 50 vertical feet or less from the top of slope.

In any event, the final reclaimed slope angle of the <u>fill</u> will not exceed 2H:1V.

CCR §3704(e). *At closure, final landforms of fills conform with surrounding topography and/or approved end use.*

Reclamation grading of overburden fill slopes is designed to create stable slopes consistent with the open space end use.

Hydrology and Water Quality

CCR §3710(a). Surface and groundwater quality protected in accordance with Porter-Cologne and Clean Water Acts (RWQCB/SWRCB).

Surface and groundwater will be protected from siltation and pollutants as required by the Federal Clean Water Act, the Porter-Cologne Act, County/City ordinances, Regional Water Quality Control Board and the State Water Resources Control Board. While the Project does not propose mining in surface waters or groundwater, the site would be exposed to rainfall events.

The existing shop and Coalinga Facility are covered under a Spill Prevention, Control, and Countermeasure Plan ("SPCC Plan") and Hazardous Materials Business Plan prepared and implemented pursuant to 40 CFR Part 112 and 19 CCR Section 2729, respectively. If required, the project will comply with the National Pollutant Discharge Elimination System General Permit ("NPDES General Permit") requirements, which involve preparation and implementation of a SWPPP, including BMPs to control erosion, sedimentation, and pollution.

Surface runoff is not anticipated as the Project involves mining below grade with perimeter control berms surrounding the majority of the excavation area. During initial surface disturbance activities, direct precipitation and drainage will be controlled through a combination of berms, fiber rolls, silt fences, revegetation, and other erosion control measures, as needed, to ensure that land and water resources are protected from erosion, gullying, sedimentation, and potential contamination. Slopes will be vegetated with specified seed mixes once final reclamation grades are achieved.

Upon completion of mining operations, the site will be graded to minimize erosion, revegetated and left in an open space condition (see Sheet 6, Reclamation Plan). Direct precipitation may temporarily collect in the pit-bottom before it evaporates, infiltrates, or is used on-site.

CCR §3706(a). *Mining and reclamation to protect downstream beneficial uses.*

CCR §3706(b). *Water quality, recharge, and groundwater storage that is accessed by others shall not be diminished, except as allowed by plan.*

CCR §3503(b)(2). *Substantially prevent siltation of groundwater recharge areas.*

Mining will not occur within the 100-year floodplain of Los Gatos Creek, and setbacks have been incorporated in the engineering design to help ensure that mining will remain outside of the floodplain in the event of future physical changes (see Sheet 4, Mining Plan). Further, based on

local groundwater data, mining activities will not intercept or impact the groundwater table (see Appendix E, Hydrologic and Hydraulic Analysis).

During initial surface disturbance activities, customary BMPs, as well as the requirements of a SWPPP, if needed, will be implemented. Upon completion of mining operations, the site will be revegetated to minimize erosion.

SMARA §2773(a). Drainage, sediment and erosion control.

CCR §3503(a)(3). Erosion control facilities constructed and maintained where necessary.

CCR §3503(b)(1). Settling ponds used where they will provide significant benefit to water quality.

CCR §3503(e). Grading and revegetation to minimize erosion and convey surface runoff to natural drainage courses or interior basins. Spillway protection.

This Plan is specific to the site and surrounding area characteristics including soil, topographic conditions, geology, surface waters and the principal mineral commodity (sand and gravel). Site-specific criteria include slope angles, seeding and planting requirements, and revegetation success performance standards.

The Project is designed to minimize erosion and retain direct precipitation, which may temporarily collect in the pit-bottom before it evaporates, infiltrates, or is used on-site. Additional erosion control facilities are not anticipated.

CCR §3706(c). Erosion and sedimentation controlled during all phases of construction, operation, reclamation, and closure of surface mining operation to minimize siltation of lakes and water courses per RWQCB/SWRCB.

CCR §3706(d). Surface runoff and drainage controlled to protect surrounding land and water resources. Erosion control methods designed for not less than 20 year/1 hour intensity storm event.

CCR §3706(e). Altered drainages shall not cause increased erosion or sedimentation.

If required, the Project will comply with the NPDES General Permit requirements, which involves preparation and implementation of a SWPPP, including BMPs to control erosion, sedimentation, and pollution.

During initial surface disturbance activities, customary BMPs, as well as the requirements of a SWPPP, if needed, will be implemented to ensure that water courses are protected from erosion, gullying, sedimentation and potential contamination. Slopes will be vegetated with appropriate native seed mixes once final reclamation grades are achieved.

Mining will not occur within the 100-year floodplain of Los Gatos Creek, and setbacks have been incorporated in the engineering design to help ensure that mining will remain outside of the floodplain in the event of future physical changes.

Transport of sand and gravel from the east side of Los Gatos Creek (Phase 4 and Phase 5) to the west side of Los Gatos Creek will occur via an elevated conveyor system. The elevated conveyor system will utilize conveyor wiper blades to prevent material build-up on the belt and the steel truss frame will be equipped with a spill pan, which will catch any side-cast sand and gravel and prevent sedimentation in Los Gatos Creek (see Figure 7, Conceptual Bridge Conveyor Schematic). The elevated conveyor crossing will be installed in the non-rainy season and will not involve removal of riparian species, or removal, filling, or hydrological interruption of Los Gatos Creek. Proper permits will be obtained, as necessary, prior to installation of the crossing.

SMARA §2772(c)(8)(A). Contaminant control and mine waste disposal.

CCR §3503(a)(2). Overburden stockpiles managed to minimize water and wind erosion.

CCR §3503(d). Disposal of mine waste and overburden shall be stable and not restrict natural drainage without suitable provisions for diversion.

CCR §3712. Mine waste and tailings, and mine waste disposal units governed by SWRCB/IWMB (Article 1, Subchapter 1, Chapter 7, Title 27, CCR).

The overburden fill slopes, perimeter berms, and temporary overburden stockpiles will be graded and wetted, as needed, to minimize water and wind erosion, and will not restrict natural drainage courses. The perimeter berms will also be treated with an erosion control seed mix. Overburden materials will either be sold as a product (e.g., fill) or used in reclamation.

CCR §3710(b). In-stream activities.

SMARA §2772(c)(8)(B). Rehabilitation of streambanks/beds to minimize erosion.

CCR §3502(b)(6). Temporary stream and water diversions shown.

CCR §3706(f)(1). Stream diversions constructed in accordance with Fish and Game Code.

CCR §3706(f)(2). Stream diversions constructed in accordance with Federal Clean Water Act and Rivers and Harbors Act of 1899.

CCR §3706(g). All temporary stream diversions eventually removed.

CCR §3710(c). In-stream channel elevations and bank erosion evaluated annually using extraction quantities, cross-sections, aerial photos.

The Project does not involve in-stream mining and includes setbacks from the 100-year floodplain to the mining boundary. An elevated conveyor crossing will be utilized to facilitate the transport

of materials from the mining area west of Los Gatos Creek to the existing processing plant (see Sheet 4, Mining Plan, for approximate location of crossing). Proper permits, including a California Department of Fish & Wildlife Stream and Lake Alteration Agreement, will be obtained, as necessary, prior to installation of the crossing. The elevated conveyor system will consist of a belt conveyor on a steel truss frame supported by two 4-foot diameter columns in the floodplain (but outside of the Creek channel) and two 4-foot diameter columns outside of the floodplain. The elevated conveyor crossing will be installed and removed in the non-rainy season. No temporary stream channel diversions are anticipated. Reclamation of the crossing will comply with the relevant regulatory permit conditions (e.g., Stream and Lake Alteration Agreement), but is expected to consist of removal of the elevated conveyor equipment and support columns, recontouring of the approaches (if necessary), covering with suitable growth media or topsoil, and revegetation consistent with the proposed seed mix in Table 2, above.

Environmental Setting and Protection of Fish and Wildlife Habitat

CCR §3502(b)(1). Environmental setting and impact of reclamation on surrounding land uses. (Identify sensitive species, wildlife habitat, sensitive natural communities, e.g. wetlands, riparian zones, etc.).

The biological consulting firm, TRC, conducted a preliminary assessment of the potential occurrence of special-status species and sensitive habitats for the Project area in late 2014 (see Appendix H, Biological Survey).

General Project Area Environmental Setting

The Project area is highly disturbed with widespread evidence of historical activity and off-road vehicle use. Vegetation cover ranges from very sparse and almost nonexistent to small, dense patches of ruderal (weedy) species such as Russian thistle (Salsola tragus), wormwood (Artemisia sp.) bromes (Bromus spp.) and oats (Avena sp.). Aside from Los Gatos Creek, no evidence of wetlands or other aquatic features exist within the Project area.

Special Status Species/Sensitive Habitats

TRC conducted a record search of the California Natural Diversity Database (CNDDB) to list all documented sightings of special status species within the vicinity of the site. In addition, TRC performed a reconnaissance-level biological resources survey on the Project site. The biological assessment concluded that due to the disturbed nature of the Project area and lack of suitable habitats, most of the species with CNDDB occurrence records within 3 miles of the Project area are unlikely to occur on the property. Furthermore, no special status species were observed during the field survey. Aside from Los Gatos Creek, no evidence of wetlands or other aquatic features exist within the Project area. Therefore, no impacts to special status species or sensitive habitats are expected from the proposed Project. Although the likelihood for any candidate, sensitive, or special status species to exist on-site is low, and none were observed on the Project site during the survey, the Project has incorporated pre-construction surveys, detection

protocols, and avoidance measures relating to nesting birds (e.g., burrowing owl and Swainson's hawk), kit fox, and blunt-nosed leopard lizard, which have the potential to occur in the vicinity of the Project area.

Soils

The Natural Resources Conservation Service has mapped the following soil units on the Project site (see Figure 5, Site NRCS Soils Map):

- Pits, gravel;
- Yribarren clay loam, 0 to 2 percent slopes;
- Excelsior sandy loam, sandy substratum, 0 to 2 percent slopes;
- Cerini sandy loam, 0 to 2 percent slopes;
- Carranza gravelly sandy loam, 2 to 8 percent slopes; and,
- Excelsior, sandy substratum - westhaven association, flooded, 0 to 2 percent slopes.

The topsoil/growth media salvage and replacement protocols described in this Plan have been specifically developed with consideration to these soil types.

Effect on Surrounding Land Uses

The proposed reclamation to open space will have no effect on existing and future uses of surrounding lands.

CCR §3503(c). Protection of fish and wildlife habitat.

CCR §3703(a). Sensitive species conserved or mitigated.

CCR §3703(b). Wildlife habitat at least as good as pre-project, if approved end use is habitat.

CCR §3703(c). Wetlands avoided or mitigated at 1:1 minimum.

CCR §3704(g). Piles or dumps not placed in wetlands without mitigation.

CCR §3710(d). In-stream mining not cause fish to be trapped in pools or off-channel pits, or restrict migratory or spawning activities.

A preliminary site assessment conducted by TRC concluded that, due to the disturbed nature of the Project area and lack of suitable habitats, most of the species with CNDDB occurrence records within 3 miles of the Project area are unlikely to occur on the property. Furthermore, no special status species were observed during the field survey. Aside from Los Gatos Creek, no evidence of wetlands or other aquatic features exist within the Project area. Therefore, no impacts to special status species or sensitive habitats are expected from the proposed Project. Although the likelihood for any candidate, sensitive, or special status species to exist on-site is low, and none were observed on the Project site during the survey, the Project has incorporated pre-

construction surveys, detection protocols, and avoidance measures relating to nesting birds (e.g., burrowing owl and Swainson's hawk), kit fox, and blunt-nosed leopard lizard, which have the potential to occur in the vicinity of the Project area.

The Project does not involve in-stream mining and includes setbacks from the 100-year floodplain to the mining boundary.

Resoiling and Revegetation

CCR §3503(f). **Resoiling.**

CCR §3704(c). *Mine waste stockpiled to facilitate phased reclamation and separate from growth media.*

CCR §3503(a)(1). *Removal of vegetation and overburden preceding mining kept to a minimum.*

CCR §3711(a). *All salvageable topsoil removed. Topsoil and vegetation removal not precede mining by more than one year.*

CCR §3711(b). *Topsoil resources mapped prior to stripping, location of stockpiles on map. Topsoil and growth media in separate stockpiles.*

CCR §3711(c). *Soil salvage and phases set forth in plan, minimize disturbance, designed to achieve reveg success.*

CCR §3711(d). *Topsoiling phase ASAP. Topsoil stockpiles not be disturbed until needed. Topsoil stockpiles clearly identified and planted with vegetation or otherwise protected.*

CCR §3711(e). *Topsoil redistributed in stable site and consistent thickness.*

CCR §3707(b). *Segregate and replace topsoil by horizon.*

Soils will only be removed as necessary to access new mining areas and will be used for reclamation as soon as it can be accommodated by the mining schedule. Removal of topsoil/growth media and vegetation will not precede mining by more than one year, unless a longer time period is approved by the Lead Agency.

Where possible, soils being removed will be directly placed for reclamation. Where salvaged topsoil/growth media cannot be used immediately, and where distinct soil horizons are present, topsoil and other growth media will be stockpiled separately and will not be disturbed until needed for reclamation. Approximate stockpile locations are depicted on Sheet 4, Mining Plan. Stockpiles will be seeded with an appropriate seed mixture as needed to prevent water and wind erosion and to discourage weed growth.

The average thickness of topsoil/growth media redistributed on the site during reclamation will vary. Based on site specific soil information, a target thickness of 6-to-12-inches of topsoil/growth media will be replaced atop the mining floor and overburden fill slopes. If soil horizons are readily distinguishable, then the sequence of horizons shall have the A atop the B, the B atop the C, etc.

CCR §3705(e). *Soil altered or other than native topsoil, requires soil analysis. Amend if necessary.*

CCR §3707(d). *Fertilizers and amendments not contaminate water.*

Growth media for revegetation will consist of native topsoil and overburden. Soil amendments, if required during revegetation efforts, will be applied according to manufacturer's specifications and will not contribute to contamination of on- or off-site water sources.

CCR §3705. Revegetation.

CCR §3503(g). *Revegetation and plant survival (use available research).*

CCR §3705(a). *Vegetative cover, suitable to end use, self-sustaining. Baseline studies documenting cover, density and species richness.*

CCR §3705(b). *Test plots if success has not been proven previously.*

CCR §3705(c). *Decompaction of site.*

CCR §3705(g). *Use native plant species, unless exotic species meet end use.*

CCR §3705(h). *Plant during correct season.*

Existing vegetation cover at the Project site ranges from very sparse and almost nonexistent to small, dense patches of ruderal (weedy) species. As part of reclamation, the Project site will be returned to open space through revegetation with the native seed mix shown in Table 2.

TABLE 2
REVEGETATION SEED MIX

Common Name	Plant Species	Application Rate (lbs (PLS)/acre)
Cattle spinach	*Atriplex polycarpa*	4
California buckwheat	*Eriogonum fasciculatum* var. *polifolium*	3
Small fescue	*Festuca microstachys*	6
Desert plantain	*Plantago ovata*	4
Expanded List of Potential Species that may be Substituted in Seed Mix		
Big saltbush	*Atriplex lentiformis*	N/A
Alkali saltbush	*Atriplex polycarpa*	

Desert croton	*Croton californicus*	
Blue wild rye	*Elymus glaucus ssp. Glaucus*	
Big squirreltail grass	*Elymus multisetus*	
Interorio goldenbush	*Ericameria linearifolia*	
Small-flowered fescue	*Festuca microstachys*	
Matchweed, snakeweed	*Gutierrezia californica*	
Bracted alkali goldenbush	*Isocoma acradenia var. bracteosa*	
Valley sky lupine (legume)	*Lupinus nanus*	
One-sided bluegrass	*Poa secunda ssp. secunda*	
Chia sage	*Salvia columbariae*	
Nodding needlegrass	*Stipa cernua*	

Note:
Composition of seed mix (and appropriate modifications) to be determined based on availability from suppliers, cost, test plot results, and species determined most suitable at the time planting occurs. Ideally, revegetation will occur in the summer to early fall.

The proposed seed mix was recommended by the supplier based on several criteria, including: 1) species native to the Coalinga area, 2) species commercially grown and therefore readily available, and, 3) long-term sustainability of the cover based on those species that had high reproductive rates. Seeding rates were based on species seed count per pound, and a consideration of total seed per square foot area. The proposed mix is intended to be self-sustaining without dependence on irrigation, soil amendments, or fertilizers.

Application of herbicides may be used ahead of planting to minimize potential for weed growth. If needed, revegetation areas will be ripped, disked and/or scarified to establish a suitable root zone in preparation for planting.

As a component of the phased reclamation, an initial mining slope that has reached its final configuration and will not be further disturbed will serve as a test plot for the revegetation seed mix. Planting procedures, species and success criteria will be updated, if necessary, in consultation with the Lead Agency following monitoring of the test plot.

Annual monitoring will be performed until the revegetation meets the success criteria detailed in this Reclamation Plan, and annual inspections will be performed by the Lead Agency to ensure compliance with this Plan.

CCR §3705(d). *Roads stripped of roadbase materials, resoiled and revegetated, unless exempted.*

At owner's discretion, perimeter access roads may remain following reclamation to facilitate the proposed end use (e.g., maintenance of perimeter fencing). If removed, roads will be stripped of any roadbase materials and covered with suitable growth media or topsoil, and replanted or revegetated consistent with the proposed seed mix in Table 2, above.

CCR §3705(f). *Temporary access not bladed. Barriers installed.*

No temporary access routes are proposed as part of reclamation.

CCR §3705(i). *Use soil stabilizing practices and irrigation, when necessary to establish vegetation.*

Following the initial establishment period, irrigation or further soil stabilizing practices should not be necessary based on the proposed seed mix. Should soil stabilizing practices be needed, straw mulch and/or other BMPs will be used as necessary to control soil erosion.

CCR §3705(k). *Noxious weed management.*

During the revegetation establishment period, noxious weeds (as listed by the California Department of Food and Agriculture) will be managed: (1) when they threaten the success of the proposed revegetation; (2) to prevent spreading to nearby areas; and (3) to eliminate fire hazard. Noxious weeds will be removed using a combination of herbicides, mechanical controls, and hand weeding. In some cases, complete eradication may not be practicable unless the weed-infested patches are small. Noxious weed identification and management will be an element of the revegetation monitoring period overseen by a qualified biologist. Noxious weeds will not exceed 10% of the total cover.

CCR §3705(l). *Plant protection measures, fencing, caging.*

The proposed revegetation is not anticipated to require fencing, caging, or other plant protection measures, as grazing within the Project area is not anticipated during the revegetation establishment period. If grazing is to occur during revegetation establishment, fencing and/or other protective measures will be employed until the revegetation efforts are successfully completed and the Lead Agency authorizes removal.

SMARA §2773(a). Revegetation performance standards and monitoring.

CCR 3705(m). *Success quantified by cover, density and species-richness. Standards proposed in plan. Sample method set forth in plan and sample size provide 80 percent confident level, as minimum.*

The following success criteria is proposed for the areas to be revegetated:

Cover:	25% cover per 1 meter x 1 meter plot
Species richness:	2 species from the seed mix per 1 meter x 1 meter plot, or 50% species richness in the event a new seed mix is chosen

Note: Success criteria will be updated, if necessary, in consultation with the Lead Agency following monitoring of the proposed test plot.

CCR §3705(j). If irrigated, demonstrate self-sustaining without for two years minimum.

Revegetation will be reviewed annually by the Lead Agency until reclamation is deemed complete. If irrigated, vegetation will be self-sustaining for two (2) years prior to the release of financial assurances.

Administrative Requirements

SMARA §2772(c)(10). Statement of Reclamation Responsibility.

Please see Appendix C for the Applicant's signed Statement of Responsibility.

SMARA §2773.1. Financial assurances.

Financial assurances (e.g. Surety Bond or equivalent) shall remain in effect for the duration of the mining operation and any additional period until reclamation is complete. Prior to the initiation of mining activities in the Project area, the Applicant will prepare and submit a Financial Assurance Cost Estimate ("FACE") to the Lead Agency. The FACE will serve to establish the appropriate dollar amount for financial assurances. The FACE will be updated annually and submitted to the Lead Agency for review. Financial assurances may be adjusted (up or down as appropriate) based on the updated FACE.

SMARA §2772.1 & §2774. Lead Agency Approvals and Annual inspection.

Upon Plan approval, and subsequent County and regulatory agency approvals for the Project, the conditions of approval and/or mitigation measures pertinent to reclamation of mined lands will be added to this Plan pursuant to PRC §2772.1(b)(7)(B). Appendix J is included as a placeholder for this purpose.

The Operator will submit a Mining Operation Annual Report to DMR and Fresno County. This report will summarize the previous year's production and reclamation activities. SMARA also requires the Lead Agency to conduct an annual inspection of the site to ensure compliance with the approved Plan.

SMARA §2776. All mining operations since 1/1/76 included in reclamation plan.

No pre-1976 mining disturbances are addressed in this Plan.

SMARA §2777. Amended reclamation plans required prior to substantial deviations to approved plans.

Amendments to this Plan may be submitted detailing proposed changes. Substantial deviations from the Plan shall not be undertaken until such amendment has been filed with and approved by the Lead Agency.

PART B: LEAD AGENCY REQUIREMENTS (SMARA §2772(C)(11))

Part B of this Plan addresses specific Lead Agency reclamation requirements, where it is believed those requirements either supplement or amplify the requirements of SMARA as outlined in Part A. This part is not intended to restate or address every Lead Agency code section or policy related to the reclamation of mined lands.

Fresno County recognizes that aggregate is one of the County's most significant extractive resources and plays an important in maintaining the County's overall economy. Fresno County also recognizes the importance of preserving the future availability of its mineral resources and has adopted policies to promote the orderly extraction of mineral resources while minimizing the impact of these activities on surrounding land uses and the natural environment.

For context, surface mining is regulated by Fresno County through two (2) primary documents:

1. **General Plan –** contains language and policy that provides general guidance on how and where mining should occur in the County.

2. **Ordinance Code –** contains regulations which provide details of how mining and reclamation should occur and addresses the impacts of mining to surrounding uses. The Ordinance Code also directs the information needed for mining use permit applications and reclamation plans.

This Part B only addresses requirements that specifically relate to the reclamation of mined lands, and not those requirements associated with regulation of the mining activities, including any associated environmental review or land use approvals.

General Plan

GP Policy OS-C.3. **The County shall require that the operation and reclamation of surface mines be consistent with the State Surface Mining and Reclamation Act (SMARA) and special zoning ordinance provisions.**

GP Policy OS-C.5. **The County shall require reclamation of all surface mines consistent with SMARA and the County's implementing ordinance.**

The Reclamation Plan has been developed consistent with SMARA and Fresno County Ordinance Code Section 858 requirements.

Ordinance Code

OC §858.H.1. **No extraction of material or overburden shall be permitted within twenty-five (25) feet of any property boundary nor within fifty (50) feet of a boundary contiguous with a public road right-of-way or recorded residential subdivision.**

The Project incorporates setbacks of at least fifty (50) feet from neighboring properties for extraction activities (see Sheet 4, Mining Plan).

OC §858.H.2. **No stockpiled soil or material shall be placed closer than twenty-five (25) feet from a property boundary.**

Topsoil stockpile locations have been identified within the mining boundary for temporary storage prior to use in reclamation (see Sheet 4, Mining Plan). No stockpiled soil or material will be placed closer than twenty-five (25) feet from a property boundary. *Note: The proposed perimeter noise control/screening berms may be located within twenty-five (25) feet of a property boundary; however, they are not considered "stockpiles" and are not subject to this standard.*

OC §858.H.3. **No production from an open pit shall create a slope steeper than 2:1 within fifty (50) feet of a property boundary nor steeper than 1½:1 elsewhere on the property, except steeper slopes may be created in the conduct of extraction for limited periods of time prior to grading the slope to its reclamation configuration, and slopes of 1:1 may be maintained five (5) feet below the lowest water table on the property, experienced in the preceding three (3) years.**

No mining is proposed within fifty (50) feet of a property boundary or below the water table.

Consistent with this Standard and recommendations provided by the Project's geotechnical engineer, final reclaimed slopes will not exceed 1.5H:1V. The overall final reclaimed slope angle of 1.5H:1V (or flatter) may be achieved through one of the following configurations:

- 1.5H:1V cut slope with no backfill;
- 0.5H:1V cut slope with backfill at 2H:1V to full slope height; or,
- 0.5H:1V cut slope with backfill at 2H:1V to a distance of 50 vertical feet or less from the top of slope.

The slope stability analysis prepared for the project demonstrates that the finished slope angles (in any of the above configurations) have an adequate factor of safety for the open space end use (See Appendix E, Slope Stability Report).

OC §858.H.4. **Security fencing four (4) feet in height consisting of not less than three (3) strands of barbed wire, or an approved equivalent, shall be placed along any property line abutting a public right-of-way and around any extraction area where slopes steeper than two (2) feet horizontal to one (1) foot vertical are maintained. Such interior fencing will not be required where exterior fencing surrounds the property.**

Perimeter fencing at least four (4) feet in height consisting of not less than three (3) strands of barbed wire (or an approved equivalent) will be installed consistent with this Standard (see Sheet 4, Mine Plan).

OC §858.H.5. **Screening of the site shall be achieved by planting trees of a variety approved by the Director along all property lines adjacent to a public road right-of-way or a recorded residential subdivision. Adequate screening can generally be achieved with evergreen trees planted in two (2) staggered rows, with twenty (20) feet between the rows and between the trees in each row. As an alternative, oleanders or shrubs of a similar size and density may be planted in the same pattern at ten (10) foot intervals. The plant species and planting plan and timetable shall be designated in the Mining and Reclamation Plan. All required plants shall be maintained in a good horticultural manner. In areas where it is found that the planting of trees or shrubs will not achieve the desired screening effect due to soil conditions, the Director may approve an alternate method of screening consisting of meandering dirt berms of sufficient height to screen the site. (Amended by Ord. T-252 adopted 12-9-80)**

Based on our experience with soils in the vicinity of the Project, Granite would anticipate significant challenge with the establishment and maintenance of evergreen trees and/or varietal shrubs. As an alternative, and consistent with this Standard, visual screening of the site will be achieved through the use of perimeter screening berms (six feet in height), which also serve as noise control berms to limit potential off-site noise impacts (see Sheet 4, Mining Plan).

OC §858.H.6. **The first one hundred (100) feet of access road(s) intersecting with a County maintained road shall be surfaced in a manner approved by the Board and shall not exceed a two (2) percent grade and shall have a width of not less than twenty-four (24) feet.**

N/A – The Project will utilize internal access roads from the existing Coalinga Facility (see Figure 2, Site Overview Map and Sheet 2, Existing Site Features).

OC §858.H.7. **Where an access road intersects a County Maintained road, it shall be improved with a driveway approach constructed to Fresno County Standards.**

N/A – See response to OC §858.H.6.

OC §858.H.8. **All interior roads within the site shall be maintained so as to control the creation of dust.**

The Project will comply with the San Joaquin Valley Air Pollution Control District ("SJVAPCD") regulations related to fugitive dust. A water truck will be utilized at the site and water will be applied to unpaved portions of internal haul roads and working areas as frequently as necessary to prevent fugitive dust emissions. The number of daily applications of water varies depending on factors such as daily surface disturbance activities, temperature, and wind conditions. Alternately, other methods, such as the application of dust palliatives or gravel, may be applied to the internal haul roads to minimize fugitive dust (see Operational Statement, Question 11).

OC §858.H.9. **Traffic control and warning signs shall be installed as required by the Commission at the intersection of all private roads with public roads. The placement, size, and wording of these signs shall be approved by the Director. (Amended by Ord. T-252 adopted 12-9-80)**

N/A – See response to OC §858.H.6.

OC §858.H.10. **When the plan calls for resoiling, coarse hard mine waste shall be leveled and covered with a layer of finer material or weathered waste. A soil layer shall then be placed on this prepared surface. Surface mine operators who do not salvage soil during the initial operations shall attempt, where feasible, to upgrade remaining materials. The use of soil conditioners, mulches, or imported topsoil shall be considered where revegetation is part of the Mining and Reclamation Plan and where such measures appear necessary. It is not justified; however, to denude adjacent areas of their soil, for any such denuded areas must in turn be reclaimed.**

OC §858.H.11. **The species selected for revegetation shall be those with good survival characteristics for the topography, resoiling characteristics, and climate of the mined area. The operator shall provide a schedule and methodology for monitoring vegetation and replacing vegetation should the Department determine that replacement is necessary.**

OC §858.H.12. **Additional vegetative planting may be required in the interest of erosion control.**

See Resoiling and Revegetation section in Part A of the Reclamation Plan.

OC §858.H.13. **Grading and revegetation shall be designed to minimize erosion and to convey surface runoff to natural drainage courses or interior basins designed for water storage. Basins that will store water during periods of surface runoff shall be designed to prevent erosion of spillways when these basins have outlet to lower ground.**

OC §858.H.14. **Stockpiles of overburden and minerals shall be managed to minimize water and wind erosion.**

OC §858.H.15. **Erosion control facilities such as settling basins, ditches, stream bank stabilization, and dikes shall be constructed and maintained where necessary to control erosion.**

OC §858.H.16. **Extraction operations adjacent to any flowing stream shall be separated from the stream by closed dikes. No extractions within the stream will be permitted.**

OC §858.H.17. **All water utilized in the plant operation shall be disposed of behind a closed dike so that it will not cause impairment of water in any stream.**

OC §858.H.18. **Operations shall be conducted to substantially prevent siltation of groundwater recharge areas.**

OC §858.H.19. **Settling ponds or basins shall be constructed to prevent potential sedimentation of streams at operations where they will provide a significant benefit to water quality.**

See Hydrology and Water Quality section in Part A of the Reclamation Plan.

OC §858.H.20.a. **Good operating practices shall at all times be utilized to minimize noise, vibration, dust and unsightliness. In reviewing a proposal the Planning Commission shall consider:**

a. The location of the processing plant.

N/A – The Project will utilize the processing plant at the existing Coalinga Facility.

b. The location where unused equipment will be stored.

Designated storage areas for unused equipment are identified on Sheet 2, Existing Site Features, and described in the Operational Statement, Questions 10 and 12.

c. Proposals for the removal of all structures, metallic equipment, debris, or objects upon conclusion of the extraction operations.

See Disposition of Old Equipment section in Part A of the Reclamation Plan.

OC §858.H.21. Operating hours may be limited to designated periods except during periods of public emergency affecting the health and welfare of the community requiring continuous operation.

No change to the existing permitted hours of operation are requested.

OC §858.H.22. Any night lighting established on the property shall be arranged and controlled so as not to illuminate public rights-of-way or adjacent properties.

Consistent with existing practices, portable light towers and permanent light fixtures will be utilized to provide for a safe operating environment. Lighting will be shielded and arranged/controlled so as not to illuminate public rights-of-way or adjacent properties (see Operational Statement, Question 17).

OC §858.H.23. Processing and storage yards shall be centrally located on the site whenever possible. (Added by Ord. 490.189 adopted 10-29-79)

The Project will utilize the processing plant at the existing Coalinga Facility, and will continue to use the existing storage areas shown on Sheet 2, Existing Site Features.

OC §858.H.24. All surface mining operations and reclamation activities shall be conducted consistent with all policies of the Noise Element of the Fresno County General Plan. (Added by Ord. 490.189 adopted 10-29-79)

A site-specific noise study was conducted for the proposed Project and concludes that, with the incorporation of noise control berms along the eastern and southern boundaries, project activities will be compliant with the Noise Element of the Fresno County General Plan (see Appendix H, Noise Study, and Operational Statement, Question 11).

OC §858.H.25. **The Department shall consider the potentially adverse environmental effects of surface mining operations and will generally require that:**

a. Disturbances of vegetation and overburden in advance of mining activities be minimized.

b. Sufficient topsoil be saved to perform site reclamation in accordance with the Mining and Reclamation Plan.

c. All reasonable and practical measures be taken to protect the habitat of fish and wildlife.

d. Temporary stream or watershed diversion be restored.

e. Permanent piles or dumps of mine waste rock and overburden be stabilized and not restrict the natural drainage without suitable provisions for diversion and toxic materials be removed or confined to control leaching. (Added by Ord. 490.189 adopted 10-29-79)

See Resoiling and Revegetation, Environmental Setting and Protection of Fish and Wildlife Habitat, and Hydrology and Water Quality sections in Part A of the Reclamation Plan.

OC §858.H.26. **Reclamation of mined lands shall be implemented in conformance with applicable performance standards as set forth in the State Regulations Sections 3703 et seq. pertaining to the subjects listed below:**

a. Wildlife habitat.

b. Backfilling, regrading, slope stability, and recontouring.

c. Revegetation.

d. Drainage, diversion structures, waterways, and erosion control.

e. Prime and other agricultural land reclamation.

f. Building, structure, and equipment removal.

g. Stream protection including surface and groundwater.

h. Topsoil salvage, maintenance, and redistribution.

I. Tailing and mine waste management.

j. Closure of surface openings.

The Reclamation Plan has been developed consistent with SMARA statutes and regulations.

County of Fresno

DEPARTMENT OF PUBLIC WORKS AND PLANNING
STEVEN E. WHITE, DIRECTOR

EVALUATION OF ENVIRONMENTAL IMPACTS

APPLICANT: Candice Longnecker on behalf of Granite Construction Company

APPLICATION NOS.: Initial Study Application No. 7029 and Unclassified Conditional Use Permit Application No. 3512

DESCRIPTION: Allow the expansion of an existing aggregate mining operation on a 299.11-acre parcel in the AE-20 (Exclusive Agriculture, 20-acre minimum parcel size) Zone District in the unincorporated area of County of Fresno and on a 202.54-acre parcel in the MBL (Light Manufacturing/Business) Zone District in the City of Coalinga.

LOCATION: The project site is located on the north side of Cambridge Avenue, between Monterey Avenue and State Route 198/33, adjacent to and within the city limits of the City of Coalinga (SUP. DIST. 4) (APN 070-060-86S and 89S) (38940 Route 33, Coalinga).

PROJECT DESCRIPTION DETAILS

Existing Site Conditions and Surrounding Uses

The Project is in western Fresno County and encompasses a portion of Section 29, Township 20 South, Range 15 East, Mount Diablo Base and Meridian. More specifically, the Project is located south of the Applicant's existing Coalinga Facility, north of Cambridge Avenue, West of State Route 198/33, and east of Monterey Avenue. The Project area encompasses 368± acres of a larger 502± acre property bearing Assessor Parcel Numbers 070-06-86S and 070-06-89S. Mining is proposed on 338± acres of the Project area with the remainder (30± acres) in ancillary use and setback areas. Primary access to the Project area will occur via internal access roads from the existing Coalinga Facility (which itself is accessed via an existing encroachment from State Route 198/33)

Predominant land uses in the vicinity of the Project are as follows:

- North: Resource extraction/industrial
- South: The City of Coalinga's recreational park, with scattered commercial, residential, and school facilities bordering Cambridge Avenue farther south
- East: State Route 198/33, with agriculture and residential uses farther east
- West: Monterey Avenue, with undeveloped land and oil fields farther west

Site zoning is AE-20 (Exclusive Agricultural) for APN 070-060-86S (Fresno County), and a combination of Light Manufacturing/Business and Service Commercial for APN 070-060-89S (City of Coalinga). The General Plan Land Use Designation is Agriculture for APN 070-060-86S (Fresno County), and a combination of Commercial Service and Manufacturing/Business with a Resource Extraction Overlay for APN 070-060-89S (City of Coalinga).

General Environmental Setting

The Project area has been disturbed with widespread evidence of historical activity (rangeland and oil exploration) and off-road vehicle use. Vegetation cover ranges from very sparse and almost nonexistent to small, dense patches of ruderal (weedy) species such as Russian thistle (*Salsola tragus*), wormwood (*Artemisia sp*.) bromes (*Bromus spp*.) and oats (*Avena sp*.). The most prominent drainage feature in the vicinity of the Project is Los Gatos Creek, which flows in a southeasterly direction through the site. The Creek flows west of the existing Coalinga Facility and bisects the Project area. Aside from Los Gatos Creek, no evidence of wetlands or other aquatic features exist within the Project area.

The Natural Resources Conservation Service has mapped the following soil units on the Project site:

- Pits, gravel;
- Yribarren clay loam, 0 to 2 percent slopes;
- Excelsior sandy loam, sandy substratum, 0 to 2 percent slopes;
- Cerini sandy loam, 0 to 2 percent slopes;
- Carranza gravelly sandy loam, 2 to 8 percent slopes; and,
- Excelsior, sandy substratum - westhaven association, flooded, 0 to 2 percent slopes.

Other than the transmission line that runs adjacent to Monterey Avenue on the western boundary of the Project site, as well as abandoned oil and gas wells from the former Chevron operation and utilities associated with the existing Coalinga Facility and surrounding developments, no other notable utilities are present in the vicinity of the Project. There are no railroads on or adjacent to the lands to be reclaimed.

Project Components

The Project's primary purpose is a change (expansion) to the geographic area allowed for mining and reclamation at the Project site. More specifically, the proposed Project includes: (1) a modification to existing UCUP No. 915 to include a new extraction area that lies west of Los Gatos Creek on APN 070-060-86S in the County of Fresno; (2) a new CUP from the City of Coalinga for extraction on the portion of APN 070-060-89S that lies within the City of Coalinga jurisdictional city limits, and (3) a modification to existing Reclamation Plan 915 to include the Project areas on APN 070-060-86S and APN 070-060-89S.

The Project would not modify the current productions levels, materials to be mined, or mining methods, and the overall production and processing activities would be consistent with existing conditions.

Summary of Project Mining and Reclamation Activities

A description of mining and reclamation activities that would occur under the proposed Project is included within the Project Applicant's submitted materials, including the Operational Statement and Reclamation Plan. The information provided by the Applicant was used to prepare the descriptions of proposed mining activities presented below unless otherwise noted.

Mining Methods

Mining operations will be performed in a manner consistent with current practices at the existing Coalinga Facility, and will be initiated by the removal of vegetation, topsoil/growth media, and overburden materials which lie above marketable sand and gravel deposits. The overlying materials will be removed using scrapers aided by a motor grader and a bulldozer, as needed. After overlying materials are removed, marketable sand and gravel will be excavated using a combination of scrapers, front-end loaders, hydraulic excavators, bulldozers, and other support equipment.

The maximum anticipated depth of excavation is two hundred (200) feet below ground surface (bgs) to elevation 484 above mean sea level (AMSL). The Project does not involve in-stream mining and includes setbacks from the 100-year floodplain to the mining boundary. No mining is proposed within fifty (50) feet of a property boundary or below the water table. Final reclaimed slopes will not exceed 1.5H:1V. Following excavation, sand and gravel will be transported via conveyor and/or internal haul roads to the existing Coalinga Facility where it will be processed and/or sold for use in construction materials. An elevated crossing will be utilized to facilitate the transport of materials from the mining area west of Los Gatos Creek to the existing processing plant.

Phasing

Mining is anticipated to progress in a phased manner to allow for concurrent reclamation (to the extent practicable). Mining will produce an anticipated 82 million tons of sand and gravel over the life of the Project. Total life of the Project is proposed by the Applicant at fifty-five (55) years for mining operations, with an additional five (5) years to complete reclamation activities, for a total Project life of sixty (60) years. Based on current mine planning, the Applicant anticipates depleting its reserves at the existing Coalinga Facility prior to moving into the Project area. Until that time, ancillary surface mining activities will take place in the Project area (e.g., stockpile management, fence installation, property maintenance, etc.). The Project does not propose concurrent mining (aggregate extraction) at the existing Coalinga Facility and Project area. An estimated time schedule for reclamation of the areas disturbed by mining activities is provided in Table 1, below.

TABLE 1
ESTIMATED PROJECT PHASING

Phase	Est. Acres	Est. Tons (millions)	Est. Years to Completion
Phase 1	78	19	13
Phase 2	79	22	15
Phase 3	74	20	13
Phase 4	46	6	4
Phase 5	69	9	6
Phase 6	22	6	4
Total	**368**	**82**	**55**

Notes:

1. *The estimated Project phasing is provided only as a guideline. Actual phasing depths, boundaries, quantities, and timelines may be affected by unforeseen changes in geology and market conditions.*
2. *Estimated years to completion calculated using a historical average production rate (baseline) of 1.5 million tons/year.*

Reclamation Measures

- Prior to the stripping of overburden, approximately six-to-twelve inches of topsoil/growth media will be excavated in a separate lift and stockpiled/segregated (with signage as needed) for use in reclamation.
- Final reclamation slope angles have been designed with adequate factors of safety for the open space end use.
- During reclamation, stockpiled topsoil/growth media will be redistributed in preparation for revegetation.
- Revegetation areas will be ripped, disced and/or scarified as needed to establish a suitable root zone in preparation for plantings.
- Any incidental refuse or garbage will be hauled off-site and disposed of in accordance with state and local standards.
- Facilities, structures, and equipment associated with mining and processing will be removed from the site following final reclamation except for property line fencing, perimeter berms, and perimeter access roads.
- Except for the cut slopes, screening berms, and perimeter access roads, disturbed surfaces will be revegetated with a native seed mix recommended for the site.

Revegetation of Disturbed Areas

Existing vegetation cover at the Project site ranges from very sparse and almost nonexistent to small, dense patches of ruderal (weedy) species. As part of reclamation, the Project site will be returned to open space through revegetation with the native seed mix shown in Table 2.

TABLE 2
REVEGETATION SEED MIX

Common Name	Plant Species	Application Rate (lbs. (PLS)/acre)
Cattle spinach	*Atriplex polycarpa*	4
California buckwheat	*Eriogonum fasciculatum* var. *polifolium*	3
Small fescue	*Festuca microstachys*	6
Desert plantain	*Plantago ovata*	4

Note:
Modifications to this seed mix may be appropriate based on availability from suppliers, cost, and species determined most suitable at the time planting occurs. Ideally, revegetation will occur in the summer to early fall.

The following success criteria is proposed for the areas to be revegetated:

Cover:	25% cover per 1-meter x 1-meter plot
Species richness:	3 species from the seed mix per 1-meter x 1-meter plot, or 60% species richness in the event a new seed mix is chosen

Annual monitoring will be performed until the revegetation meets the success criteria,

Proposed End Use Following Mining

The proposed end use for the site following reclamation will be open space, consistent with the current condition of the property and existing reclamation plan for the adjacent Coalinga Facility.

I. AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:

A. Have a substantial adverse effect on a scenic vista; or

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

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project area has been disturbed with evidence of historical surface mining activity, oil exploration, and off-road vehicle use. Vegetation cover ranges from very sparse and almost nonexistent to small, dense patches of ruderal (weedy) species. A portion of the Project area includes existing permitted mining pits, and the entire Project area is designated by the City of Coalinga for resource extraction (mining). Los Gatos Creek bisects the project site from the northwest to the southeast, with seasonal water flow. A portion of the project area includes existing permitted Granite Construction Company mining pits. The Coalinga General Plan Land Use Element designates the site for

Manufacturing and Business with a Resource Extraction Overlay. The County-adopted Coalinga Community Plan designates the area as Agriculture.

Surrounding land uses include Granite Construction Company's existing surface mining facility to the north, undeveloped land, oil fields, and industrial uses to the west, and commercial, recreational, educational, and residential uses to the east and south, within the City of Coalinga. The closest residences are greater than 1,000 feet to the south and east of the project area and are separated from the mining activity by Route 198/33 and Cambridge Avenue.

The site does not have any historic buildings, rock outcroppings or trees designated for removal. In addition, the Project site is not within view of a scenic vista, or state or locally designated scenic highway. Therefore, the proposed Project would have a less than significant impact on scenic vistas or scenic resources.

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

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project site is directly north of single-family residential neighborhoods and schools and west of single-family residential neighborhoods and agricultural operations. Los Gatos Creek transverses the site, in a southeasterly flow. The Project does not involve in-stream mining and includes setbacks from the 100-year floodplain to the mining boundary. In each phase, overburden material will be used to build earthen screening berms around most of the Project boundary. Once the proposed berm is built in each phase, the below-grade excavation will not be visible at eye-level from the surrounding areas. Therefore, a less than significant impact to the existing visual character or quality of the site and surrounding area would occur.

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

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

Consistent with existing practices, portable light towers and permanent light fixtures will be utilized to provide for a safe operating environment. Lighting will be shielded and arranged/controlled so as not to illuminate public rights-of-way or adjacent properties. In addition, the nearest residences are located greater than 1,000 feet from the project area and are separated by Route 198/33 and Cambridge Avenue. Therefore, the proposed Project would have a less than significant impact with the following Mitigation Measure.

* ***Mitigation Measure(s)***

1. *All outdoor lighting shall be hooded and directed as not to shine towards adjacent properties and public streets.*

II. AGRICULTURAL AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology in Forest Protocols adopted by the California Air Resources Board. Would the project:

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

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project site has land classifications of Grazing Land, Farmland of Local Importance, and Vacant or Disturbed Land (Fresno County Important Farmland Map 2016) and does not have Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The site is not under a Williamson Act contract.

Although the site is designated Agriculture in the County-adopted Coalinga Community Plan, the area has been historically used for oil extraction and a small airport but is currently open space. The site has been used for surface mining operations under CUP 915 for more than forty (40) years. The rest of the Project area has been historically used for oil extraction and an air landing strip but is currently open space. Because the project would not convert actively farmed land to non-agricultural uses, a less than significant impact would occur.

B. Conflict with existing zoning for agricultural use, or a Williamson Act Contract?

FINDING: LESS THAN SIGNIFICANT IMPACT:

A portion of the project site is zoned Exclusive Agriculture (AE) by the County of Fresno. Surface mining is an allowed use in the AE Zone District with an Unclassified Conditional Use Permit per the County's surface mining ordinance, and mineral production has occurred on a part of the Project area under an approved use permit for more than forty (40) years. The Project site does not have prime or unique farmlands, is not under a Williamson Act contract, and is not currently used or intended to be used for agricultural purposes.

The portion of the Project within the City of Coalinga is zoned for Light Manufacturing/Business and Recreation. The project site does not have prime or unique farmlands, is not under a Williamson Act contract, and is not currently used for agricultural purposes. The Project would not conflict with existing zoning for agricultural use or a Williamson Act contract.

C. Conflict with existing zoning for forest land, timberland, or timberland zoned Timberland Production; or

D. Result in the loss of forest land or conversion of forest land to non-forest use?

FINDING: NO IMPACT:

The Project site is not identified as forest land (as defined in Public Resources Code section 12220[g]) or timberland (as defined by Public Resources Code section 4526) and is not zoned Timberland Production (as defined by Government Code section 51104[g]). Therefore, the proposed Project would not result in the conversion of forest land and would not conflict with forest land, timberland, or Timberland Production zoning, and no impact would occur.

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

FINDING: LESS THAN SIGNIFICANT IMPACT:

Approximately half of the project site is designated Agriculture in the County-adopted Coalinga Community Plan and the portion of the project site within the City of Coalinga is designated Manufacturing/Business with a Resource Extraction Overlay. Neither area has prime farmland, unique farmland, or farmland of statewide importance, and is not under a Williamson Act contract. The Project area has been historically used for oil extraction and a small airport and is not currently improved or farmed. As such, no currently farmed agricultural land would be converted to non-agricultural uses because of the proposed Project.

III. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

A. Conflict with or obstruct implementation of the applicable Air Quality Plan; or

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

FINDING: LESS THAN SIGNIFICANT IMPACT:

The Air Quality Analysis and Health Risk Assessment prepared for this Project was reviewed by the San Joaquin Valley Air Pollution Control District, who had recommendations for further analysis, which was completed by the Applicant to the satisfaction of the District.

The proposed Project would not modify the current production levels, hours of operation, materials to be mined, equipment types, or mining methods. Further, the Project will continue to comply with the San Joaquin Valley Air Pollution Control District ("SJVAPCD") regulations related to fugitive dust, and will incorporate applicable control measures outlined within SJVAPCD's Rules related to control of fugitive dust during excavation and earthmoving activities (Regulation VIII); thus, any potential fugitive emissions would be reduced to less than significant levels in accordance with SJVAPCD CEQA guidance.

Given that the Project will not result in aggregate production above the existing production level at the adjacent site, the Project will not result in any new or increased air emissions. Accordingly, the Project would not conflict with or obstruct implementation of an applicable air quality plan, violate any air quality standard, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase of any criteria pollutant, and there would be a less than significant impact in these areas.

C. Expose sensitive receptors to substantial pollutant concentrations?

FINDING: LESS THAN SIGNIFICANT IMPACT:

As discussed above, the proposed Project would not modify the current production levels, hours of operation, materials to be mined, equipment types, or mining methods used at the adjacent facility. However, the geographic area of mining and reclamation activities would be expanded, and activities would shift closer to receptors located to the south and east of the Project area.

Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Sensitive receptors are facilities where sensitive receptor population groups (i.e., children, the elderly, the ill, etc.) are likely to be found. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and medical clinics.

The proposed Project would not introduce new sensitive receptors to the area. Accordingly, the proposed Project would not be considered a sensitive receptor. The nearest sensitive receptors to the Project site are the Coalinga Middle School, which is located greater than 1,000 feet from the Project area, and is separated by Cambridge

Avenue, and an existing residence, which is located on the opposite side of State Route 33 and over 1,000 feet from the Project area. The Project will involve diesel-fueled mobile equipment such as scrapers, bulldozers, and other off-road equipment. The combustion of diesel and the resulting diesel exhaust has been identified by the State of California as a known carcinogen (Cal/EPA 2008). Diesel exhaust is a complex mixture of hundreds of compounds, which under regulatory guidelines (Cal/EPA 2005) can be characterized by a single toxic air contaminant referred to as diesel particulate matter ("DPM"). In addition, the Project will involve the generation of fugitive dust from mining, handling and transport activities.

During application development, the Applicant retained a third-party air quality consultant (Air Permitting Specialists) to determine if toxic air contaminants from the Project are likely to cause a significant public health risk as defined by State and local criteria.

The results of the July 2015, January 2016, and June 2017 (revised) Health Risk Analysis reveal that the cancer risk associated with the Project would be 12.9 in a million, which is below the SJVAPCD significance threshold of 20 in a million, and below the chronic and acute hazard indices of 1.0, for all nearby receptors (including sensitive receptors). Therefore, exposure of sensitive receptors to substantial pollutant concentrations would not occur and a less than significant impact would result. According to the Fresno County Public Health Department, Coccidioidmycosis, also known as Valley Fever, is disease caused by a fungus called Coccidioides immitis and Coccidioides posadasii carried in the environment. When the fungi are carried in the wind as spores, they can become inhaled, causing Valley Fever. Fresno County's geographical area is known to contain Coccidioides immitis in its soil, and the area around Coalinga is identified as an area of elevated Valley Fever activity.

Proposed Project activities could increase potential exposure to Coccidioidmycosis for onsite workers, nearby residents and visitors. No significance threshold has been adopted for Coccidioidmycosis. The project will comply with local and State regulations that will minimize the potential for impacts from Coccidioidmycosis by reducing fugitive dust emissions and providing training and personal protection for onsite workers to reduce potential exposure to Coccidiodes spores.

More specifically, the Project will comply with regulations related to fugitive dust and will incorporate applicable control measures outlined within SJVAPCD's Rules related to control of fugitive dust during excavation and earthmoving activities (Regulation VIII). Regulation VIII contains a series of prescriptive requirements to ensure that fugitive dust is controlled and minimized. These measures include:

Table 8021-1 – CONTROL MEASURE OPTIONS FOR CONSTRUCTION, EXCAVATION, EXTRACTION, AND OTHER EARTHMOVING ACTIVITIES	
A.	**PRE-ACTIVITY:** **A1 Pre-water site sufficient to limit VDE to 20% opacity; and** **A2 Phase work to reduce the amount of disturbed surface area at any one time.**
B.	**DURING ACTIVE OPERATIONS:** **B1 Apply water or chemical/organic stabilizers/suppressants sufficient to limit VDE to 20% opacity; or** **B2 Construct and maintain wind barriers sufficient to limit VDE to 20% opacity. If utilizing wind barriers, control measure B1 above shall also be implemented.** **B3 Apply water or chemical/organic stabilizers/suppressants to unpaved haul/access roads and unpaved vehicle/equipment traffic areas sufficient to limit VDE to 20% opacity and meet the conditions of a stabilized unpaved road surface.**
C.	**TEMPORARY STABILIZATION DURING PERIODS OF INACTIVITY:** **C1 Restrict vehicular access to the area; and** **C2 Apply water or chemical/organic stabilizers/suppressants, sufficient to comply with the conditions of a stabilized surface. If an area having 0.5 acres or more of disturbed surface area remains unused for seven or more days, the area must comply with the conditions for a stabilized surface area as defined in section 3.58 of Rule 8011.**

In addition to the dust control measures prescribed by the SJVAPCD, the Project will comply with AB 203, which modified Section 6709 of the Labor Code to require construction employers in counties where Valley Fever is highly endemic to provide effective awareness training on Valley Fever to all employees annually and before an employee begins work. Per AB 203 requirements, the training must include the following topics:

(1) What Valley Fever is and how it is contracted.
(2) High risk areas and types of work and environmental conditions during which the risk of contracting Valley Fever is highest.
(3) Personal risk factors that may create a higher risk for some individuals, including pregnancy, diabetes, having a compromised immune system due to causes including, but not limited to, human immunodeficiency virus (HIV) or acquired immunodeficiency syndrome (AIDS), having received an organ transplant, or taking immunosuppressant drugs such as corticosteroids or tumor necrosis factor inhibitors.
(4) Personal and environmental exposure prevention methods that may include, but are not limited to, water-based dust suppression, good hygiene when skin and clothing is soiled by dust, limiting contamination of drinks and food, working upwind from dusty areas when feasible, wet cleaning dusty equipment when feasible, and wearing a respirator when exposure to dust cannot be avoided.
(5) The importance of early detection, diagnosis, and treatment to help prevent the disease from progressing. Early diagnosis and treatment are important because the effectiveness of medication is greatest in early stages of the disease.
(6) Recognizing common signs and symptoms of Valley Fever, which include fatigue, cough, fever, shortness of breath, headache, muscle aches or joint pain, rash on upper body or legs, and symptoms similar to influenza that linger longer than usual.
(7) The importance of reporting symptoms to the employer and seeking medical attention from a physician and surgeon for appropriate diagnosis and treatment.
(8) Common treatment and prognosis for Valley Fever.

Given that the nearest sensitive receptors to the Project site are located greater than 1,000 feet from the Project area, and with implementation of the SJVAPCD dust control

measures and AB 203 requirements, the Project's potential impacts from Coccidioidmycosis will be less than significant.

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

FINDING: LESS THAN SIGNIFICANT IMPACT:

Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative methodologies to determine the presence of a significant odor impact do not exist. According to the California Air Resources Board Handbook, some of the most common sources of odor complaints received by local air districts are sewage treatment plants, landfills, recycling facilities, waste transfer stations, petroleum refineries, biomass operations, autobody shops, coating operations, fiberglass manufacturing, foundries, rendering plants, and livestock operations. The proposed Project does not involve any of the these uses.

The proposed Project would not change the current production levels, hours of operation, materials to be mined, equipment types, or mining methods occurring at the adjacent permitted facility. In addition, odors dissipate with distance and the nearest sensitive receptor is located greater than 1,000 feet from the Project area. Further, the nearest receptor to the site will be separated from the proposed Project area by perimeter berms, fencing, and either State Route 33 or Cambridge Avenue.

SJVAPCD regulates objectionable odors on a complaint basis. If complaints are received, the SJVAPCD investigates the complaint and determines a solution for the source of the complaint, which could include operational modifications. Although not anticipated, if odor complaints are made, the operator and/or the SJVAPCD would ensure that such odors are addressed, and any potential odor effects reduced to less than significant. Overall, the proposed Project would not create objectionable odors, nor would the Project site be affected by any existing sources of substantial objectionable odors, and there will be a less-than-significant impact related to objectionable odors.

IV. BIOLOGICAL RESOURCES

Would the project:

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

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

The Project area is disturbed with evidence of historical industrial activity and off-road vehicle use. Vegetation cover ranges from very sparse and almost nonexistent to small, dense patches of ruderal (weedy) species such as Russian thistle (*Salsola tragus*),

wormwood (*Artemisia sp*.) bromes (*Bromus spp*.) and oats (*Avena sp*.). Aside from Los Gatos Creek, no evidence of wetlands or other aquatic features exist within the Project area.

The portions of the Project site not previously disturbed by mining activities are made up of primarily ruderal vegetation. Due to the disturbed nature of the area and lack of essential habitat, the likelihood for any special-status species to currently exist on-site is low. Similarly, due to the disturbed nature of the Project site, any potential resident or migratory wildlife corridors, or wildlife nursery sites on the Project site are limited to Los Gatos Creek. The entire Creek and most of its floodplain area would be avoided by the proposed Project activities with a fifty (50)-foot setback for new mining areas. Additionally, the use of heavy equipment and mining activities on the Project site could discourage most wildlife species from living on the Project site

The Applicant retained a third-party biological consultant (TRC) to conduct a preliminary assessment of the potential occurrence of special-status species and sensitive habitats for the Project area in late 2014. TRC conducted a record search of the California Natural Diversity Database (CNDDB) to list all documented sightings of special-status species within the vicinity of the site. In addition, TRC performed a reconnaissance-level biological resources survey on the Project site. The biological assessment concluded that due to the disturbed nature of the Project area and lack of suitable habitats, most of the species with CNDDB occurrence records within 3 miles of the Project area are unlikely to occur on the property. Further, no special-status species were observed during the field survey.

Although the likelihood for any candidate, sensitive, or special status species to exist on-site is low, and none were observed on the Project site during the survey, it is recommended that prior to construction pre-construction surveys be completed to determine whether nesting birds (e.g., burrowing owl and Swainson's hawk), kit fox, and blunt-nosed leopard lizard may be present within the vicinity of the Project. The following Mitigation Measures are recommended to reduce potentially significant impacts to less than significant.

***** ***<u>Mitigation Measure(s)</u>***

2. Nesting Bird Preconstruction Surveys

If construction or ground disturbance activities are initiated during the nesting season (typically February 1st to August 31st), a qualified biologist shall conduct a pre-construction survey of the construction areas and the immediate vicinity (0.25 mile radius for Swainson's hawk) for active nests/burrows within 30 days of initiation of Project activities.

3. Nesting Bird Avoidance

If active nests/burrows are observed during pre-construction surveys conducted pursuant to Mitigation Measure No. 1 above, impacts to nests/burrows shall be avoided by establishing a 300-foot construction-free buffer around the nest/burrow

until the nest/burrow becomes inactive as determined by a qualified biologist. If an active Swainson's hawk nest is identified, a 750-foot buffer shall be established. With prior approval of the California Department of Fish & Wildlife, work may occur within the buffer zone(s).

4. Kit Fox Preconstruction Surveys

Preconstruction/pre-activity surveys for kit fox dens shall be conducted by a qualified biologist no less than 14 days and no more than 30 days prior to the beginning of construction or ground disturbance activities within a new phase boundary.

5. Kit Fox Avoidance

If a kit fox den is identified in the Project area, exclusion zones shall be placed in accordance with USFWS recommendations, as follows:

- *Potential Den: 50-foot radius*
- *Known Den: 100-foot radius*
- *Natal/Pupping Den: (Occupied and Unoccupied) Contact USFWS for guidance*
- *Atypical Den: 50-foot radius*

Work shall not occur within the exclusion zone(s) until approved by USFWS. If a natal/pupping den is discovered within the Project area, the USFWS shall be immediately notified and under no circumstances should the den be disturbed or destroyed without prior authorization.

6. Blunt-Nosed Leopard Lizard Preconstruction Surveys

The blunt-nosed leopard lizard (BNLL) is listed as federally and state endangered and is a state fully-protected species. Since CDFW is not able to issue any form of "take" permit for the blunt-nosed leopard lizard due to its status as a fully-protected animal under the California Fish and Game Code §5050, detection of species presence on a Project site is crucial.

Protocol surveys for blunt-nose leopard lizard shall be conducted by a qualified biologist in the Project area no more than one (1) year prior to the initiation of ground disturbance activities. The biologist(s) shall identify and clearly mark the location of areas where any BNLL were observed. A 50 ft. buffer will be established around all sightings with highly visible markers.

BNLL protocol surveys will be used to help determine the presence/absence of San Joaquin kit fox and burrowing owl, and the suitability of the site to support these species well before project-related disturbance activities.

7. Blunt-Nosed Leopard Lizard Avoidance

If the presence of a blunt-nosed leopard lizard is detected, 50-ft buffer zones shall be established from any observed blunt-nosed leopard lizard location. The buffer

zones shall be demarcated by construction fencing (or similar) to ensure that construction crews do not enter the avoidance zone. CDFW and USFWS shall be notified immediately in the event of a detection of the species, and work shall not occur within the buffer zone until approved by both agencies and any other Mitigation Measures recommended by the agencies have been fully implemented.

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

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

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

The 46.08-acre Riverine habitat (Los Gatos Creek) running through the project site is classified as a R4SBA. System Riverine (R): The Riverine system includes all wetlands and deep-water habitats contained within a channel, with two exceptions: (1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and (2) habitats with water containing ocean-derived salts of 0.5 ppt or greater. A channel is an open conduit either naturally or artificially created which periodically or continuously has moving water, or which forms a connecting link between two bodies of standing water. Subsystem Intermittent (4): This Subsystem includes channels that have flowing water only part of the year. When the water is not flowing, it may remain in isolated pools or surface water may be absent. Class Streambed (SB): Includes all wetlands contained within the Intermittent Subsystem of the Riverine System and all channels of the Estuarine System or of the Tidal Subsystem of the Riverine System that are completely dewatered at low tide. Water Regime Temporary Flooded (A): Surface water is present for brief periods (from a few days to a few weeks) during the growing season, but the water table usually lies well below the ground surface for most of the season.

The Project does not involve in-stream mining and includes setbacks from the 100-year floodplain to the mining boundary. Transport of sand and gravel from the west side of Los Gatos Creek (Phase 4 and Phase 5) to the east side of Los Gatos Creek will occur via an elevated electrical-powered conveyor system. The elevated conveyor system will consist of a belt conveyor on a steel truss frame supported by two 4-foot diameter columns in the floodplain (but outside of the Creek channel) and two 4-foot diameter columns outside of the floodplain. The conveyor system will be situated above the 100-year flood elevation, which is 710.17 feet ASL. The belt conveyor will be equipped with water spray nozzles to minimize dust. Conveyor wiper blades will be used to prevent material build-up on the belt and the steel truss frame will be equipped with a spill pan, which will catch any water drips or side-cast sand and gravel and prevent sedimentation in Los Gatos Creek.

The elevated conveyor crossing will be installed in the non-rainy season and will not involve removal of riparian species, or removal, filling, or hydrological interruption of Los

Gatos Creek. Proper permits will be obtained, as necessary, prior to installation of the crossing.

* ***<u>Mitigation Measure(s)</u>***

8. *Prior to installation of the crossing over Los Gatos Creek, all necessary permits shall be obtained for conducting work in and adjacent to jurisdictional waters, and may include an Army Corps of Engineers Section 404 permit, Regional Water Quality Control Board Section 401 Water Quality Certification, and California Department of Fish and Wildlife (CDFW) (Section 1602 Streambed Alteration Agreement).*

9. *If an elevated conveyor system is utilized spanning Los Gatos Creek, a containment system shall be designed and installed to catch and collect side-cast sands and gravels to prevent inadvertent fill of the jurisdictional waters. The containment system shall be regularly maintained as part of normal operations during the life of the Project.*

10. *Installation of the elevated conveyor system and associated infrastructure in the floodplain shall occur between April 1 – October 31 when flowing water is absent from the stream or at a minimum flow.*

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

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

Due to the disturbed nature of the Project site, potential native resident or migratory fish or wildlife species, native resident or migratory wildlife corridors, or native wildlife nursery sites on the Project site are limited to the area Los Gatos Creek. The entire creek and most of its floodplain area would be avoided by the proposed Project activities with a fifty (50)-foot setback for new mining areas. With adherence to the mitigation measures identified in Section IV. A. and C., the impact to native resident or migratory fish or wildlife species and native resident or migratory wildlife corridors or native wildlife nursery sites will be less than significant.

See discussion and Mitigation Measures 2-10 in Section IV. A. and C.

E. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

F. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan?

FINDING: NO IMPACT:

The project site does not fall within the jurisdiction of any adopted habitat conservation plans or natural community conservation plans, nor would it affect the implementation of any such plans that may be in effect beyond the boundaries of the project site. Therefore, no impact will result to an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.

V. CULTURAL RESOURCES

Would the project:

A. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

During application development, the Applicant retained a third-party cultural resources consultant (Tom Origer & Associates) to assess the likelihood of the proposed Project to impact cultural resources at the site. Tom Origer & Associates completed a search of the archaeological base maps, site records, and survey reports on file at the Southern San Joaquin Valley Information Center (SSJVIC), California State University, Bakersfield.

In addition, Origer reviewed documents and maps pertinent to the Project and attempted contact with the Native American Heritage Commission and local tribal organizations. This record search included review and analysis of various environmental and cultural factors, including soil surveys, geological data, and the locations of known archaeological sites. Previous studies of the project area have revealed multiple historical resources on the surface. Origer concluded the soils and geology of the project area, being recent alluvium, suggest the possibility of buried archeological resources is moderate to high and that there is a 5% to 20% potential for discovering such resources on areas of the site not previously mined. Origer recommended that if archaeological materials are discovered, work should halt at the place of discovery until a professional archeologist can evaluate the find.

No historic properties (i.e., cultural resources eligible for inclusion on the CRHR) were identified within the area of disturbance on the project site. If buried archaeological deposits are encountered during Project-related activities, work in the immediate vicinity of the discovery must cease until the finds can be evaluated by a professional archaeologist. With implementation of the following mitigation measure, the project will have a less than significant impact on cultural resources.

*** *<u>Mitigation Measure(s)</u>***

11. If cultural resources are unearthed during ground-disturbing activities, all work shall be halted in the area of the find. A professional archeologist shall be called to evaluate the findings and make any necessary mitigation recommendations. If human remains are unearthed during ground disturbing activities, no further

disturbance is to occur until the Fresno County Sheriff-Coroner has made the necessary findings as to origin and disposition. All normal evidence procedures shall be followed by photos, reports, video, and etc. If such remains are determined to be Native American, the Sheriff-Coroner must notify the Native American Commission within 24 hours.

B. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

The survey did not reveal any recorded cultural resources on or within a one-mile radius of the project site. No archaeological deposits or isolated finds were identified during the cultural resources survey. Nonetheless, because buried cultural resources that may be unique or otherwise significant may be uncovered during the mining process, the following Mitigation Measure shall be followed.

*** *Mitigation Measure(s)***

12. In the event archaeological materials are encountered during grading or construction, the operator shall cease all ground-disturbing activities within 50 feet of the find. A professional archaeologist shall evaluate the significance of the resources and recommend appropriate treatment measures. Per CEQA Guidelines §15126.4(b)(3)(A). Consistent with CEQA Guidelines §15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the professional archaeologist shall develop additional treatment measures in consultation with the County, which may include data recovery or other appropriate measures.

C. Disturb any human remains, including those interred outside of formal cemeteries?

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

Although no human remains were identified in the records search for the project site, the possibility that remains could be found nonetheless exists. Accordingly, the following Mitigation Measure shall be followed.

*** *Mitigation Measure(s)***

See Mitigation Measure 11, Section V. A.

VI. ENERGY

Would the project:

A. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation; or

B. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The Project involves mining with mobile off-road equipment and the transport of materials via an electric conveyor to an existing permitted processing plant. Energy use will consist of fuel consumption in mobile equipment and electrical power for the conveyor system. The intensity of operations (mining and transport) and associated energy use will be consistent with existing conditions, as no production increase is being requested. In addition, the Project implements energy reduction measures through company policy related to equipment management. This includes: limiting idling of on-highway and off-highway equipment to no more than five (5) minutes, except under certain safety-related conditions; properly servicing and maintaining equipment in accordance with manufacturer's recommendations; and compliance with the California Air Resources Board In-Use Off-Road Diesel-Fueled Fleets Regulation, which includes compliance with progressive fleet emission reduction and efficiency requirements.

The EPA regulates non-road diesel engines. EPA has no formal fuel economy standards for non-road (e.g., construction) diesel engines but does regulate diesel emissions, which indirectly affect fuel economy. In 2004, EPA issued the Clean Air Non-Road Diesel Rule. This rule, which took effect in 2008 and was fully phased in by 2014, will cut emissions from non-road diesel engines by more than 90 percent. These emission standards are intended to promote advanced clean technologies for non-road diesel engines that improve fuel combustion, but they also result in slight decreases in fuel economy.

The Project's Operational Statement limits idling of equipment and vehicles on-site, further, the project's compliance with SJVAPCD's Rule 9510 Indirect Source Review would reduce fuel usage through the implementation of cleaner off-road construction equipment to meet the required emission reductions pursuant to regulatory requirements. The Project will also utilize Tier 4 final engines or better.

Operational activities associated with the proposed project would result in the consumption of petroleum-based fuels. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in other parts of the state. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

VII. GEOLOGY AND SOILS

Would the project:

A. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

2. Strong seismic ground shaking?

3. Seismic-related ground failure, including liquefaction?

4. Landslides?

FINDING: LESS THAN SIGNIFICANT IMPACT:

According to the California Department of Conservation, the project site is not located in an Alquist-Priolo earthquake fault zone. However, the facility is in an area with a moderate to high seismic hazard potential, with the Alcalde Hills fault zone 4.75 miles to the northwest. Earthquake hazard maps provided by the California Geologic Society indicate that the design peak horizontal ground acceleration in bedrock is between 0.30g and 0.40g for an earthquake event associated with a 10 percent probability of exceedance in a 50-year period. This design earthquake event has a mean return period of 475 years.

Within the project area, the applicant will continue to use existing structures. No other buildings are anticipated, but the operator may utilize Conex boxes (or similar) for miscellaneous on-site storage (e.g., parts, materials). Any new structures will be required to conform to the latest Building Code for structural standards regarding earthquake hazards. As such, the proposed Project would result in a less than significant exposure of people or structures to potential substantial adverse effects from seismic activity beyond what is currently existing on the project site.

Liquefaction is a process in which strong ground shaking causes saturated soils to lose their strength and behave as a fluid. Ground failure associated with liquefaction can result in lateral spreading and slope failure. Three geologic conditions must be simultaneously present for liquefaction to occur: shallow groundwater (less than fifty feet deep), unconsolidated sandy soils, and strong ground shaking.

At the project site, groundwater occurs at depths of at least 300 feet or greater below the ground surface and within soils that are dominated by gravel and coarse sands. Based on the site-specific soil and groundwater conditions, the potential for liquefaction in the native soils at the Project Site is low.

The risk of landslide for flatlands, valley bottoms, and areas of minimal topographic relief is defined in the Five County Seismic Safety Element, as low risk. Further, ground acceleration was considered in the site-specific slope stability evaluation, which concluded that the factors of safety for the proposed slopes are acceptable. As such, there will be a less than significant risk of loss, injury, or death due to area geology and project operations.

B. Result in substantial soil erosion or loss of topsoil?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Surface runoff is not anticipated as the Project involves mining below grade with perimeter control berms surrounding most of the excavation area. During initial surface disturbance activities, direct precipitation and drainage will be controlled through a combination of berms, silt fences, revegetation, hay bales and other erosion control measures, as needed, to ensure that land and water resources are protected from erosion, gullying, sedimentation, and potential contamination. Slopes will be vegetated with specified seed mixes once final reclamation grades are achieved. Upon completion of mining operations, the site will be graded to minimize erosion, revegetated, and left in an open space condition. Direct precipitation may temporarily collect in the pit-bottom before it evaporates, infiltrates, or is used on-site.

Soils will only be removed as necessary to access new mining areas and will be used for reclamation as soon as it can be accommodated by the mining schedule. Where possible, soils being removed will be directly placed for reclamation. Where salvaged topsoil/growth media cannot be used immediately, and where distinct soil horizons are present, topsoil and other growth media will be stockpiled separately and will not be disturbed until needed for reclamation. Stockpiles will be seeded with an appropriate seed mixture as needed to prevent water and wind erosion and to discourage weed growth. During reclamation, stockpiled topsoil/growth media will be redistributed on disturbed surfaces and revegetated with a native seed mix. Due to the site conditions and erosion control measures, and because topsoil would be stored on site for future use in accordance with the Surface Mining and Reclamation Plan, there will be a less than significant impact.

C. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The Project will involve excavation of mine pits of up to 200 feet below ground surface. Final reclaimed slopes will not exceed 1.5H:1V. The overall final reclaimed slope angle of 1.5H:1V (or flatter) may be achieved through one of the following configurations:

- 1.5H:1V cut slope with no backfill;
- 0.5H:1V cut slope with backfill at 2H:1V to full slope height; or,
- 0.5H:1V cut slope with backfill at 2H:1V to a distance of 50 vertical feet or less from the top of slope.

The Applicant retained a third-party engineering consultant (Golder Associates) to conduct a site-specific geologic and slope stability evaluation for the Project consistent with State of California Surface and Mining Reclamation Act (“SMARA”) requirements for the proposed reclamation configuration of the mined area. The slope stability evaluation indicates that, consistent with SMARA requirements, the reclamation design of the Project provides adequate factors of safety for slope stability for the intended end

use under both static and earthquake (pseudostatic) conditions. The slope stability analysis indicates a static factor of safety greater than 1.4, and a pseudo-static factor of safety greater than 1.0 for the final reclaimed slopes. Accordingly, the impact will be less than significant.

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

FINDING: NO IMPACT:

Expansive soils are those that greatly increase in volume when they absorb water and shrink when they dry out. Expansion is measured by shrink-swell potential, which is the relative volume change in soil with a gain in moisture. If the shrink-swell potential is rated moderate to high, damage to buildings, roads, and other structures can occur. According to the Fresno County General Plan, soils exhibiting a high to moderately high shrink-swell potential generally occur in a northwest-trending belt approximately parallel to the Friant-Kern Canal foothills in Kings Canyon National Park in the Sierra Nevada, and along Fresno Slough from Madera County to Kings County. The majority of the Project site (east of Los Gatos Creek) are located on soils that are not considered expansive by the United States Department of Agriculture, National Resources Conservation Service. Soils west of Lost Gatos Creek are considered at least moderately expansive. However, no structures that require soil analysis per Uniform Building Code Section 18 (e.g., building foundation footings, roadways, and sidewalks) are proposed in the Project area; therefore, there will be no impact from expansive soils.

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

FINDING: LESS THAN SIGNIFICANT IMPACT:

The Project will not involve new septic tanks or alternative wastewater disposal systems. Sewage systems at the adjacent (existing) surface mining site will be utilized and should be supplemented with serviced portable toilets within the project area. Therefore, there will be a less than significant impact related to the use of septic tanks or alternative wastewater disposal systems.

F. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

Although no paleontological resources were identified in the course of the archaeological and historical resources assessment of the Project Site, the possibility that such resources could be found nonetheless exists. The following Mitigation Measures shall be followed.

* ***Mitigation Measure(s)***

See Mitigation Measure 11, Section V. A.

See Mitigation Measure 12, Section V. B.

13. *If paleontological resources are discovered during Project-related activities, all work shall be stopped in the area of the find and a qualified paleontologist shall be called to assess the find. The paleontologist shall make any necessary recommendations, including any procedures to further investigate or mitigate impacts to the find as required by law.*

VIII. GREENHOUSE GAS EMISSIONS

Would the project:

A. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or

B. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The San Joaquin Valley Air Pollution Control District (SJVAPCD) has adopted guidance to assist lead Agencies, project proponents, and interested parties in assessing and reducing the impacts of project specific greenhouse gas emissions (GHG) on global climate change.

The SJVAPCD determined that GHG emissions from development projects (i.e., proposed residential, commercial, industrial, or governmental operations) primarily occur indirectly through energy consumption and vehicle miles traveled and these effects would need to be reduced for a project to have a less than significant cumulative effect on the environment. This direction is contained within the District's Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA (December 2009). The guidance relies on the use of performance-based standards, otherwise known as Best Performance Standards (BPS), to assess significance of project specific greenhouse gas emissions on global climate change during the environmental review process, as required by CEQA.

Use of BPS is a method of streamlining the CEQA process of determining significance and is not a required emission reduction measure. Projects implementing BPS would be determined to have a less than cumulatively significant impact. Otherwise, demonstration of a 29 percent reduction in GHG emissions from business-as-usual is required to determine that a project would have a less than cumulatively significant impact. The guidance does not limit a lead agency's authority in establishing its own process and guidance for determining significance of project related impacts on global climate change.

For purposes of this analysis, if a comparison of project emissions to baseline emissions results in no net increase in emissions, then the project would have no CEQA impact in terms of greenhouse gas emissions and BPS or percentage reductions would not be required.

The Applicant retained a third-party consultant (Compass Land Group) to conduct a site-specific greenhouse gas emissions study (2019) consistent with the SJVAPCD Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA. The Greenhouse Gas Analysis evaluated the potential greenhouse gas emissions from existing mining operations at the project site (i.e., baseline) and from the proposed Project. These emissions were compared to determine the net changes in emissions anticipated from the Project. Net emission changes from the Project were then compared against significance criteria guidance issued by the SJVAPCD. The CEQA baseline used for purposes of the study were determined by averaging the annual aggregate production totals between 2003 and 2014, which resulted in an average annual production of approximately 1.5 million tons per year.

To establish the baseline emissions levels for Project evaluation, Compass first estimated greenhouse gas emissions from existing mining, conveyor, and off-site transportation activities. To evaluate these sources, Compass primarily relied upon the California Emissions Estimator Model ("CalEEMod") for mining-related emissions and the California Air Resources Board's 2017 EMFAC1 model for off-site transportation (mobile source) emissions. For conveyor emissions estimates, Compass used emission factors developed by Pacific Gas & Electric Company and energy consumption data provided by Granite to manually calculate emissions.

For proposed Project activities, mining activities are assumed to continue for the life of the Project at current production levels since the Project proposes no change to any fundamental element of the existing operation. Compass modeled mining-related emissions assuming mining operations in the expansion area begin in the year 2020, which is a conservative assumption given that mining in the expansion areas will occur after reserves are exhausted in the existing mining pits. Future emissions are expected to improve as newer mobile equipment replaces older mobile equipment over time.

For land use projects that result in GHG emissions increases, the SJVAPCD guidance recommends that Lead Agencies require appropriate GHG emission reduction measures sufficient to reduce GHG emissions by 29%, when compared to business as usual. Project emissions are similar to baseline emissions given the continuation of mining at the same intensity as under existing conditions. The modeling results demonstrate a small reduction in Project emissions due to the improvement of equipment fleet emission factors over time. Based on the analysis, the Project would have a less than significant impact related to greenhouse gas emissions.

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

A. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; or

B. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; or

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

FINDING: LESS THAN SIGNIFICANT IMPACT:

The proposed Project site is directly north of the Coalinga Middle School, Miles W. Culwell Community Day School (commonly known as the Cambridge Continuation School), Bishop School, Sunset School, Nell Dawson Elementary School, Coalinga High School, and West Hills College. Additionally, the proposed Project is adjacent to the Applicant's existing mining operation to the north. As mining operations conclude at the existing site, new excavation would begin at the project sited.

The proposed Project would not change the current production levels, hours of operation, materials to be mined, equipment types, or mining methods. Because the proposed Project would not increase the routine transport, use, or disposal of hazardous materials from existing conditions, the proposed Project would not result in any increase in the associated potential to create a significant hazard to the public or the environment. Public health and safety precautions are currently in place at the Project site in accordance with local, State and federal standards, and would continue to be with implementation of the proposed Project through updated Hazardous Materials Business Plan submittals to Fresno County In addition, Mine Safety and Health Administration (MSHA) and California Occupational Health and Safety (Cal-OSHA) rules, regulations and standards are presently employed to protect both the public and on-site employees, and would continue to be employed under the proposed Project. Although the proposed Project site is within one-quarter mile of an existing school at its southern extent, because the Project would not involve any increase in hazardous materials handling at the Project site and would comply with all applicable regulations regarding hazardous materials, there will be a less than significant impact from hazards and hazardous materials.

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

FINDING: NO IMPACT:

The Project site is not included on the list of hazardous materials sites complied pursuant to Government Code Section 65962.5. Therefore, no impact would result from implementation of the proposed Project.

E. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area; or

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project site is adjacent to, but not within the Coalinga Municipal Airport Influence Area. The Coalinga Municipal Airport is approximately three miles east of the site. Therefore, the proposed Project would not result in a safety hazard for people residing or working in the Project area and is not expected to have a significant impact on people working in the project area.

F. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

FINDING: NO IMPACT:

The Project would not modify the access roadways or the existing street system. Therefore, interference with any adopted emergency response plan or emergency evacuation plan would not occur, and no impact would occur. The Fresno County Sheriff's Department and the Fresno County Fire Protection District review the project and did not identify any significant concerns. The project will not impact an adopted emergency response plan or emergency evacuation plan.

G. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project site is un-farmed agricultural land and a portion has been used for oil exploration and surface mining. Areas of the project site not disturbed by existing mining activities are made up of primarily ruderal vegetation. The site is within the Local Responsibility Area with a Hazard Class of Non-wildland/Non-urban. A State Responsibility Area with a Hazard Class of Moderate begins one mile to the west of the project site.

Considering the proposed Project consists of surface mining operations, it would not increase the potential for people or structures to be exposed to risks involving wildland fires from existing conditions, and a less than significant impact would occur.

X. HYDROLOGY AND WATER QUALITY

Would the project:

A. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Mining will not occur within the 100-year floodplain of Los Gatos Creek, and setbacks have been incorporated in the engineering design to help ensure that mining will remain outside of the floodplain in the event of future physical changes. Mining activities will also not intercept or impact the groundwater table. While the Project does not propose mining in surface waters or groundwater, the site would be exposed to rainfall events.

The existing shop and Coalinga Facility are covered under a Spill Prevention, Control, and Countermeasure Plan ("SPCC Plan") and Hazardous Materials Business Plan prepared and implemented pursuant to 40 CFR Part 112 and 19 CCR Section 2729, respectively. The Project will comply with the National Pollutant Discharge Elimination System General Permit ("NPDES General Permit") requirements, which involve preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP), including Best Management Practices (BMPs) to control erosion, sedimentation, and pollution.

Surface runoff is not expected as the Project involves mining below grade with perimeter control berms surrounding most of the excavation area. During initial surface disturbance activities, direct precipitation and drainage will be controlled through a combination of berms, silt fences, fiber rolls, revegetation and other erosion control measures, as needed, to ensure that land and water resources are protected from erosion, gullying, sedimentation, and potential contamination. Slopes will be vegetated with specified seed mixes once final reclamation grades are achieved. Upon completion of mining operations, the site will be graded to minimize erosion, revegetated, and left in an open space condition. Direct precipitation may temporarily collect in the pit-bottom before it evaporates, infiltrates, or is used on-site. The floor of each pit will slope to the south to allow positive drainage and to confine the runoff to desired locations in a controlled manner.

Due to the Project design elements and site-specific conditions, it is not anticipated that the Project would violate any water quality standards or waste discharge requirements or otherwise degrade water quality, or conflict with or obstruct the implementation of a Water Quality Control Plan or Sustainable Groundwater Management Plan. The Project's Reclamation Plan is consistent with the Central Valley Regional Water Quality Control Board's Water Quality Control Plan guidance for mining operations.

A mitigation measure related to timing of work for installation of the elevated conveyor crossing and associate infrastructure is recommended to minimize potential water quality impacts to surface waters. Impacts related to water quality standards and surface and groundwater quality would be less than significant with implementation of the following Mitigation Measure.

***** ***<u>Mitigation Measure(s)</u>***

See Mitigation Measure 10, Section IV. C.

B. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Groundwater depths at the project site are greater than 300 feet below ground surface (groundwater varies from just over elevation 300 to just over elevation 400 feet) and will not be impacted by mining activities. In addition, the proposed Project would not increase the percentage of impervious surfaces on the site and direct precipitation within the mining pits is retained on-site. Accordingly, the proposed Project would not deplete groundwater supplies or interfere substantially with groundwater recharge, and a less than significant impact is anticipated.

C. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

1. Result in substantial erosion or siltation on or off site?

2. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?

3. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or

4. Impede or redirect flood flows?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Mining will not occur within the 100-year floodplain of Los Gatos Creek, and setbacks have been incorporated in the engineering design to help ensure that mining will remain outside of the floodplain in case of future physical changes. The Project primarily involves a geographic expansion of the mining area and will not add impervious surfaces of any significance. Surface runoff is not expected as the Project involves mining below grade with perimeter control berms surrounding most of the excavation area. As a result, the mining pits will result in on-site retention of storm water and will not create adverse flood or sediment transport impacts or increase storm water runoff on adjacent properties or Los Gatos Creek.

During initial surface disturbance activities, direct precipitation and drainage will be controlled through a combination of berms, silt fences, fiber rolls, revegetation and other erosion control measures, as needed, to ensure that land and water resources are protected from erosion, gullying, sedimentation, and potential contamination. Slopes will be vegetated with specified seed mixes once final reclamation grades are achieved.

Upon completion of mining operations, the site will be graded to minimize erosion, revegetated, and left in an open space condition. Direct precipitation may temporarily collect in the pit-bottom before it evaporates, infiltrates, or is used on-site. The floor of each pit will slope to the south to allow positive drainage and to confine the runoff to desired locations in a controlled manner. Because the proposed Project would not substantially alter the existing drainage pattern of the site or area, create or contribute runoff that would exceed the capacity of existing stormwater drainage systems, or increase sources of polluted runoff, the proposed Project would have a less-than-significant impact related to erosion or siltation on or off-site

D. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or

FINDING: LESS THAN SIGNIFICANT IMPACT:

FEMA has developed Flood Insurance Rate Maps (FIRMs) (Map Numbers 06019C3211H and 06019C3213H dated February 18, 2009) for Los Gatos Creek along the Project site. The 100-year floodplain has been delineated on the FIRMs, but a regulatory floodway has not been delineated. The regulatory floodway is the area within the floodplain that must be reserved to convey the 100-year flow without cumulatively increasing the 100-year water surface elevations by more than one (1) foot. The 100-year floodplain is the area subject to inundation by the 100-year flow conveyed along the creek.

The Fresno County Ordinance Code, City of Coalinga Municipal Code, and Title 44 of the Code of Federal Regulations outline requirements for projects within a floodway or floodplain. The regulations prohibit floodway encroachments. Since a regulatory floodway has not been defined for Los Gatos Creek, the floodway regulations do not apply. Floodplain regulations prohibit encroachments that “increase the water surface elevation of the base flood elevation (i.e., 100-year water surface elevation) more than one foot at any point…” (Fresno County Code Section 14.48.080.F.1).

The proposed mining pits are being setback from the existing floodplain to avoid encroaching in the floodplain. The setbacks will prevent the Project from being subject to floodplain regulations. The setbacks are also being used to prevent hydraulic and sediment transport impacts from the Project. The Creek is a natural channel so it can be subject to erosion or deposition during flow events (i.e., a creek can experience physical changes due to sediment transported by its flows). The setbacks are incorporated in the engineering design to help ensure that the new pit areas will remain outside the floodplain in case of future physical changes. The setback distances were established along the new pit areas at 50-feet minimum based on the Los Gatos Creek hydraulic results from the site-specific HEC-RAS analysis. Where the hydraulic analysis reveals a greater potential for physical changes, the setback has been increased.

While the mining areas will be setback from and avoid the existing floodplain, the Project will involve a creek crossing to facilitate the transport of materials from the mining area west of Los Gatos Creek to the existing processing plant. The crossing will

consist of an elevated conveyor supported by two 4-foot diameter columns. Other than the elevated conveyor, the Project proposes to avoid encroaching into the floodplain.

The Applicant retained a third-party hydrology consultant (Chang Consultants) to conduct a proposed condition hydraulic analysis to assess the impacts from a potential conveyor crossing of Los Gatos Creek. The conveyor will be elevated above the 100-year water surface elevation, so it will not impact the floodplain; however, the 4-foot diameter conveyor support columns would be constructed within the floodplain. Comparing the existing and proposed condition results indicates that the impacts from the conveyor support columns will be minimal (water surface elevation increases at the two affected cross-sections of 0.05 feet and 0.13 feet, respectively). There are no impacts at any of the other cross-sections. Therefore, the results show that a potential crossing will meet the Fresno County floodplain regulation that restricts a rise to no more than a foot. In addition, the small rise is completely within the Project site, and has no off-site impacts. As a result, the proposed Project would not result in an increased risk of pollutant release due to project inundation from flooding and a less than significant impact would occur.

Tsunamis are defined as sea waves created by undersea fault movement. A tsunami poses little danger away from shorelines. When tsunamis reach the shoreline, high swells of water break and wash inland with great force. The Project site is located approximately 75 miles inland and would not be expected to be substantially affected by flooding risks from tsunamis. A seiche is a long-wavelength, large-scale wave action set up in a closed body of water such as a lake or reservoir, with destructive capacity that is not as great as that of a tsunami. The Project site is not located near a closed body of water large enough for a seiche to occur. Therefore, the Project site is not expected to be impacted by seiches. Therefore, the proposed Project would not be threatened by a seiche, tsunami

E. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

See discussion in Section X. A. above.

***** ***<u>Mitigation Measure(s)</u>***

See Mitigation Measure 10, Section IV. C.

XI. LAND USE AND PLANNING

Would the project:

A. Physically divide an established community?

FINDING: NO IMPACT:

The Project site is a large, contiguous grouping of parcels bordered to the north by the Applicant's existing Coalinga mining and processing facility, to the east by State Route 198/33, to the west by Monterey Avenue, and to the south by the City of Coalinga's recreational park and Cambridge Avenue farther south. There are no public roadways traversing the project site, nor would the proposed Project block any designated roads or pathways. The Project would not divide any established communities and no impact would occur.

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

FINDING: NO IMPACT:

The proposed Project does not require a General Plan amendment or change of zoning for the Project site. The Project site has a County zoning designation of Exclusive Agriculture (AE). The AE zoning designation does not specifically address the allowance (or disallowance) of mining; however, the County's General Plan and development policies (e.g., Policy LU-A.4) specifically allow mining within agricultural districts, subject to the approval of a conditional use permit and the mining restrictions as set forth in Section 858, "Regulations for Surface Mining and Reclamation in All Districts." A portion of the Project area includes existing permitted mining pits, and the entire Project area is designated by the City of Coalinga for resource extraction (mining).

The proposed Project would be consistent with the zoning of the Project site applied by both the County of Fresno and City of Coalinga, as well as the existing and currently permitted mining uses that occur on a part of the site. The Reclamation Plan would ensure that the mined lands are suitable for the proposed end use, which is open space. Therefore, the proposed Project would not conflict with any applicable land use plans, policies, or regulations of an agency with jurisdiction over the Project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating environmental effects, and no impacts would occur.

XII. MINERAL RESOURCES

Would the project:

A. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or

B. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local General Plan, Specific Plan, or other land use plan?

FINDING: NO IMPACT:

Implementation of the Project would not result in the loss of availability of a known mineral resource. Rather, the Project proposes to develop a known sand and gravel mineral resource. The proposed Project will increase the aggregate supply in the local market area, resulting in a beneficial impact. Therefore, no impact to mineral resources would occur because of the proposed Project.

XIII. NOISE

Would the project result in:

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

The current land uses surrounding the Project area include the existing Coalinga Facility to the north, Route 198/33 to the east and mostly vacant land with a facility associated with oil production to the west. Land immediately adjacent to the south of the Project area is either vacant or part of the City of Coalinga recreational facility. Southeast of the Project area are the Elks Lodge, Cambridge Inn Motor Lodge, and Key Energy Services. The nearest residences and schools are across Cambridge Avenue to the south and across Route 198/33 to the east, both greater than 1,000 feet from the Project area.

City of Coalinga Noise Element of the General Plan
The Noise Element of the City of Coalinga General Plan 2025, Ref. (a), utilizes the Day-Night Level (DNL) descriptor to define acceptable noise exposures for various land uses. The DNL is a 24-hour time-weighted average descriptor commonly used to describe community noise environments. The Noise Element does not specifically address noise exposure impacts from industrial or commercial uses impacting noise sensitive uses. However, in Table 5-6 of the Noise Element, the Normally Acceptable noise exposure limits for residential, transient lodging and school land uses is 55 dB DNL. For commercial uses, such as the nearby Elks Lodge, the Noise Element indicates a Normally Acceptable limit of 60 dB DNL.

City of Coalinga Municipal Code
The City of Coalinga Municipal Code does not have standards that limit the noise levels at noise sensitive land uses from noise generated by an industrial facility or commercial facility, including mining operations.

Fresno County Noise Element of the General Plan
The Noise Element of the Fresno County General Plan 2000, Ref. (b), adopted in December of 1975, establishes maximum acceptable noise levels for various land use categories. The Noise Element uses both the DNL and L50 and specifies exterior noise limits for urban residential and noise sensitive receivers (including transient lodging) of 60 dB DNL, 55 dBA L50 daytime and 50 dBA L50 nighttime. Note that the urban residential noise standards are used in this study, as the residential areas near the Project site are mostly tract homes and closely spaced, characterizing a more urban/suburban environment rather than a rural environment.

Fresno County Noise Ordinance

The Fresno County Noise Element of the General Plan includes the noise standards outlined in the Fresno County Noise Ordinance. The Noise Ordinance standards are designed to be consistent with the noise standards of the General Plan's L50 guidelines. For urban residential areas with the baseline noise level of 55 dBA L50, Table 10-10a of the Noise Ordinance limits the short-term (dBA) noise levels to various levels depending upon the time of day and the duration of the noise, as shown below:

TABLE 4
FRESNO COUNTY NOISE ORDINANCE STANDARDS

	Noise Level Limit, dBA	
Duration of Noise Event	Daytime (7:00 AM – 10:00 PM)	Nighttime (10:00 PM – 7:00 AM)
30 min/hr (L50)	55	50
15 min/hr (L25)	60	55
5 min/hr (L8)	65	60
1 min/hr (L2)	70	65
Maximum (Lmax)	75	70

During the course of application development, Granite retained a third-party noise consultant (Edward L. Pack Associates) to analyze and evaluate the Project's potential noise effects on the closest receptors to the Project site, which include residences to the east and south of the Project area as well as an Elks Lodge and schools to the south.

For the purposes of evaluation, the measured noise levels and noise exposures were compared to the City of Coalinga Noise Element of the General Plan, the County of Fresno Noise Element of the General Plan, and the County of Fresno Noise Ordinance.

The results of the noise study reveal that the stripping of the surface overburden materials will generate the highest noise levels as the noise generating equipment will be working at the surface. The noise analysis shows that, absent noise mitigation, the Project has the potential to result in exceedances of the applicable City/County noise standards. These exceedances would occur once stripping operations are within 2,200 ft. of a residential or school receptor location or within 2,300 ft. of the Elks Lodge property line.

To reduce Project noise levels and noise exposures for compliance with the standards of the City of Coalinga Noise Element, the Fresno County Noise Element and Fresno County Noise Ordinance, mitigation measures, which address noise control berms on the perimeter of the property have been incorporated into the Project design. The construction of the noise control berms will reduce the Project noise levels below the applicable noise standards of the City of Coalinga and County of Fresno. See Tables 5 and 6, below, for the Project's expected short-term noise levels and noise exposures.

Timing and construction of berms are based on distance from identified receptors. Given these distances, it is anticipated berm construction will occur within the first couple of years of mining in each respective phase. With the installation of the noise control berms,

the Project-generated noise levels and noise exposures will comply with the standards of the City of Coalinga Noise Element and the Fresno County Noise Element and Noise Ordinance. No further noise mitigation measures are required.

TABLE 5
MITIGATED SHORT-TERM NOISE LEVEL ANALYSIS

		Lmax	L2	L8	L25	L50
Limits =	Fresno	75	70	65	60	55
	Coalinga					55
	Dist.					
Reference Data	275	91	80	79	76	75
Residences to East	1,200	70	59	58	55	54
Excess		-5	-11	-7	-5	-1
Elks Lodge	1,100	N/A	N/A	N/A	N/A	55
Excess						0
Residences to South	1,400	68	56	56	53	52
Excess		-7	-14	-9	-7	-3

Source: Noise Assessment Study Granite Construction Company Coalinga Mine Expansion Project, Edward L. Pack Associates Inc., July 2015

TABLE 6
MITIGATED PROJECT-GENERATED NOISE EXPOSURES, dB DNL

Location	Distance	DNL	Noise Evaluation	
			Coalinga Limit (55-60 dB DNL)	Fresno Co. Limit (60 dB DNL)
Residence to East, North of El Rancho	1,400 ft.	51	-4	-9
Residence to East, South of El Rancho	1,200 ft.	52	-3	-8
Elks Lodge	800 ft.	58	-2	-2
Schools	1,500 ft.	51	-4	-9
Residences South of Cambridge Ave.	1,400 ft.	51	-4	-9

Source: Noise Assessment Study Granite Construction Company Coalinga Mine Expansion Project, Edward L. Pack Associates Inc., July 2015

* ***<u>Mitigation Measure(s)</u>***

14. Prior to mining within 2,300 ft. of the Elks Lodge property line, 6 ft. high earthen berms shall be constructed along the Project mine boundary in the eastern pit. (See July 23, 2015 Noise Assessment Study Prepared by Edward L. Pack and Associates, Inc., Figure 4, for the approximate locations of the noise control berms).

15. Prior to mining within 2,200 ft. of the school/residential property lines on the south side of Cambridge Avenue, 6 ft. high earthen berms shall be constructed along the expansion boundary to the south parallel with Cambridge Avenue. The berms will extend from the west boundary and turn along the flood plain/mining boundary to the west of Los Gatos Creek to terminate at a distance of 2,200 ft. from the school/residential property lines on the south side of Cambridge Avenue(See July 23, 2015 Noise Assessment Study Prepared by Edward L. Pack and Associates, Inc., Figure 4, for the approximate locations of the noise control berms) .

B. Generation of excessive ground-borne vibration or ground-borne noise levels?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Pile driving or blasting activities are not included in the operations plan for the proposed Project. Additionally, most surface mining activities will occur below below-grade once mining commences. The nearest sensitive receiver would be located over 1,000 feet from any construction activities. For these reasons, the proposed Project would not generate significant levels of groundborne vibration or groundborne noise at any nearby receivers, and a less than significant impact would occur.

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?

FINDING: NO IMPACT:

The proposed Project is not within two miles of a public airport and is not within an airport land use plan or the vicinity of a private airstrip. Therefore, the proposed Project would not expose people residing or working in the Project area to excessive noise, and no impact would occur.

XIV. POPULATION AND HOUSING

Would the project:

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

B. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

FINDING: NO IMPACT:

The proposed Project involves a geographic expansion to the area of mining and reclamation associated with a site that has experienced mining activities for decades. The proposed Project would not include the direct creation of new housing nor displace any existing housing or people. The number of employees working at the site would be expected to generally remain the same. Because the proposed Project would not result in population growth in the area, does not involve the creation of, or necessity for, new housing, and would not displace existing housing or people, no impact related to population and housing would occur.

XV. PUBLIC SERVICES

Would the project:

A. Result in substantial adverse physical impacts associated with the provision of new or physically-altered governmental facilities, or the need for new or physically-altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

1. Fire protection;

2. Police protection;

3. Schools;

4. Parks; or

5. Other public facilities?

FINDING: NO IMPACT:

The proposed Project would not modify the current production levels, hours of operation, materials to be mined, equipment types, or mining methods. The number of on-site employees would be expected to generally remain the same. As such, the demand for fire and police protection services at the Project site would remain the same upon implementation of the proposed Project. The Coalinga Facility maintains fire extinguishers and an on-site water truck supplied by on-site wells that can be easily mobilized for use in fire suppression.

The proposed Project does not involve the creation of new housing and would not result in population growth in the area. Existing electricity infrastructure and electricity supply at the site is enough to meet the demand for the Project activities. Therefore, existing

services would be adequate to serve the proposed Project, and no impact related to fire, police protection, schools, parks, other public facilities would occur.

XVI. RECREATION

Would the project:

A. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or

B. Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

FINDING: NO IMPACT:

The Project does not involve the creation of new housing and would not result in population growth in the area. Similarly, new recreational facilities are not proposed as part of the Project and the demand for such facilities would not increase with implementation of the Project. Therefore, because the Project would not result in any increase in the use of, or demand for, parks or recreation facilities, no impact related to recreation would occur.

XVII. TRANSPORTATION

Would the project:

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

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

The Project's primary purpose is a change (expansion) to the geographic area allowed for mining and reclamation at the Project site. The proposed Project would not change the current production levels, hours of operation, materials to be mined, equipment types, or mining methods. Sand and gravel mined within the Project area will be transported via conveyor and/or internal haul roads to the existing processing plants where it will be processed and/or sold for use in construction materials. All existing operations and mining would continue as currently approved and permitted and an increase in mining production is not proposed. Primary access to the Project area will occur via internal access roads from the existing Coalinga Facility, which itself is accessed via an existing encroachment off of the State Route 198/33 transit corridor. Modifications to the existing roadway network would not occur as a result of the Project.

During the course of application development, The Applicant retained a third-party traffic consultant (VRPA Technologies), who coordinated closely with the County Public Works Department to prepare a Traffic Impact Study (TIS). The TIS included a roadway segment capacity analysis, intersection capacity analysis, and traffic index analysis.

The roadway segment analysis analyzed roadway segment volumes and levels of service with Project traffic. The analysis showed that the roadway segments used by Project traffic will meet acceptable levels of service and no mitigation is required.

The intersection capacity analysis analyzed the number of trips generated by the Project at selected Caltrans' intersections: I-5 NB Off Ramp and Jayne Avenue, SR-33 and Jayne Avenue, SR-33 and Juniper Ridge Boulevard, SR-33 and 5th Street, and SR-33 and 3rd Street. Caltrans identified that these intersections require improvements in order to accommodate future traffic and specified fair-share cost for those improvements.

The Traffic Index (TI) analysis revealed that Project traffic on Phelps Avenue between SR-33 and Calaveras Avenue, Calaveras Avenue between Phelps Avenue and SR-33, and Jayne Avenue between SR-33 and I-5 result in a TI increase of 0.5, which requires a fair-share maintenance contribution per County standards.

Potential impacts associated with transportation would be less than significant with implementation of Mitigation Measures **16** through **18**.

* ***Mitigation Measure(s)***

16. *Within one year of project approval, the Applicant shall pay Caltrans the following fair-share cost:*

Fair-Share Cost to Caltrans Facilities

INTERSECTION	ESTIMATED COST	COST / TRIP	PROJECT TRUCK TRIPS	FAIR SHARE COST
I-5 NB Off Ramp at Jayne Avenue	**$1,200,00**	**$925**	**5**	**$4,625**
SR 33 at Jayne Avenue	**$173,000**	**$90**	**34**	**$3,060**
SR 33 at Juniper Ridge Boulevard	**$173,000**	**$90**	**17**	**$1,530**
SR 33 at 5th Street	**$470,000**	**$162**	**19**	**$3,078**
SR 33 at 3rd Street	**$470,000**	**$218**	**19**	**$4,142**

17. *Prior to any production mining in the project area, the Applicant shall be responsible for completing upgrades to the impacted segments on Phelps Avenue between SR-33 and Calaveras Avenue, Calaveras Avenue between Phelps Avenue and SR-33, and Jayne Avenue between SR-33 and I-5 to their required Traffic Index as detailed in the Traffic Impact Study completed by VRPA dated November of 2019. No less than one (1) year prior to production mining in the project area, the Applicant shall provide plans for review and approval by the County of Fresno Department of Public Works and Planning. Upon receipt of approval of the plans, the Applicant shall immediately obtain all necessary permits and construct the necessary upgrades. The Applicant is responsible for all permits and fees including staff time.*

18. *Within five years of the projected time of initiating mining in the project area, the Applicant shall provide annual written updates to the County regarding the projected timeline of initiation mining in the project area. The annual written updates are due by January 31st of every year.*

B. Be in conflict or be inconsistent with the California Environmental Quality Act (CEQA) Guidelines Section 15064.3, subdivision (b)?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The Project will not result in an increase in vehicle miles traveled. The Project estimates no increase in the number of employees as compared to existing baseline conditions. Except for occasional service and delivery vehicles (e.g., electrical, maintenance, industrial deliveries), the Project does not anticipate customers and/or visitors within the Project area. Most customers and visitors will continue to access defined areas of the

Coalinga Facility, consistent with existing practices. Thus, no increase in employee or vendor trips will result from the Project.

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

D. Result in inadequate emergency access?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Primary access to the Project area will occur via internal access roads from the existing Coalinga Facility (which itself is accessed via an existing encroachment from State Route 198/33). Therefore, the proposed Project would not increase hazards due to a design feature, such as a sharp curve or dangerous intersection, incompatible uses, such as farming equipment, or inadequate emergency access. Thus, the proposed Project would have a less than impact related to emergency access and hazardous design features.

XVIII. TRIBAL CULTURAL RESOURCES

Would the project:

A. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or

2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? (In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.)

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

During application development, Granite retained a third-party cultural resources consultant (Tom Origer & Associates) to assess the likelihood of the proposed Project to impact cultural resources at the site. Origer's assessment included contact with the Native American Heritage Commission and local tribal organizations. Origer concluded that the possibility of finding surface evidence of cultural resources within the study area is very low. However, Origer determined that a moderate potential exists for finding buried archaeological resources within the study area.

No historic properties (i.e., tribal cultural resources eligible for inclusion on the CRHR) were identified within the area of disturbance in the Project Site; thus, it is unlikely that development of the Proposed Project will have an effect on significant or important archaeological or other tribal cultural resources. Therefore, no further tribal cultural resource investigation is recommended at this time. In the unlikely event that unanticipated buried tribal cultural resources are encountered during Project-related activities, work in the immediate vicinity of the discovery must cease until the finds can be evaluated by a qualified professional.

Potential impacts associated with the tribal cultural resources that may be encountered during Project activities would be less than significant with implementation of Mitigation Measures 1, 2, and 3.

FINDING LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

* ***Mitigation Measure(s)***

19. *If tribal cultural materials (i.e., flaked stone artifacts, ground stone, historical glass, bone, etc.) or features (e.g., hearths, structural foundations, privies, etc.) are discovered during Project related activities, all work will stop in the area of the find and a professional archeologist shall assess and make any necessary recommendations, including any procedures to further investigate or mitigate impacts to the find as required by law. If the cultural resource is associated with the past lifeways of California Native Americans, evaluation, recommendations for further investigation, and/or mitigation shall be determined in consultation with the most likely descendent.*

20. *If unanticipated human remains are discovered:*

    a. *Work will immediately stop at the discovery location and any nearby area reasonably suspected to overlie adjacent human remains. The Fresno County Coroner shall immediately be contacted to determine if the cause of death must be investigated. If the coroner has reason to believe that the remains are of Native American origin, he or she will contact the NAHC by telephone within 24 hours (PRC § 7050.5).*

    b. *The NAHC and landowner will follow prescribed steps in PRC Section 5097.98, which include but are not limited to the following: The NAHC will notify those persons it believes to be the most likely descended from the deceased Native American. The most likely descendant may recommend to the landowner the means of treating and disposing of, with appropriate dignity, the human remains and any associated grave goods. The landowner shall ensure the immediate vicinity of the Native American human remains is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations. The Applicant shall work with the NAHC to develop and execute an agreement between*

themselves and the most likely descendant(s) of Native Americans who may be buried in the vicinity by which the human remains and associated burial items will be treated or disposed, with appropriate dignity.

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:

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

FINDING: LESS THAN SIGNIFICANT IMPACT:

All utilities and service systems are within the Fresno County jurisdiction. The sewage systems at the adjacent Coalinga surface mine will be utilized and should be supplemented with serviced portable toilets within the project area. No new or additional wastewater above existing generation levels are anticipated from the proposed Project.

Water usage associated with mining and reclamation activities in the project area will be limited to that needed for dust control and will be supplied by on-site wells, located adjacent to the freshwater pond west of the asphalt plant at the adjacent mining facility. Estimated daily water use is 100,000 gallons/day; this amount will vary depending on the weather.

Because no increase in water demand is associated with the proposed Project, the Project would not require or result in the construction of new or expansion of existing water facilities. Therefore, no impact would occur because of implementation of the Project and the construction of new storm water drainage facilities or expansion of existing facilities would not be required as a result of the proposed Project, resulting in a less than significant impact.

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

FINDING: LESS THAN SIGNIFICANT IMPACT:

Water usage associated with mining and reclamation activities in the project area will be limited to that needed for dust control and will be supplied by on-site wells, located adjacent to the freshwater pond west of the asphalt plant at the adjacent surface mining operation. Estimated daily water use is 100,000 gallons/day; this amount will vary depending on the weather. No change is expected from baseline conditions.

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

FINDING: NO IMPACT:

The sewage systems at the existing Coalinga Facility will be used and may be supplemented with serviced portable toilets within the Project area. The existing sewage systems consist of a city sewer connection at the office building, as well as septic systems at the processing facility, and portable toilets in other locations of the Facility. No new or added wastewater above existing generation levels are expected from the proposed Project. Therefore, the proposed Project would have no impact on wastewater treatment capacity or wastewater treatment requirements.

D. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or

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

FINDING: LESS THAN SIGNIFICANT IMPACT:

No change to existing solid waste generation quantities or collection procedures is anticipated. The Project would be served by permitted Class I, II and/or III solid waste landfills that have sufficient capacity to meet the Project's needs, and activities at the site would comply with Federal, State, and local solid waste statutes and regulations. Therefore, implementation of the proposed Project would not result in significant changes to solid waste generation or disposal from existing conditions, and a less than significant impact related to solid waste services would result.

XX. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

A. Substantially impair an adopted emergency response plan or emergency evacuation plan, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

FINDING: NO IMPACT:

The proposed Project would not modify the access roadways or the existing street system. Therefore, interference with any adopted emergency response plan or emergency evacuation plan would not occur, and no impact would occur.

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

FINDING: NO IMPACT:

The Project site is disturbed with widespread evidence of historical industrial activity and off-road vehicle use. Vegetation cover ranges from very sparse to almost nonexistent. The proposed mining pits will be setback from the existing floodplain to avoid encroaching in the floodplain. The mining surface will be below grade and surface drainage is designed to be contained internal to the mining area. The proposed Project would not expose project occupants, people, or structures to fire-related pollutants or flooding. Therefore, no impact would occur.

C. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

The Project site is disturbed with widespread evidence of historical industrial activity and off-road vehicle use. Vegetation cover ranges from very sparse to almost nonexistent. Project access roads will be dirt or gravel roads, there are no structures proposed (buildings), and the electric conveyor will be maintained according to Mine Safety and Health Administration (MSHA) and California Occupational Health and Safety (Cal-OSHA) rules, regulations, and standards. The Coalinga Facility has fire extinguishers and an on-site water truck supplied by on-site wells that can be easily mobilized for use in fire suppression. Therefore, a less than significant impact would occur related to wildfire risk resulting from installation and maintenance of Project infrastructure.

D. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

FINDING: NO IMPACT:

The project site is un-farmed agricultural land and a portion has been used for oil exploration and surface mined. Areas of the project site not disturbed by existing mining activities are made up of primarily ruderal vegetation. The site is within the Local Responsibility Area with a Hazard Class of Non-wildland/Non-urban. A State Responsibility Area with a Hazard Class of Moderate begins one mile to the west of the project site. Considering that the proposed Project consists of surface mining operations, it should not increase the potential for people or structures to be exposed to risks involving wildland fires from existing conditions resulting in no impact.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:

A. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or

animal or eliminate important examples of the major periods of California history or prehistory?

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

The Applicant does not anticipate beginning extraction in the project area until their reserves at their adjacent mining operation to the north are depleted, and Project should not modify the current productions levels, materials to be mined, or mining methods. The overall production and processing activities would be consistent with existing conditions.

The Project site is disturbed with widespread evidence of historical industrial activity and off-road vehicle use. Vegetation cover ranges from very sparse to almost nonexistent. Aside from Los Gatos Creek, no evidence of wetlands or other aquatic features exist within the Project site. Further, no special-status species were observed during the reconnaissance level surveys of the Project site.

Mitigation Measures have been incorporated that would reduce potential biological resources impacts to less-than-significant levels. Similarly, although no historic properties were identified within the Project's area of disturbance, Mitigation Measures have been included to ensure the site is adequately preserved if unanticipated buried archaeological deposits are encountered during project-related work. With Mitigation Measures incorporated, the proposed Project would have less-than-significant impacts to the quality of the environment.

B. Have impacts that are individually limited, but cumulatively considerable ("cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects); or

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

The proposed Project would not modify the existing production levels, hours of operation, materials to be mined, equipment types, number of employees, or mining methods. Further, the applicant does not anticipate beginning mineral extraction at the Project site until reserves are depleted at their existing surface mine to the north.

As such, the Project would not cause an increase in the cumulative impacts in the area. With implementation of the Mitigation Measures required in this IS/MND, Project-level impacts would not be cumulatively considerable and the Project's incremental contribution to cumulative impacts would be less-than-significant with Mitigation Measures incorporated.

C. Have environmental effects which will cause substantial adverse effects on human beings either directly or indirectly?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The proposed Project is for the expansion of an existing surface mining operation. Mining operations will be performed in a manner consistent with current practices at the Applicant's existing surface mining operation to the north of the project site. The Applicant does not anticipate beginning mineral extraction at the Project site until reserves are depleted at the existing Coalinga Facility. Given that the Project will not result in any aggregate production above the existing baseline, the Project would not be expected to result in any new environmental effects, such as significant increases in air pollutant or GHG emissions, risk related to geological hazards, exposure to hazards or hazardous materials, or exposure to excessive noise levels, that would cause adverse effects on human beings. Because adverse effects on human beings, either directly or indirectly, would not occur because of the implementation of the proposed Project, a less-than-significant impact would result.

CONCLUSION/SUMMARY

Based upon the Initial Study prepared for Unclassified Conditional Use Permit Application No. 3512, staff has concluded that the project will not have a significant effect on the environment. It has been determined that there would be no impacts to Mineral Resources, Population and Housing, Land Use and Planning, Public Services, Recreation, and Wildfire.

Potential impacts related to Aesthetics, Agriculture, Air Quality, Geology and Soils, Greenhouse Gas Emissions, Energy, Hazards and Hazardous Materials, Hydrology and Water Quality, and Utilities and Service Systems have been determined to be less than significant. Potential impacts relating to **Aesthetics**, Biological Resources, Cultural Resources, Noise, Transportation, and Tribal Cultural Resources have determined to be less than significant with compliance with recommended mitigation measures

A Mitigated Negative Declaration/Negative Declaration is recommended and is subject to approval by the decision-making body. IS Application No. 7029 and the draft MND may be viewed at www.co.fresno.ca.us/initialstudies . An electronic copy of the draft MND for the Proposed Project may be obtained from the County of Fresno using contact information provided in the posted Notice of Intent.

MM:CM:cwm
G:\4360Devs&Pln\PROJSEC\PROJDOCS\CUP\3500-3599\3512\SR\Exhibits\CUP 3512 Initial Study Writeup Rev 2020_07212020_Final_Corrected.docx

File original and one copy with:	Space Below For County Clerk Only.
Fresno County Clerk **2221 Kern Street** **Fresno, California 93721**	CLK-2046.00 E04-73 R00-00

Agency File No:	**LOCAL AGENCY PROPOSED MITIGATED NEGATIVE DECLARATION**	County Clerk File No:
IS 7029		**E-**

Responsible Agency (Name):	Address (Street and P.O. Box):	City:	Zip Code:
Fresno County	2220 Tulare St. Sixth Floor	Fresno	93721

Agency Contact Person (Name and Title):	Area Code:	Telephone Number:	Extension:
Chris Motta Principal Planner	559	600-4227	N/A

Project Applicant/Sponsor (Name):	Project Title: Granite Mine Expansion
Candice Longnecker for Granite Construction Company	

Project Description: Allow the expansion of an existing aggregate mining operation on a 299.11-acre parcel in the AE-20 (Exclusive Agriculture, 20-acre minimum parcel size) Zone District in the unincorporated area of County of Fresno and on a 202.54-acre parcel in the MBL (Light Manufacturing/Business) Zone District in the City of Coalinga.

Justification for Negative Declaration:

Based upon the Initial Study prepared for Unclassified Conditional Use Permit Application No. 3512, staff has concluded that the project will not have a significant effect on the environment. It has been determined that there would be no impacts to Mineral Resources, Population and Housing, Land Use and Planning, Public Services, Recreation, and Wildfire.

Potential impacts related to Agriculture, Air Quality, Geology and Soils, Greenhouse Gas Emissions, Energy, Hazards and Hazardous Materials, Hydrology and Water Quality, and Utilities and Service Systems have been determined to be less than significant. Potential impacts relating to Aesthetics, Biological Resources, Cultural Resources, Noise, Transportation, and Tribal Cultural Resources have determined to be less than significant with compliance with recommended mitigation measures.

A Mitigated Negative Declaration/Negative Declaration is recommended and is subject to approval by the decision-making body. IS Application No. 7029 and the draft MND may be viewed at www.co.fresno.ca.us/initialstudies . An electronic copy of the draft MND for the Proposed Project may be obtained from the County of Fresno using contact information provided in the posted Notice of Intent.

FINDING:

The proposed project will not have a significant impact on the environment.

Newspaper and Date of Publication:	Review Date Deadline:
Fresno Business Journal – July 6, 2020	Planning Commission – August 13

Date:	Type or Print Signature:	Submitted by (Signature):
	Will Kettler Development Services and Capital Projects Division Manager	Chris Motta Principal Planner

State 15083, 15085

County Clerk File No.:_____

LOCAL AGENCY
MITIGATED NEGATIVE DECLARATION

CM:cwm
G:\4360Devs&Pln\PROJSEC\PROJDOCS\CUP\3500-3599\3512\SR\Exhibits\CUP 3512 MND DRAFT.docx

16)

March 31, 1970 474

IN THE MATTER OF UNCLASSIFIED CONDITIONAL USE PERMIT NO. 915 Owl-Folsom Rock Company

APPROVED SUBJECT TO CERTAIN CONDITIONS

The hearing on Unclassified Conditional Use Permit No. 915 for extraction of sand and gravel came on regularly before this Board of Supervisors this 31st day of March, 1970, at the hour of 2:30 P. M.

Said property is particularly described as follows:

UNCLASSIFIED CONDITIONAL USE PERMIT APPLICATION NO. 915

Area 1: The S 412.5 ft. of the E½ of Sec. 20-20/15, according to the United States Government Township Plat approved by the Surveyor General of February 28, 1855

Area 2: Beg. at a pt. 785.95 ft. to the W of the NE cor of Sec. 29-20/15, From there alg a li N 19°46' E to a pt. 2430.0 ft. from the beg., th alg a li N 39°52' W 2,780 ft. then W, 950' turn N 150' turn E 3540' to beg. pt.

Area 3: That por. of Sec. 20-20/15 as established from the M.D.B.&M., in the Co. of Fresno, St. of Calif. as per Off. Maps recorded in the office of the Recorder of sd Co., Property desc. as follows: Beg. at a pt. on the Wly li of sd Sec. 20, dist. Nly 2565' from the SW cor. of sd Sec. 20; th Ely, para. to the S'ly li of sd Sec. 20: 810'; th Sly, para. to the Wly li of sd Sec. 20, 385'; th Ely para to the Sly li of sd Sec. 20, 1000'; th Sly, para. to the Wly li of sd Sec. 20, 670'; th Ely para. to the Sly li of sd Sec. 20, to the Ely li of the SW¼ of sd Sec. 20: th Sly alg. the Ely li of sd SW¼ to the Sly li of sd Sec. 20: th Wly alg sd Sly li to the SW cor of sd Sec. 20; th. Nly alg the Wly li of sd Sec. 20 to the pt. of beg.

Area 4: The Nly 2100' of the NE¼ of Sec. 30-20/15 as established from the M.D.B.&M.

Area 5: Beg. at a pt. 920.00' E. of the NW cor of Sec 29-20/15, th S. 1000.00'; th S. 49°E. 2700' to the N-S midsection li of sd Sec. 29, th N alg sd li 1280.00' to a pt; th N. 39°52'W 1780'; th N. 50°08'E. 440'; th N. 80' to a pt 150' S. of the N sec li of sd Sec. 29; th W. and para to the N. li of sd Sec. 29, 880'; th N. 150' to the pt. of beg.

(This property is located on the west side of Highway 33 at the north edge of the City of Coalinga)

and

It appearing to this Board, after due consideration and deliberation of the evidence adduced, that the application, as recommended in the Fresno County Planning Commission's Resolution No. 5109 should be approved;

NOW, THEREFORE, upon motion of Supervisor Cassidy, seconded by Supervisor Reich, and carried, IT IS ORDERED that Unclassified Conditional Use Permit No. 915 for extraction of sand and gravel be, and the same hereby is, approved, subject to the following conditions:

1. Development shall be in accordance with a site plan to be approved by the Department of Planning and subject to all conditions established by the Board of Supervisors and all applicable zoning regulations. The provisions of Section 874 (S.P.R.) shall prevail.

2. No extraction of material or overburden shall be permitted within twenty-five (25) feet of any property boundary nor within fifty (50) feet of a boundary contiguous with a public road right of way or recorded residential subdivision.

3. No stockpiled soil or material shall be placed closer than twenty-five (25) feet to a property boundary.

(Continued)

UCUP#915....Continued

4. No production from an open pit shall create a slope steeper than 2:1 within fifty feet (50') of a property boundary nor steeper than 1½:1 elsewhere on the property, except, (1) steeper slopes may be created in the conduct of extraction for limited periods of time prior to grading the slope to its rehabilitation configuration, and (2) slopes of 1:1 may be maintained five (5) feet below the lowest water table on the property, experienced in the preceding three (3) years.

5. The first one hundred (100') feet of access road (s) intersecting with a County maintained road shall be surfaced in a manner approved by the Board and shall not exceed a two percent (2%) grade and shall have a width of not less than twenty-four (24') feet.

6. Where an access road intersects a County Maintained road, it shall be improved with a driveway approach constructed to Fresno County Standards.

7. All interior roads within the site shall be maintained so as to control the creation of dust.

8. Traffic control and warning signs shall be installed as required by the Board at the intersection of all private roads with public roads. The Placement, size and working of these signs shall be approved by the Fresno County Department of Public Works, Traffic Division.

9. Security fencing four (4) feet in height consisting of not less than three (3) strands of barbed wire, or an approved equivalent, shall be placed along any property line abutting a public right of way and around any extraction area where slopes steeper than two (2) feet horizontal to one (1) foot vertical are maintained. This fencing shall be installed immediately prior to excavation of each affected area.

10. Trees of a variety approved by the Tree Board shall be planted at twenty (20) foot intervals along all property lines adjacent to a public road right of way. As an alternative, oleanders or shrubs of a similar size and density may be planted at ten (10) foot intervals. The plant species and planting timetable shall be designated in the permit application. All required plants shall be maintained in a good horicultural manner. This planting shall be installed immediately prior to excavation of each affected area.

11. Extraction operations adjacent to any flowing stream shall be separated from the stream by closed dikes. No extractions within the stream will be permitted.

12. All water utilized in the plant operation shall be disposed of behind a closed dike so that it will not cause impairment of water in any stream.

13. The operator shall comply with all existing and future laws, ordinances, regulations, orders and decrees of bodies or tribunals.

(Continued)

UCUP#915.....Continued

14. Except as provided for above, all provisions of the operational statement including the rehabilitation plan and standards submitted shall apply.

ADOPTED by the Fresno County Board of Supervisors this 31st day of March, 1970, by the following vote, to-wit:

AYES: Supervisors Cassidy, Reich, Krebs, Ventura, Craven
NOES: None
ABSENT: None

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vlm

17

File #8591
January 10, 1989

County of FRESNO

Agenda Item

Date: January 10, 1989

To: Board of Supervisors

From: Planning Commission

Subject: RESOLUTION NO. 10211 - UNCLASSIFIED CONDITIONAL USE PERMIT APPLICATION NO. 2320, ENVIRONMENTAL ASSESSMENT NO. 3378

APPLICANT: Granite Construction Co.

REQUEST: Allow expansion of an existing rock, sand, and gravel extraction and processing operation, including an asphalt plant and concrete plant, on a 472-acre parcel of land in the AE-20 (Exclusive Agricultural, 20-acre minimum parcel size) District.

LOCATION: South side of W. Gale Avenue between S. Kinos Avenue and State Highway 33, approximately three-quarters of a mile north of the City of Coalinga (38940 Highway 33). (SUP. DIST.: 1) [APN 070-040-33s and 43s; 070-060-22s (portion of)]

PLANNING COMMISSION ACTION:

At its hearing of November 17, 1988, the Commission considered the Staff Report and testimony (summarized on Exhibit "A"), approved the Negative Declaration based upon a determination that there was no substantial evidence to demonstrate that the project would have a significant effect on the environment, adopted the recommended findings of fact in the Staff Report, and approved Unclassified Conditional Use Permit Application No. 2320, subject to the following conditions:

1. Development and operation shall be in accordance with the site plan, cross sections, operational statement and rehabilitation plan approved by the Commission, except as modified by other conditions of this permit. The cross sections shown on the excavation and rehabilitation plans shall note that they represent all phases of development.

ADMINISTRATIVE OFFICE REVIEW Ernest P. Barbis Page 1 of 4

BOARD ACTION: DATE January 10, 1989 APPROVED AS RECOMMENDED _____ OTHER X

COUNTY OF FRESNO Clerk of the Board of Supervisors

DENIED APPEAL; ADOPTED FINDINGS AND APPROVED NEGATIVE DECLARATION AND UNCLASSIFIED CONDITIONAL USE PERMIT APPLICATION NO. 2320 WITH CONDITIONS AS RECOMMENDED BY PLANNING COMMISSION AND ADDITIONAL CONDITION REQUIRING THE AREA WHERE AN EXISTING 3/4 SLOPE EXISTS BE FENCED WITH MESH FENCING. (SEE ATTACHMENT "A" FOR CONDITIONS; SEE ATTACHMENT "B" FOR STANDARDS AND CONDITIONS OF ZONING ORDINANCE SECTION 858-C AND E)

UNANIMOUS X ANDREEN _____ CONRAD _____ KOLIGIAN _____ LEVY _____ VAGIM _____

17

2. A Site Plan Review Application shall be submitted for approval to the Director of the Public Works and Development Services Department in accordance with Section 874 of the Fresno County Zoning Ordinance within 90 days of the effective date of this approval.

   All conditions of approval of the Conditional Use Permit and Site Plan Review shall be met within six months from the date of approval of the Site Plan Review.

3. A detailed rehabilitation plan shall be submitted as part of the Site Plan Review Application. The plan shall show the proposed final slopes and contours of the site. Rehabilitation work in any phase shall proceed in such a manner that no excavated area is allowed to remain in an unrehabilitated state for more than three years. Rehabilitation of any phase shall be completed within one year of commencing operation in a subsequent phase.

4. The extraction operation shall consist of not less than 11 separate phases. Each phase shall be numbered and shown on the approved Site Plan.

5. A dust palliative shall be applied to all haul roads as frequently as necessary to control dust. Dust palliatives may include road oil, water, magnesium chloride, or other proven materials.

6. Operating hours shall be limited to the hours of 6:00 a.m. to 5:00 p.m. weekdays except that these hours may be extended to weekends and nights when required to meet the demands of clients and/or projects.

7. The use shall be operated in such a manner as to avoid creating a dust or noise nuisance.

8. The applicant shall allow Fresno County staff to monitor the proposed use to assure that all applicable Standards of the General Plan Noise Element and Noise Ordinance are being met. A recordable agreement between the applicant and the County allowing for said monitoring shall be executed within 90 days of approval of the Conditional Use Permit. Cost of said monitoring shall be at the expense of the applicant.

9. No slopes steeper than 1:1 within 50 feet of a property or elsewhere on the property shall be permitted. For those areas where excavation has already occurred, slopes of 3/4:1 may be allowed to remain provided a soil investigation by a qualified geologist or soil engineer determines to the satisfaction of the Director of Public Works and Development Services Department that a steeper slope will stand. Said reports shall be submitted within 90 days of approval. If certification for slopes of 3/4:1 for the existing excavated areas cannot be obtained, then the operation shall be required to submit for approval by the Director a slope stabilization plan prepared by a certified engineer showing how the slopes can be stabilized. The operation shall be required to stabilize the slopes as recommended by the Director.

10. No channel modifications shall be made on the south leg of Los Gatos Creek.

11. No man-made obstruction shall be permitted within the north leg of Los Gatos Creek and any existing man-made barriers within the project site shall be removed.

12. Any alteration or diversion of the north leg of Los Gatos Creek shall be approved by the Public Works and Development Services Department. Engineered plans shall be required at the time the modifications are proposed and shall be approved by the Director of the Public Works & Development Services Department.

13. Engineered plans to control off-site erosion shall be submitted and approved by the Public Works and Development Services Department before ground extraction is started in the most westerly phases.

14. The rock crushing plant, asphalt batch plant, and concrete batch plant shall cease operation upon completion of mineral extraction activities on the site, or upon expiration of this conditional use permit, which ever occurs first.

15. Security, as herein specified, shall be deposited during the Site Plan Review process. Said security shall be in the form of cash deposited by the operator with the County or in an approved irrevocable escrow or its equivalent and shall be in an amount determined by the Director equal to 100 percent of the total cost of completing the subject phase of rehabilitation. Said security may be partially released during the progress of rehabilitation as long as the same ratio of security is maintained on deposit for all incomplete work.

16. The conditions of this permit shall supersede the conditions of prior Conditional Use Permit Nos. 650 and 915 in any areas where the three permits overlap.

VOTING: Yes: Commissioners McCrummen, Furgurson, Comstock, Quist, Stephens, Radics

No: None

Absent: Commissioners Cruff, Lingo, Orosco

RICHARD D. WELTON, Director
Public Works & Development Services Department
Secretary-Fresno County Planning Commission

NOTES: 1. The Planning Commission action is final unless appealed to the Board of Supervisors within 15 days of the Commission's action.

2. The approval of this project will expire if there is a cessation in the occupancy or use of the land or structures authorized by this Conditional Use Permit for a period in excess of two years.

3. The proposed use is also subject to the certain mandatory conditions of Sections 858 C and E of the Zoning Ordinance as specified on Attachment "A".

4. All operations are subject to the requirements of the Fresno County Noise, Ordinance and the Fresno County Air Pollution Control District.

DC:mar
7496K

Terry Johnson Trucking, Inc.
31186 W Gale Ave
Coalinga, CA 93210

Ph: 559-935-0371
Fax: 559-935-5803

8270 E. Lacey Blvd.; Hanford, CA (559) 584-2622 * 5942 Old Stage Rd.; Fountain Springs, CA (559) 534-2491
1860 W Betteravia Rd, Santa Maria, CA (805)928-2202

July 14th, 2020

Chris Motta
Principal Planner
Fresno County, Department of Public Works and Planning
2220 Tulare Street, Sixth Floor
Fresno, CA 93721

RE: UCUP 3512 Coalinga Mine Expansion – Letter of Support

Dear Mr. Motta,

On behalf of Terry Johnson Trucking, Inc , please accept this letter of support to Granite Construction Company in their application for the Coalinga Mine Expansion.

Terry Johnson Trucking, Inc is a Construction Trucking Company in Coalinga , since 1978. Hauling rock, sand & gravel for various large projects around the west side of the valley, for over 40 years.

With the expansion of the mine, it would let us continue to supply all of our customers, with all of their construction materials need's in the future. If Terry Johnson Trucking, Inc had to go to Fresno to supply materials to the west side of the valley, it costs double, for both the customer & for the product.

Please consider this expansion on behalf of Terry Johnson Trucking, Inc & all of our employee's & if you have any questions, please reach out to me, as I am happy assist in any way that I can.

Sincerely,

Terry Johnson
Terry Johnson
President
Terry Johnson Trucking, Inc.

Table 1

Property Line Metes and Bounds

NO.	Delta or BRG.	Radius (ft)	Length (ft)	Remarks
01	N89°32'31"E	--------	585.65	*
02	N00°31'17"W	--------	5,269.47	*
03	N89°27'27"E	--------	5,274.10	*
04	S00°20'54"E	--------	2,638.50	*
05	S89°29'54"W	--------	583.02	*
06	N00°3122'"E	--------	1,432.57	**
07	N89°28'43"E	--------	250.07	**
08	N00°31'22"E	--------	608.23	**
09	N83°58'01"W	--------	39.97	**
10	N85°42'59"E	--------	174.62	*
11	S85°00'22"E	--------	534.12	*
12	N88°15'38"E	--------	157.61	*
13	S80°00'13"E	--------	138.64	*
14	S60°49'46"E	--------	137.20	*
15	S70°04'16"E	--------	231.95	*
16	S54°57'25"E	--------	289.01	*
17	S47°25'00"E	--------	270.31	*
18	S42°42'33"E	--------	118.28	*
19	N89°32'21"E	--------	1,955.92	*
20	N00°27'16"W	--------	1,200.00	*

* Metes and Bounds are per February 2007 ALTA/ACSM Land Title Survey by McPheeters and Associates, Inc. Project Boundary shown on these plans is approximate from ALTA Survey.

** Metes and Bounds estimated from CAD files.

Table 2

(#) Site Plan Details on Sheet 2

#	Feature
1	Portable Trailer
2	Perimeter Fencing & Signs
3	Proposition 65 Signs
4	Power Poles
5	Portable Light Towers
6	Elevated Conveyor Crossing
7	Proposed Berm
8	Existing Structures

Notes

1) Loadout for customers typically occurs at the Existing Coalinga Facility north of the project area, except in limited circumstances when loadout is needed within the mine site (e.g. overburden).

2) The alignment of conveyor, haul road, power poles and lighting will be based on mine phase and field conditions at the time of construction.

3) Surface runoff is not anticipated, as mining in the project area will occur below grade with perimeter berms surrounding most of the excavation area.

4) No perimeter walls are anticipated, only fencing.

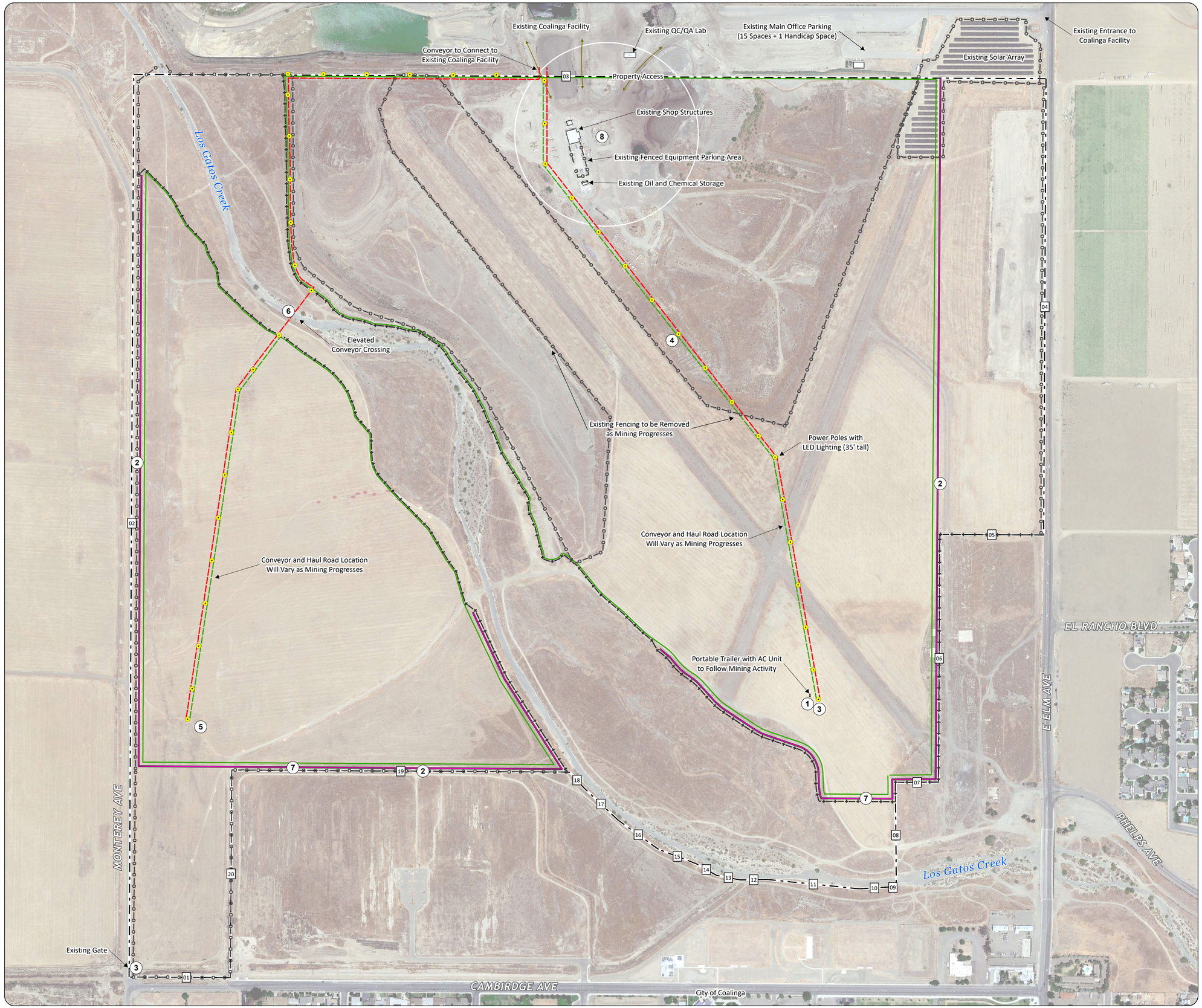
5) Suspended security fence to will be utilized at elevated conveyor crossing to restrict access.

6) All existing structures are located at ~ 710 feet MSL.

N
W E
S

0 250 500 1,000 Feet

1 inch = 250 feet



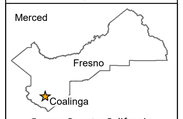
GRANITE™

Coalinga Mine Expansion Project

Site Plan Review

Sheet 1
Site Plan Map

February 25, 2021



Fresno County, California

Address: 38940 CA Highway 33
Coalinga, CA 93210
Operator: Granite Construction Co.
Project APNs:
070-060-86S (299.11 Acres; County)
070-060-89S (202.54 Acres; City)

Legend:

- Property Boundary
- Property Boundary Metes and Bound Segment (See Table 1)
- Proposed Perimeter Road
- Proposed Haul Road
- Proposed Conveyor
- Existing Fence
- Proposed Fence
- Typical Traffic Circulation
- Structure
- Proposed Noise Control/ Visual Screening Berm
- Power Pole & LED Lighting
- Site Plan Details on Sheet 2

Aerial photo dated June 6, 2018, adapted from Google Earth.
Project Boundary shown on these plans is approximate from ALTA Survey from February 2007 ALTA/ACSM Land Title Survey by McPheeters and Associates, Inc.
Parcel APN and ownership information Parcel Quest (January 2021).

Disclaimer: The data was mapped for planning purposes only. No liability is assumed for accuracy of the data shown.

Prepared by: Sage Thurmond, Compass Land Group
3140 Peacekeeper Way #102, McClellan Park, CA 95652

COMPASS LAND GROUP

1 Portable Trailer

Portable Trailer (8' x 16') with an AC unit to be used on-site as part of mining activity. Structure will be relocated as needed to support mining activity.

2 Site Perimeter Fencing & Private Property Signs

The project site will be entirely surrounded by fencing with the exception being where it connects with the existing Coalinga Facility. Perimeter fencing will be 4' high 3-strand barbed wire or equivalent. "Private Property No Trespassing" signs will placed along the perimeter fence. These signs will be 10" x 14" with red lettering and white background.

3 Proposition 65 Signs

Proposition 65 Signs will be located around the site.
- Located at the gate at Cambridge and Monterey. 24" x 36"
- Located on the portable structure. 18" x 24" and 8 ½ " x 11"

4 Facility Utilities

Power for conveyors will be supported by power poles to be installed approximately every 250' along beltline. Power poles will be 35' tall (45' long with 10' driven into the ground). The power poles will have LED lighting fixed to poles, placed about 25' above grade.

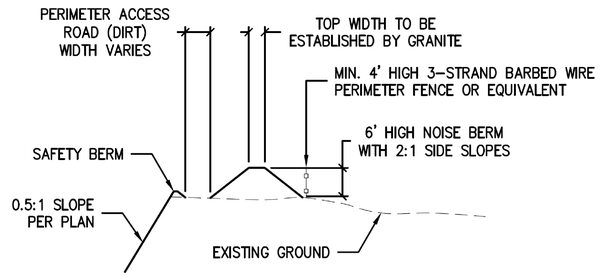
5 Portable Light Towers

Mining area to be supported by two portable light tower trailers which deploy to 25' - 35' in height and will be used to illuminate operational areas as needed.

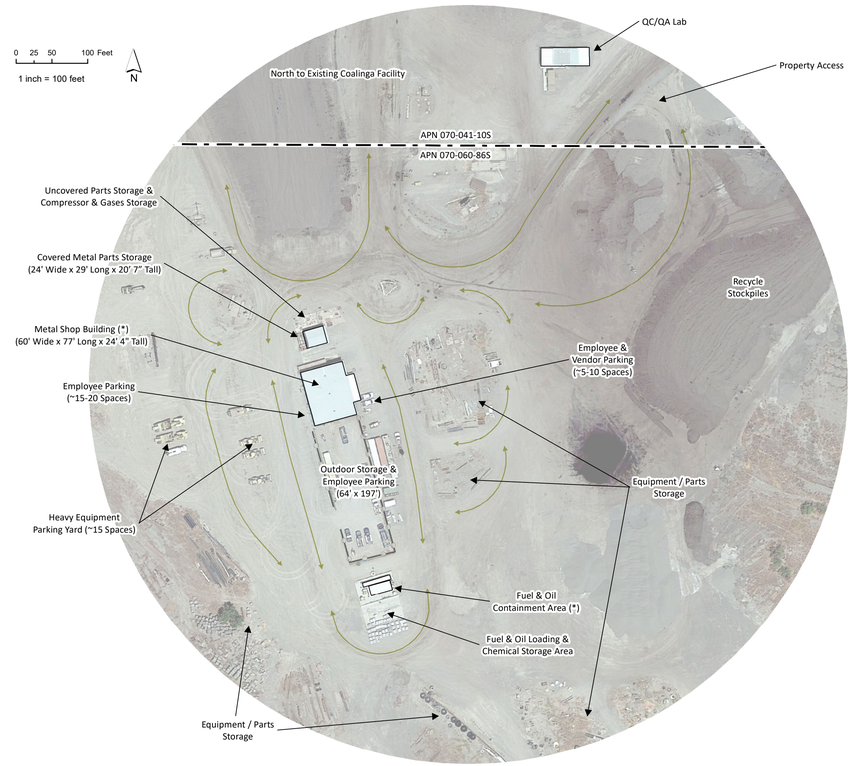
6 Elevated Conveyor Crossing

An elevated conveyor crossing will span Los Gatos Creek (see Visual Simulation above and Conceptual Cross-Section Schematic to the right).

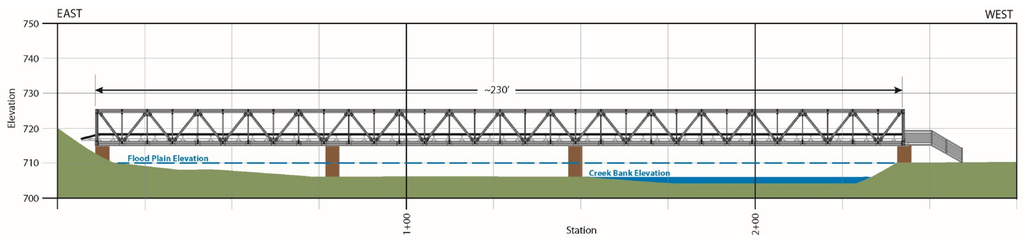
7 Proposed Noise Control/Visual Screening Berm



8 Existing On-Site Structures Detail



(*) There are four fire extinguishers around the Shop, an AED inside of the Shop, and an eyewash station in the Shop. There is a fire extinguisher and an eyewash station at the Fuel & Oil Containment Area.



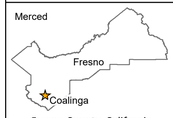
GRANITE

Coalinga Mine Expansion Project

Site Plan Review

Sheet 2
Site Plan Details

February 25, 2021



Fresno County, California

Address: 38940 CA Highway 33
Coalinga, CA 93210
Operator: Granite Construction Co.
Project APNs:
070-060-86S (299.11 Acres; County)
070-060-89S (202.54 Acres; City)

Disclaimer: The data was mapped for planning purposes only. No liability is assumed for accuracy of the data shown.

Prepared by: Sage Thurmond, Compass Land Group
3140 Peacekeeper Way #102, McClellan Park, CA 95652

COMPASS LAND GROUP

RECLAMATION PLAN
FOR THE
COALINGA MINE EXPANSION PROJECT

Prepared for:

Granite Construction Company
2716 Granite Court
Fresno, CA 93706

Prepared by:

Compass Land Group
3140 Peacekeeper Way, Suite 102
McClellan, CA 95652

March 2020

TABLE OF CONTENTS

FIGURES

SHEETS

APPENDICES

CHART OF SMARA CONTENTS [PRC §2770.5]

SMARA Section		Location in Plan (e.g., Page #s)	Lead Agency Checklist
SMARA Statutes (California PRC Sections 2772, 2773 and 2773.3)			
2772(b)	Chart of contents	v (this chart)	☐ YES ☐ NO ☐ N/A
2772(c)(1)	Operator and agent contact info	1, 3	☐ YES ☐ NO ☐ N/A
2772(c)(2)	Quantity and type of materials	4	☐ YES ☐ NO ☐ N/A
2772(c)(3)	Initiation and termination dates	4	☐ YES ☐ NO ☐ N/A
2772(c)(4)	Maximum anticipated depth	4	☐ YES ☐ NO ☐ N/A
2772(c)(5)	Reclamation plan maps	4, Sheets 1 - 7	☐ YES ☐ NO ☐ N/A
2772(c)(6)	Mining description and schedule	5-6	☐ YES ☐ NO ☐ N/A
2772(c)(7)	Proposed or potential end uses	8	☐ YES ☐ NO ☐ N/A
2772(c)(8)	Reclamation description	8, 15-19	☐ YES ☐ NO ☐ N/A
2772(c)(9)	Effect on future mining in area	6	☐ YES ☐ NO ☐ N/A
2772(c)(10)	Statement of responsibility	20, Appendix C	☐ YES ☐ NO ☐ N/A
2772(c)(11)	Lead agency requirements	21-27	☐ YES ☐ NO ☐ N/A
2773(a)	Site specific reclamation plan	1-27, Sheets 1 - 7	☐ YES ☐ NO ☐ N/A
2773.3	Requirements for metallic mines	N/A	☐ YES ☐ NO ☐ N/A
SMARA Regulations, Article 1, Surface Mining and Reclamation Practice (Title 14, California CCR §3500 et seq.)			
3502(a)	Reclamation objectives	1, 8, 15-19	☐ YES ☐ NO ☐ N/A
3502(b)(1)	Environmental setting	13-14	☐ YES ☐ NO ☐ N/A
3502(b)(2)	Public health and safety	7	☐ YES ☐ NO ☐ N/A
3502(b)(3)	Final slopes	9, Appendix D	☐ YES ☐ NO ☐ N/A
3502(b)(4)	Borrow and settlement of fills	9-10	☐ YES ☐ NO ☐ N/A
3502(b)(5)	Disposition of old equipment	7	☐ YES ☐ NO ☐ N/A
3502(b)(6)	Stream and watershed diversions	12-13	☐ YES ☐ NO ☐ N/A
3503(a)	Soil erosion control	11-12, 15	☐ YES ☐ NO ☐ N/A
3503(b)	Water quality / watershed control	10-11	☐ YES ☐ NO ☐ N/A
3503(c)	Protection of fish / wildlife habitat	14	☐ YES ☐ NO ☐ N/A
3503(d)	Disposal of waste / overburden	12	☐ YES ☐ NO ☐ N/A
3503(e)	Erosion and drainage	11	☐ YES ☐ NO ☐ N/A
3503(f)	Resoiling	15-16	☐ YES ☐ NO ☐ N/A
3503(g)	Revegetation	16-17	☐ YES ☐ NO ☐ N/A
SMARA Regulations, Article 9, Reclamation Standards (Title 14, California CCR §3700 et seq.)			
3703	Wildlife and habitat protection	14-15, Appendix H	☐ YES ☐ NO ☐ N/A
3704	Backfill, grading and slopes	9-10, 14-15	☐ YES ☐ NO ☐ N/A
3704.1	…for metallic mines	N/A	☐ YES ☐ NO ☐ N/A
3705	Revegetation	16-19	☐ YES ☐ NO ☐ N/A
3706	Water quality, drainage, runoff	10-13	☐ YES ☐ NO ☐ N/A
3707	Standards for prime agriculture	8, 15-16	☐ YES ☐ NO ☐ N/A
3708	Standard for other agriculture	8	☐ YES ☐ NO ☐ N/A
3709	Equipment storage and removal	7	☐ YES ☐ NO ☐ N/A
3710	Surface / groundwater protection	10-14, Appendix E	☐ YES ☐ NO ☐ N/A
3711	Topsoil salvage and redistribution	15-16	☐ YES ☐ NO ☐ N/A
3712	Mine waste disposal	12	☐ YES ☐ NO ☐ N/A
3713	Drill holes and water wells	7	☐ YES ☐ NO ☐ N/A

INTRODUCTION

This Reclamation Plan (or "Plan") has been prepared in support of surface mining reclamation activities associated with Granite Construction Company's ("Granite") Coalinga Mine Expansion Project ("Project") in western Fresno County, California (see Figure 1, Site and Vicinity Map and Sheet 1, Title Sheet). The Project involves a new mining area on Granite-owned property directly south and southeast of Granite's existing, permitted aggregate mining and processing operation known as the Coalinga Facility. Project parcels total approximately 502 acres, and straddle two jurisdictions: 1) County of Fresno (APN 070-060-86s, 299.11 acres); and, 2) the City of Coalinga (APN 070-060-89s, 202.54 acres). Mining and related project activities would be conducted on approximately 368 acres of the Project parcels, with the remainder left undisturbed (e.g., the majority of the Los Gatos Creek floodplain) or reserved for alternative uses (e.g., commercially zoned property in the northeast corner) (see Figure 2, Site Overview Map and Sheet 2, Existing Site Features).

As described below, the Project will require a new entitlement from the City of Coalinga, as well as modifications to existing entitlements from the County of Fresno (see Figure 3, Existing and Proposed Entitlements Map):

1. New CUP for the portion of APN# 07006089s that lies within the City of Coalinga jurisdictional limits;
2. Modification of CUP 915 to include a new extraction area that lies west of Los Gatos Creek on APN# 07006086s in the County of Fresno; and,
3. Modification of the Reclamation Plan associated with CUP 915 to include the Project areas on APN# 07006089s and APN# 07006086s.

   (Note: CUP/Reclamation Plan 2320 would not be modified by the proposed Project.)

The purpose of this Plan is to describe a process that will minimize environmental effects so that mined lands are reclaimed to a useable condition that is readily adaptable for alternate land uses and creates no danger to public health and safety. While the purpose of this Plan is to describe reclamation activities, the surface mining activities associated with the Project are described and referenced throughout for contextual purposes.

In August 2015, Granite submitted an initial draft Reclamation Plan, including supportive technical analyses, for the expansion project. A revised Reclamation Plan was submitted in February 2016 in response to comments received from the County of Fresno and other responsible agencies following their review of the August 2015 submittal. This revised March 2020 Reclamation Plan has been developed to address updates to the California Surface Mining and Reclamation Act (SMARA), comments received from the California Department of Conservation (Division of Oil, Gas, and Geothermal Resources), and clarify information related to the bridge conveyor crossing at Los Gatos Creek.

Plan Organization

Part A of this Plan provides an overview of reclamation activities and is organized around the State of California Division of Mine Reclamation's ("DMR's") "Reclamation Plan Review Checklist" (see Appendix A). Part B of this Plan addresses specific Fresno County (Lead Agency) requirements, where those requirements supplement or amplify the requirements of Part A.

This Plan has been prepared pursuant to the following requirements associated with the reclamation of mined lands:

- SMARA ;
- Fresno County General Plan;
- City of Coalinga General Plan; and
- Fresno County Ordinance Section 858, Regulations for Surface Mining and Reclamation in all Districts.

PART A: SURFACE MINING AND RECLAMATION ACT CHECKLIST

Mining Operation and Closure

SMARA §2770.5. 100-year flood, Caltrans contact.

Whenever a new surface mining operation is proposed that involves mining within the 100-year floodplain and within one mile of a State Highway Bridge, the County (lead agency) is required to notify the State Department of Transportation ("DOT") that the application has been received. The Project is located within one mile of the Hwy. 198/33 bridge that crosses Los Gatos Creek. Although mining will not occur within the floodplain, certain project activities will (as described below). The County will notify Caltrans in accordance with PRC §2770.5, as appropriate.

The 100-year floodplain in and around the Project area has been mapped by the Federal Emergency Management Agency ("FEMA"). Mining will not occur within the 100-year floodplain, and setbacks have been incorporated in the engineering design to help ensure that mining will remain outside of the floodplain in the event of future physical changes.

While the mining areas will be setback from and avoid the existing floodplain, transport of sand and gravel from the east side of Los Gatos Creek (Phase 4 and Phase 5) to the west side of Los Gatos Creek will occur via an elevated conveyor system (see Sheet 4, Mining Plan). The elevated conveyor system will consist of a belt conveyor on a steel truss frame supported by two 4-foot diameter columns in the floodplain (but outside of the Creek channel) and two 4-foot diameter columns outside of the floodplain (see Figure 7, Conceptual Bridge Conveyor Schematic). The conveyor system will be situated above the 100-year flood elevation, which is approximately 710.17 feet. Other than the elevated conveyor and support columns, the Project proposes to avoid encroaching into the floodplain. A proposed condition hydraulic analysis was performed to assess the impacts from a potential conveyor crossing of Los Gatos Creek. The results show that the conveyor crossing support columns would result in a minimal rise in water surface elevations (<1 foot) at the crossing location. This minimal rise would be completely contained within Granite's site boundaries, have no off-site impacts, and would meet Fresno County floodplain regulation requirements (see Appendix E, Hydrologic and Hydraulic Analysis).

SMARA §2772(c)(1). Name and address of operator/agent.

<u>Surface Mining Operator:</u>
Granite Construction Company
2716 Granite Court
Fresno, CA 93706

<u>Operator's Agent(s):</u>
Jordan Main
Compass Land Group
3140 Peacekeeper Way, Suite 102
McClellan, CA 95652

SMARA §2772(c)(2). Quantity & type of mineral to be mined.

Mining will produce an anticipated 82 million tons of sand and gravel over the life of the project.

SMARA §2772(c)(3). Initiation and termination dates.

Total life of the project is estimated at approximately fifty-five (55) years for mining operations, with an additional five (5) years to complete reclamation activities, for a total project life of sixty (60) years. Based on current mine planning, Granite anticipates depleting its reserves at the existing Coalinga Facility prior to moving into the Project area. Until that time, ancillary surface mining activities will take place in the Project area (e.g., stockpile management, fence installation, property maintenance, etc.). For the purposes of satisfying SMARA informational requirements, the estimated initiation date is January 1, 2021, and the estimated termination date is December 31, 2080. However, the actual termination date will occur five (5) years following the completion of surface mining operations.

SMARA §2772(c)(4). Maximum anticipated depth of mining.

The maximum anticipated depth of excavation is two hundred (200) feet below ground surface (bgs) to elevation 484 above mean sea level (AMSL). Actual depth may vary depending on soil/geologic conditions.

SMARA §2772(c)(5). Reclamation Plan map requirements.

The Project is located in western Fresno County and encompasses a portion of Section 29, Township 20 South, Range 15 East, Mount Diablo Base and Meridian. More specifically, the Project is located south of Granite's existing Coalinga Facility, north of Cambridge Avenue, West of State Route 198/33, and east of Monterey Avenue. The Project area encompasses 368± acres of a larger 502± acre property bearing Assessor Parcel Numbers 070-06-086s and 070-06-089s. Mining is proposed on 338± acres of the Project area with the remainder (30± acres) in ancillary use and setback areas.

Predominant land uses in the vicinity of the Project are as follows:

- North: Resource extraction/industrial (Granite's existing Coalinga Facility)
- South: The City of Coalinga's recreational park, with scattered commercial, residential, and school facilities bordering Cambridge Avenue farther south
- East: State Route 198/33, with agriculture and residential farther east
- West: Monterey Avenue, with undeveloped land and oil fields farther west

Site zoning is Exclusive Agricultural for APN 07006086s, and a combination of Light Manufacturing/Business and Service Commercial for APN 07006089s. The General Plan Land Use Designation is Agriculture for APN 07006086s, and a combination of Commercial Service and Manufacturing/Business with a Resource Extraction Overlay for APN 07006089s.

Legal Description

Please see Appendix B, Site Legal Description.

Site Geology

The geology of the site is shown on Figure 4, Site Geology Map.

Streams, Roads, Railroads and Utilities

The most prominent drainage feature in the vicinity of the Project is Los Gatos Creek, which flows in a southeasterly direction through the site. The Creek flows west of the existing Coalinga Facility and bisects the Project area.

Primary access to the Project area will occur via internal access roads from the existing Coalinga Facility (which itself is accessed via an existing encroachment off of State Route 198/33). From time to time, equipment may access the Phase 4 and 5 mining areas west of Los Gatos Creek utilizing encroachment(s) off of Monterey Avenue.

Other than the transmission line that runs adjacent to Monterey Avenue on the western boundary of the Project, as well as utilities associated with the existing Coalinga Facility and surrounding developments, no other notable utilities are present in the vicinity of the Project.

There are no railroads on or adjacent to the lands to be reclaimed.

See Figure 2, Site Overview Map and Sheet 2, Existing Site Features.

Ownership of Surface and Mineral Interests

Surface and mineral interests on the Project site are owned by:

Granite Construction Company
2716 Granite Court
Fresno, CA 93706

SMARA §2772(c)(6). Mining description and time schedule .

A description of the mining operation, while not specifically regulated under SMARA, is provided here in order to facilitate understanding of the proposed Plan. Mining methods and practices will conform to the conditions of the surface mining use permits issued by Fresno County and the City of Coalinga. The Project involves only mining/reclamation and transportation of mined aggregates to the existing Coalinga Facility. Beyond construction materials recycling (current practice) and potentially limited initial screening of aggregates, no processing is anticipated in the Project area.

Mining Methods

Mining operations will be performed in a manner consistent with current practices at the existing Coalinga Facility, and will be initiated by the removal of vegetation, topsoil/growth media, and overburden materials which lie above marketable sand and gravel deposits. The overlying materials will be removed using scrapers aided by a motor grader and a bull dozer, as needed. After overlying materials are removed, marketable sand and gravel will be excavated using a combination of scrapers, front-end loaders, hydraulic excavators, bulldozers and other support equipment. Following excavation, the sand and gravel will be transported via conveyor and/or internal haul roads to the existing Coalinga Facility where it will be processed and/or sold for use in construction materials.

Phasing

Mining will progress in a phased manner to allow for concurrent reclamation (to the extent practicable) (see Sheet 3, Mining Phasing Overview). Final reclamation, consisting of slope reclamation, replacement of growth media, and revegetation will commence as soon as final excavation grades are achieved. The proposed end use for the site following reclamation will be open space, consistent with the current condition of the property and existing reclamation plans for the Coalinga Facility. An estimated time schedule for reclamation of the areas disturbed by mining activities is provided in Table 1, below.

TABLE 1
ESTIMATED PROJECT PHASING

Phase	Est. Acres	Est. Tons (millions)	Est. Years to Completion
Phase 1	78	19	13
Phase 2	79	22	15
Phase 3	74	20	13
Phase 4	46	6	4
Phase 5	69	9	6
Phase 6	22	6	4
Total	**368**	**82**	**55**

Notes:

1. *The estimated project phasing is provided only as a guideline. Actual phasing depths, boundaries, quantities and timelines may be affected by unforeseen changes in geology and market conditions.*
2. *Estimated years to completion calculated using a historical average production rate of 1.5 million tons/year.*

SMARA §2772(c)(9). Impact of reclamation on future mining.

The proposed Plan and proposed end use of the site will not preclude future mining in the area.

CCR §3502(b)(2). Public health and safety (exposure).

CCR §3713(a). Drill holes, water wells, monitoring wells completed or abandoned in accordance with laws.

CCR §3713(b). All portals, shafts, tunnels, or openings, gated or protected from public entry, but preserve access for wildlife.

The Project will not jeopardize public health and safety at any time during mining, reclamation or post-reclamation activities. Safety measures such as fencing, signs, and setbacks will be implemented as necessary to ensure public safety (see Sheet 4, Mining Plan). Fencing may be used for public safety, but will not prevent access for wildlife (avian species) foraging and may be removed at final reclamation at the owner's discretion. No portals, shafts, tunnels or other openings are proposed.

According to the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources' (DOGGR's) CalGEM Well Finder Map, 11 abandoned oil and gas wells and 2 abandoned "dry hole" wells are located within the proposed mining footprint (see Figure 6, Wells in Project Footprint). Granite will locate and flag the abandoned wells in the proposed mining footprint prior to mining. Granite will either avoid the wells with a 20-foot setback or properly abandon the wells according to DOGGR requirements and guidelines prior to mining within 20 feet.

No new water wells or monitoring wells are anticipated in the expansion area. In the event that additional water wells are deemed necessary in the Project area, they will be properly abandoned at final reclamation in accordance with state and local standards, or will be kept to facilitate the approved end use.

CCR §3502(b)(5). Disposition of old equipment.

CCR §3709(a). Equipment stored in designated area and waste disposed of according to ordinance.

CCR §3709(b). Structures and equipment dismantled and removed.

Equipment used in mining and reclamation will be stored in designated areas during the life of the Project (see Sheet 2, Existing Site Features). Any incidental refuse or garbage will be hauled off-site and disposed of in accordance with state and local standards.

Facilities, structures, and equipment associated with mining and processing will be removed from the site following final reclamation with the exception of: property line fencing, perimeter berms, and perimeter access roads.

End Land Use

SMARA §2772(c)(7). Proposed or potential end uses.

The proposed end use for the site following reclamation will be open space, consistent with the current condition of the property and existing reclamation plan for the adjacent Coalinga Facility. The owner's acknowledgment of this end use is evidenced by the execution of the statement of reclamation responsibility found at the end of this Plan (see Appendix C).

SMARA §2772(c)(8). Reclamation measures adequate for end use.

Reclamation will be conducted in the following manner to support the open space end use:

- Prior to the stripping of overburden, approximately six-to-twelve inches of topsoil/growth media will be excavated in a separate lift and stockpiled/segregated (with signage as needed) for use in reclamation (see Sheet 4, Mining Plan, for anticipated stockpile locations).
- Final reclamation slope angles have been designed with adequate factors of safety for the open space end use.
- During reclamation, stockpiled topsoil/growth media will be redistributed in preparation for revegetation.
- Revegetation areas will be ripped, disked and/or scarified as needed to establish a suitable root zone in preparation for plantings.
- Any incidental refuse or garbage will be hauled off-site and disposed of in accordance with state and local standards.
- Facilities, structures, and equipment associated with mining and processing will be removed from the site following final reclamation with the exception of: property line fencing, perimeter berms and perimeter access roads.
- With the exception of the cut slopes and perimeter access roads, disturbed surfaces will be revegetated with a native seed mix recommended for the site.

CCR §3707 & §3708. Agricultural fertility performance standards.

CCR §3707(a). *Return prime ag to fertility level specified in approved plan.*

CCR §3707(c). *Productivity rates equal pre-project or similar site for two consecutive years. Rates set forth in plan.*

CCR §3708. *Other ag capable of sustaining crops common to area.*

The Project area does not contain prime farmland, and the proposed end use is open space.

Geotechnical Requirements

CCR §3502(b)(3). Final slopes: slope angles flatter than critical gradient.

CCR §3704(f). Final cut slopes have minimum factor of safety for end use and conform with surrounding topography and/or approved end use.

Consistent with the Fresno County Mining and Reclamation Standards, as well as recommendations provided by the Project geotechnical engineer, final reclaimed slopes will not exceed 1.5H:1V (see Sheet 6, Reclamation Plan and Sheet 7, Reclamation Plan Cross-Sections). The overall final reclaimed slope angle of 1.5H:1V (or flatter) may be achieved through one of the following configurations:

- 1.5H:1V cut slope with no backfill;
- 0.5H:1V cut slope with backfill at 2H:1V to full slope height; or,
- 0.5H:1V cut slope with backfill at 2H:1V to a distance of 50 vertical feet or less from the top of slope.

The slope stability analysis prepared for the project demonstrates that the finished slope angles (in any of the above configurations) have an adequate factor of safety for the open space end use (See Appendix D, Slope Stability Evaluation).

CCR §3502(b)(4). Disposition of fill materials considered. Foundation fills for end use in conformance with good engineering practice.

CCR §3704(a). For urban use, fill compacted in accordance with UBC, local grading ordinance, or other methods approved by the Lead Agency.

CCR §3704(b). For resource conservation, compact to standard for that end use.

Backfill is not proposed for urban use or resource conservation purposes. Backfill of mining areas and slopes, where performed, will be achieved using mobile equipment such as scrapers that will provide an appropriate level of compaction for the desired open space end use.

CCR §3704(d). Final reclamation fill slopes not exceed 2:1, except when allowed by site-specific engineering analysis, and can be revegetated.

As stated above, final reclaimed slopes will not exceed 1.5H:1V. The overall final reclaimed slope angle of 1.5H:1V (or flatter) may be achieved through one of the following configurations:

- 1.5H:1V cut slope with no backfill;
- 0.5H:1V cut slope with backfill at 2H:1V to full slope height; or,
- 0.5H:1V cut slope with backfill at 2H:1V to a distance of 50 vertical feet or less from the top of slope.

In any event, the final reclaimed slope angle of the fill will not exceed 2H:1V.

CCR §3704(e). *At closure, final landforms of fills conform with surrounding topography and/or approved end use.*

Reclamation grading of overburden fill slopes is designed to create stable slopes consistent with the open space end use.

Hydrology and Water Quality

CCR §3710(a). Surface and groundwater quality protected in accordance with Porter-Cologne and Clean Water Acts (RWQCB/SWRCB).

Surface and groundwater will be protected from siltation and pollutants as required by the Federal Clean Water Act, the Porter-Cologne Act, County/City ordinances, Regional Water Quality Control Board and the State Water Resources Control Board. While the Project does not propose mining in surface waters or groundwater, the site would be exposed to rainfall events.

The existing shop and Coalinga Facility are covered under a Spill Prevention, Control, and Countermeasure Plan ("SPCC Plan") and Hazardous Materials Business Plan prepared and implemented pursuant to 40 CFR Part 112 and 19 CCR Section 2729, respectively. If required, the project will comply with the National Pollutant Discharge Elimination System General Permit ("NPDES General Permit") requirements, which involve preparation and implementation of a SWPPP, including BMPs to control erosion, sedimentation, and pollution.

Surface runoff is not anticipated as the Project involves mining below grade with perimeter control berms surrounding the majority of the excavation area. During initial surface disturbance activities, direct precipitation and drainage will be controlled through a combination of berms, fiber rolls, silt fences, revegetation, and other erosion control measures, as needed, to ensure that land and water resources are protected from erosion, gullying, sedimentation, and potential contamination. Slopes will be vegetated with specified seed mixes once final reclamation grades are achieved.

Upon completion of mining operations, the site will be graded to minimize erosion, revegetated and left in an open space condition (see Sheet 6, Reclamation Plan). Direct precipitation may temporarily collect in the pit-bottom before it evaporates, infiltrates, or is used on-site.

CCR §3706(a). *Mining and reclamation to protect downstream beneficial uses.*

CCR §3706(b). *Water quality, recharge, and groundwater storage that is accessed by others shall not be diminished, except as allowed by plan.*

CCR §3503(b)(2). *Substantially prevent siltation of groundwater recharge areas.*

Mining will not occur within the 100-year floodplain of Los Gatos Creek, and setbacks have been incorporated in the engineering design to help ensure that mining will remain outside of the floodplain in the event of future physical changes (see Sheet 4, Mining Plan). Further, based on

local groundwater data, mining activities will not intercept or impact the groundwater table (see Appendix E, Hydrologic and Hydraulic Analysis).

During initial surface disturbance activities, customary BMPs, as well as the requirements of a SWPPP, if needed, will be implemented. Upon completion of mining operations, the site will be revegetated to minimize erosion.

SMARA §2773(a). Drainage, sediment and erosion control.

CCR §3503(a)(3). Erosion control facilities constructed and maintained where necessary.

CCR §3503(b)(1). Settling ponds used where they will provide significant benefit to water quality.

CCR §3503(e). Grading and revegetation to minimize erosion and convey surface runoff to natural drainage courses or interior basins. Spillway protection.

This Plan is specific to the site and surrounding area characteristics including soil, topographic conditions, geology, surface waters and the principal mineral commodity (sand and gravel). Site-specific criteria include slope angles, seeding and planting requirements, and revegetation success performance standards.

The Project is designed to minimize erosion and retain direct precipitation, which may temporarily collect in the pit-bottom before it evaporates, infiltrates, or is used on-site. Additional erosion control facilities are not anticipated.

CCR §3706(c). Erosion and sedimentation controlled during all phases of construction, operation, reclamation, and closure of surface mining operation to minimize siltation of lakes and water courses per RWQCB/SWRCB.

CCR §3706(d). Surface runoff and drainage controlled to protect surrounding land and water resources. Erosion control methods designed for not less than 20 year/1 hour intensity storm event.

CCR §3706(e). Altered drainages shall not cause increased erosion or sedimentation.

If required, the Project will comply with the NPDES General Permit requirements, which involves preparation and implementation of a SWPPP, including BMPs to control erosion, sedimentation, and pollution.

During initial surface disturbance activities, customary BMPs, as well as the requirements of a SWPPP, if needed, will be implemented to ensure that water courses are protected from erosion, gullying, sedimentation and potential contamination. Slopes will be vegetated with appropriate native seed mixes once final reclamation grades are achieved.

Mining will not occur within the 100-year floodplain of Los Gatos Creek, and setbacks have been incorporated in the engineering design to help ensure that mining will remain outside of the floodplain in the event of future physical changes.

Transport of sand and gravel from the east side of Los Gatos Creek (Phase 4 and Phase 5) to the west side of Los Gatos Creek will occur via an elevated conveyor system. The elevated conveyor system will utilize conveyor wiper blades to prevent material build-up on the belt and the steel truss frame will be equipped with a spill pan, which will catch any side-cast sand and gravel and prevent sedimentation in Los Gatos Creek (see Figure 7, Conceptual Bridge Conveyor Schematic). The elevated conveyor crossing will be installed in the non-rainy season and will not involve removal of riparian species, or removal, filling, or hydrological interruption of Los Gatos Creek. Proper permits will be obtained, as necessary, prior to installation of the crossing.

SMARA §2772(c)(8)(A). Contaminant control and mine waste disposal.

CCR §3503(a)(2). Overburden stockpiles managed to minimize water and wind erosion.

CCR §3503(d). Disposal of mine waste and overburden shall be stable and not restrict natural drainage without suitable provisions for diversion.

CCR §3712. Mine waste and tailings, and mine waste disposal units governed by SWRCB/IWMB (Article 1, Subchapter 1, Chapter 7, Title 27, CCR).

The overburden fill slopes, perimeter berms, and temporary overburden stockpiles will be graded and wetted, as needed, to minimize water and wind erosion, and will not restrict natural drainage courses. The perimeter berms will also be treated with an erosion control seed mix. Overburden materials will either be sold as a product (e.g., fill) or used in reclamation.

CCR §3710(b). In-stream activities.

SMARA §2772(c)(8)(B). Rehabilitation of streambanks/beds to minimize erosion.

CCR §3502(b)(6). Temporary stream and water diversions shown.

CCR §3706(f)(1). Stream diversions constructed in accordance with Fish and Game Code.

CCR §3706(f)(2). Stream diversions constructed in accordance with Federal Clean Water Act and Rivers and Harbors Act of 1899.

CCR §3706(g). All temporary stream diversions eventually removed.

CCR §3710(c). In-stream channel elevations and bank erosion evaluated annually using extraction quantities, cross-sections, aerial photos.

The Project does not involve in-stream mining and includes setbacks from the 100-year floodplain to the mining boundary. An elevated conveyor crossing will be utilized to facilitate the transport

of materials from the mining area west of Los Gatos Creek to the existing processing plant (see Sheet 4, Mining Plan, for approximate location of crossing). Proper permits, including a California Department of Fish & Wildlife Stream and Lake Alteration Agreement, will be obtained, as necessary, prior to installation of the crossing. The elevated conveyor system will consist of a belt conveyor on a steel truss frame supported by two 4-foot diameter columns in the floodplain (but outside of the Creek channel) and two 4-foot diameter columns outside of the floodplain. The elevated conveyor crossing will be installed and removed in the non-rainy season. No temporary stream channel diversions are anticipated. Reclamation of the crossing will comply with the relevant regulatory permit conditions (e.g., Stream and Lake Alteration Agreement), but is expected to consist of removal of the elevated conveyor equipment and support columns, recontouring of the approaches (if necessary), covering with suitable growth media or topsoil, and revegetation consistent with the proposed seed mix in Table 2, above.

Environmental Setting and Protection of Fish and Wildlife Habitat

CCR §3502(b)(1). Environmental setting and impact of reclamation on surrounding land uses. (Identify sensitive species, wildlife habitat, sensitive natural communities, e.g. wetlands, riparian zones, etc.).

The biological consulting firm, TRC, conducted a preliminary assessment of the potential occurrence of special-status species and sensitive habitats for the Project area in late 2014 (see Appendix H, Biological Survey).

General Project Area Environmental Setting

The Project area is highly disturbed with widespread evidence of historical activity and off-road vehicle use. Vegetation cover ranges from very sparse and almost nonexistent to small, dense patches of ruderal (weedy) species such as Russian thistle (Salsola tragus), wormwood (Artemisia sp.) bromes (Bromus spp.) and oats (Avena sp.). Aside from Los Gatos Creek, no evidence of wetlands or other aquatic features exist within the Project area.

Special Status Species/Sensitive Habitats

TRC conducted a record search of the California Natural Diversity Database (CNDDB) to list all documented sightings of special status species within the vicinity of the site. In addition, TRC performed a reconnaissance-level biological resources survey on the Project site. The biological assessment concluded that due to the disturbed nature of the Project area and lack of suitable habitats, most of the species with CNDDB occurrence records within 3 miles of the Project area are unlikely to occur on the property. Furthermore, no special status species were observed during the field survey. Aside from Los Gatos Creek, no evidence of wetlands or other aquatic features exist within the Project area. Therefore, no impacts to special status species or sensitive habitats are expected from the proposed Project. Although the likelihood for any candidate, sensitive, or special status species to exist on-site is low, and none were observed on the Project site during the survey, the Project has incorporated pre-construction surveys, detection

protocols, and avoidance measures relating to nesting birds (e.g., burrowing owl and Swainson's hawk), kit fox, and blunt-nosed leopard lizard, which have the potential to occur in the vicinity of the Project area.

Soils

The Natural Resources Conservation Service has mapped the following soil units on the Project site (see Figure 5, Site NRCS Soils Map):

- Pits, gravel;
- Yribarren clay loam, 0 to 2 percent slopes;
- Excelsior sandy loam, sandy substratum, 0 to 2 percent slopes;
- Cerini sandy loam, 0 to 2 percent slopes;
- Carranza gravelly sandy loam, 2 to 8 percent slopes; and,
- Excelsior, sandy substratum - westhaven association, flooded, 0 to 2 percent slopes.

The topsoil/growth media salvage and replacement protocols described in this Plan have been specifically developed with consideration to these soil types.

Effect on Surrounding Land Uses

The proposed reclamation to open space will have no effect on existing and future uses of surrounding lands.

CCR §3503(c). Protection of fish and wildlife habitat.

CCR §3703(a). Sensitive species conserved or mitigated.

CCR §3703(b). Wildlife habitat at least as good as pre-project, if approved end use is habitat.

CCR §3703(c). Wetlands avoided or mitigated at 1:1 minimum.

CCR §3704(g). Piles or dumps not placed in wetlands without mitigation.

CCR §3710(d). In-stream mining not cause fish to be trapped in pools or off-channel pits, or restrict migratory or spawning activities.

A preliminary site assessment conducted by TRC concluded that, due to the disturbed nature of the Project area and lack of suitable habitats, most of the species with CNDDB occurrence records within 3 miles of the Project area are unlikely to occur on the property. Furthermore, no special status species were observed during the field survey. Aside from Los Gatos Creek, no evidence of wetlands or other aquatic features exist within the Project area. Therefore, no impacts to special status species or sensitive habitats are expected from the proposed Project. Although the likelihood for any candidate, sensitive, or special status species to exist on-site is low, and none were observed on the Project site during the survey, the Project has incorporated pre-

construction surveys, detection protocols, and avoidance measures relating to nesting birds (e.g., burrowing owl and Swainson's hawk), kit fox, and blunt-nosed leopard lizard, which have the potential to occur in the vicinity of the Project area.

The Project does not involve in-stream mining and includes setbacks from the 100-year floodplain to the mining boundary.

Resoiling and Revegetation

CCR §3503(f). **Resoiling.**

CCR §3704(c). *Mine waste stockpiled to facilitate phased reclamation and separate from growth media.*

CCR §3503(a)(1). *Removal of vegetation and overburden preceding mining kept to a minimum.*

CCR §3711(a). *All salvageable topsoil removed. Topsoil and vegetation removal not precede mining by more than one year.*

CCR §3711(b). *Topsoil resources mapped prior to stripping, location of stockpiles on map. Topsoil and growth media in separate stockpiles.*

CCR §3711(c). *Soil salvage and phases set forth in plan, minimize disturbance, designed to achieve reveg success.*

CCR §3711(d). *Topsoiling phase ASAP. Topsoil stockpiles not be disturbed until needed. Topsoil stockpiles clearly identified and planted with vegetation or otherwise protected.*

CCR §3711(e). *Topsoil redistributed in stable site and consistent thickness.*

CCR §3707(b). *Segregate and replace topsoil by horizon.*

Soils will only be removed as necessary to access new mining areas and will be used for reclamation as soon as it can be accommodated by the mining schedule. Removal of topsoil/growth media and vegetation will not precede mining by more than one year, unless a longer time period is approved by the Lead Agency.

Where possible, soils being removed will be directly placed for reclamation. Where salvaged topsoil/growth media cannot be used immediately, and where distinct soil horizons are present, topsoil and other growth media will be stockpiled separately and will not be disturbed until needed for reclamation. Approximate stockpile locations are depicted on Sheet 4, Mining Plan. Stockpiles will be seeded with an appropriate seed mixture as needed to prevent water and wind erosion and to discourage weed growth.

The average thickness of topsoil/growth media redistributed on the site during reclamation will vary. Based on site specific soil information, a target thickness of 6-to-12-inches of topsoil/growth media will be replaced atop the mining floor and overburden fill slopes. If soil horizons are readily distinguishable, then the sequence of horizons shall have the A atop the B, the B atop the C, etc.

CCR §3705(e). *Soil altered or other than native topsoil, requires soil analysis. Amend if necessary.*

CCR §3707(d). *Fertilizers and amendments not contaminate water.*

Growth media for revegetation will consist of native topsoil and overburden. Soil amendments, if required during revegetation efforts, will be applied according to manufacturer's specifications and will not contribute to contamination of on- or off-site water sources.

CCR §3705. Revegetation.

CCR §3503(g). *Revegetation and plant survival (use available research).*

CCR §3705(a). *Vegetative cover, suitable to end use, self-sustaining. Baseline studies documenting cover, density and species richness.*

CCR §3705(b). *Test plots if success has not been proven previously.*

CCR §3705(c). *Decompaction of site.*

CCR §3705(g). *Use native plant species, unless exotic species meet end use.*

CCR §3705(h). *Plant during correct season.*

Existing vegetation cover at the Project site ranges from very sparse and almost nonexistent to small, dense patches of ruderal (weedy) species. As part of reclamation, the Project site will be returned to open space through revegetation with the native seed mix shown in Table 2.

TABLE 2
REVEGETATION SEED MIX

Common Name	Plant Species	Application Rate (lbs (PLS)/acre)
Cattle spinach	*Atriplex polycarpa*	4
California buckwheat	*Eriogonum fasciculatum* var. *polifolium*	3
Small fescue	*Festuca microstachys*	6
Desert plantain	*Plantago ovata*	4
Expanded List of Potential Species that may be Substituted in Seed Mix		
Big saltbush	*Atriplex lentiformis*	N/A
Alkali saltbush	*Atriplex polycarpa*	

Desert croton	*Croton californicus*	
Blue wild rye	*Elymus glaucus ssp. Glaucus*	
Big squirreltail grass	*Elymus multisetus*	
Interorio goldenbush	*Ericameria linearifolia*	
Small-flowered fescue	*Festuca microstachys*	
Matchweed, snakeweed	*Gutierrezia californica*	
Bracted alkali goldenbush	*Isocoma acradenia var. bracteosa*	
Valley sky lupine (legume)	*Lupinus nanus*	
One-sided bluegrass	*Poa secunda ssp. secunda*	
Chia sage	*Salvia columbariae*	
Nodding needlegrass	*Stipa cernua*	

Note:
Composition of seed mix (and appropriate modifications) to be determined based on availability from suppliers, cost, test plot results, and species determined most suitable at the time planting occurs. Ideally, revegetation will occur in the summer to early fall.

The proposed seed mix was recommended by the supplier based on several criteria, including: 1) species native to the Coalinga area, 2) species commercially grown and therefore readily available, and, 3) long-term sustainability of the cover based on those species that had high reproductive rates. Seeding rates were based on species seed count per pound, and a consideration of total seed per square foot area. The proposed mix is intended to be self-sustaining without dependence on irrigation, soil amendments, or fertilizers.

Application of herbicides may be used ahead of planting to minimize potential for weed growth. If needed, revegetation areas will be ripped, disked and/or scarified to establish a suitable root zone in preparation for planting.

As a component of the phased reclamation, an initial mining slope that has reached its final configuration and will not be further disturbed will serve as a test plot for the revegetation seed mix. Planting procedures, species and success criteria will be updated, if necessary, in consultation with the Lead Agency following monitoring of the test plot.

Annual monitoring will be performed until the revegetation meets the success criteria detailed in this Reclamation Plan, and annual inspections will be performed by the Lead Agency to ensure compliance with this Plan.

CCR §3705(d). *Roads stripped of roadbase materials, resoiled and revegetated, unless exempted.*

At owner's discretion, perimeter access roads may remain following reclamation to facilitate the proposed end use (e.g., maintenance of perimeter fencing). If removed, roads will be stripped of any roadbase materials and covered with suitable growth media or topsoil, and replanted or revegetated consistent with the proposed seed mix in Table 2, above.

CCR §3705(f). *Temporary access not bladed. Barriers installed.*

No temporary access routes are proposed as part of reclamation.

CCR §3705(i). *Use soil stabilizing practices and irrigation, when necessary to establish vegetation.*

Following the initial establishment period, irrigation or further soil stabilizing practices should not be necessary based on the proposed seed mix. Should soil stabilizing practices be needed, straw mulch and/or other BMPs will be used as necessary to control soil erosion.

CCR §3705(k). *Noxious weed management.*

During the revegetation establishment period, noxious weeds (as listed by the California Department of Food and Agriculture) will be managed: (1) when they threaten the success of the proposed revegetation; (2) to prevent spreading to nearby areas; and (3) to eliminate fire hazard. Noxious weeds will be removed using a combination of herbicides, mechanical controls, and hand weeding. In some cases, complete eradication may not be practicable unless the weed-infested patches are small. Noxious weed identification and management will be an element of the revegetation monitoring period overseen by a qualified biologist. Noxious weeds will not exceed 10% of the total cover.

CCR §3705(l). *Plant protection measures, fencing, caging.*

The proposed revegetation is not anticipated to require fencing, caging, or other plant protection measures, as grazing within the Project area is not anticipated during the revegetation establishment period. If grazing is to occur during revegetation establishment, fencing and/or other protective measures will be employed until the revegetation efforts are successfully completed and the Lead Agency authorizes removal.

SMARA §2773(a). Revegetation performance standards and monitoring.

CCR 3705(m). *Success quantified by cover, density and species-richness. Standards proposed in plan. Sample method set forth in plan and sample size provide 80 percent confident level, as minimum.*

The following success criteria is proposed for the areas to be revegetated:

Cover:	25% cover per 1 meter x 1 meter plot
Species richness:	2 species from the seed mix per 1 meter x 1 meter plot, or 50% species richness in the event a new seed mix is chosen

Note: Success criteria will be updated, if necessary, in consultation with the Lead Agency following monitoring of the proposed test plot.

CCR §3705(j). If irrigated, demonstrate self-sustaining without for two years minimum.

Revegetation will be reviewed annually by the Lead Agency until reclamation is deemed complete. If irrigated, vegetation will be self-sustaining for two (2) years prior to the release of financial assurances.

Administrative Requirements

SMARA §2772(c)(10). Statement of Reclamation Responsibility.

Please see Appendix C for the Applicant's signed Statement of Responsibility.

SMARA §2773.1. Financial assurances.

Financial assurances (e.g. Surety Bond or equivalent) shall remain in effect for the duration of the mining operation and any additional period until reclamation is complete. Prior to the initiation of mining activities in the Project area, the Applicant will prepare and submit a Financial Assurance Cost Estimate ("FACE") to the Lead Agency. The FACE will serve to establish the appropriate dollar amount for financial assurances. The FACE will be updated annually and submitted to the Lead Agency for review. Financial assurances may be adjusted (up or down as appropriate) based on the updated FACE.

SMARA §2772.1 & §2774. Lead Agency Approvals and Annual inspection.

Upon Plan approval, and subsequent County and regulatory agency approvals for the Project, the conditions of approval and/or mitigation measures pertinent to reclamation of mined lands will be added to this Plan pursuant to PRC §2772.1(b)(7)(B). Appendix J is included as a placeholder for this purpose.

The Operator will submit a Mining Operation Annual Report to DMR and Fresno County. This report will summarize the previous year's production and reclamation activities. SMARA also requires the Lead Agency to conduct an annual inspection of the site to ensure compliance with the approved Plan.

SMARA §2776. All mining operations since 1/1/76 included in reclamation plan.

No pre-1976 mining disturbances are addressed in this Plan.

SMARA §2777. Amended reclamation plans required prior to substantial deviations to approved plans.

Amendments to this Plan may be submitted detailing proposed changes. Substantial deviations from the Plan shall not be undertaken until such amendment has been filed with and approved by the Lead Agency.

PART B: LEAD AGENCY REQUIREMENTS (SMARA §2772(C)(11))

Part B of this Plan addresses specific Lead Agency reclamation requirements, where it is believed those requirements either supplement or amplify the requirements of SMARA as outlined in Part A. This part is not intended to restate or address every Lead Agency code section or policy related to the reclamation of mined lands.

Fresno County recognizes that aggregate is one of the County's most significant extractive resources and plays an important in maintaining the County's overall economy. Fresno County also recognizes the importance of preserving the future availability of its mineral resources and has adopted policies to promote the orderly extraction of mineral resources while minimizing the impact of these activities on surrounding land uses and the natural environment.

For context, surface mining is regulated by Fresno County through two (2) primary documents:

1. **General Plan –** contains language and policy that provides general guidance on how and where mining should occur in the County.

2. **Ordinance Code –** contains regulations which provide details of how mining and reclamation should occur and addresses the impacts of mining to surrounding uses. The Ordinance Code also directs the information needed for mining use permit applications and reclamation plans.

This Part B only addresses requirements that specifically relate to the reclamation of mined lands, and not those requirements associated with regulation of the mining activities, including any associated environmental review or land use approvals.

General Plan

GP Policy OS-C.3. **The County shall require that the operation and reclamation of surface mines be consistent with the State Surface Mining and Reclamation Act (SMARA) and special zoning ordinance provisions.**

GP Policy OS-C.5. **The County shall require reclamation of all surface mines consistent with SMARA and the County's implementing ordinance.**

The Reclamation Plan has been developed consistent with SMARA and Fresno County Ordinance Code Section 858 requirements.

Ordinance Code

OC §858.H.1. **No extraction of material or overburden shall be permitted within twenty-five (25) feet of any property boundary nor within fifty (50) feet of a boundary contiguous with a public road right-of-way or recorded residential subdivision.**

The Project incorporates setbacks of at least fifty (50) feet from neighboring properties for extraction activities (see Sheet 4, Mining Plan).

OC §858.H.2. **No stockpiled soil or material shall be placed closer than twenty-five (25) feet from a property boundary.**

Topsoil stockpile locations have been identified within the mining boundary for temporary storage prior to use in reclamation (see Sheet 4, Mining Plan). No stockpiled soil or material will be placed closer than twenty-five (25) feet from a property boundary. *Note: The proposed perimeter noise control/screening berms may be located within twenty-five (25) feet of a property boundary; however, they are not considered "stockpiles" and are not subject to this standard.*

OC §858.H.3. **No production from an open pit shall create a slope steeper than 2:1 within fifty (50) feet of a property boundary nor steeper than 1½:1 elsewhere on the property, except steeper slopes may be created in the conduct of extraction for limited periods of time prior to grading the slope to its reclamation configuration, and slopes of 1:1 may be maintained five (5) feet below the lowest water table on the property, experienced in the preceding three (3) years.**

No mining is proposed within fifty (50) feet of a property boundary or below the water table.

Consistent with this Standard and recommendations provided by the Project's geotechnical engineer, final reclaimed slopes will not exceed 1.5H:1V. The overall final reclaimed slope angle of 1.5H:1V (or flatter) may be achieved through one of the following configurations:

- 1.5H:1V cut slope with no backfill;
- 0.5H:1V cut slope with backfill at 2H:1V to full slope height; or,
- 0.5H:1V cut slope with backfill at 2H:1V to a distance of 50 vertical feet or less from the top of slope.

The slope stability analysis prepared for the project demonstrates that the finished slope angles (in any of the above configurations) have an adequate factor of safety for the open space end use (See Appendix E, Slope Stability Report).

OC §858.H.4. **Security fencing four (4) feet in height consisting of not less than three (3) strands of barbed wire, or an approved equivalent, shall be placed along any property line abutting a public right-of-way and around any extraction area where slopes steeper than two (2) feet horizontal to one (1) foot vertical are maintained. Such interior fencing will not be required where exterior fencing surrounds the property.**

Perimeter fencing at least four (4) feet in height consisting of not less than three (3) strands of barbed wire (or an approved equivalent) will be installed consistent with this Standard (see Sheet 4, Mine Plan).

OC §858.H.5. **Screening of the site shall be achieved by planting trees of a variety approved by the Director along all property lines adjacent to a public road right-of-way or a recorded residential subdivision. Adequate screening can generally be achieved with evergreen trees planted in two (2) staggered rows, with twenty (20) feet between the rows and between the trees in each row. As an alternative, oleanders or shrubs of a similar size and density may be planted in the same pattern at ten (10) foot intervals. The plant species and planting plan and timetable shall be designated in the Mining and Reclamation Plan. All required plants shall be maintained in a good horticultural manner. In areas where it is found that the planting of trees or shrubs will not achieve the desired screening effect due to soil conditions, the Director may approve an alternate method of screening consisting of meandering dirt berms of sufficient height to screen the site. (Amended by Ord. T-252 adopted 12-9-80)**

Based on our experience with soils in the vicinity of the Project, Granite would anticipate significant challenge with the establishment and maintenance of evergreen trees and/or varietal shrubs. As an alternative, and consistent with this Standard, visual screening of the site will be achieved through the use of perimeter screening berms (six feet in height), which also serve as noise control berms to limit potential off-site noise impacts (see Sheet 4, Mining Plan).

OC §858.H.6. **The first one hundred (100) feet of access road(s) intersecting with a County maintained road shall be surfaced in a manner approved by the Board and shall not exceed a two (2) percent grade and shall have a width of not less than twenty-four (24) feet.**

N/A – The Project will utilize internal access roads from the existing Coalinga Facility (see Figure 2, Site Overview Map and Sheet 2, Existing Site Features).

OC §858.H.7. **Where an access road intersects a County Maintained road, it shall be improved with a driveway approach constructed to Fresno County Standards.**

N/A – See response to OC §858.H.6.

OC §858.H.8. **All interior roads within the site shall be maintained so as to control the creation of dust.**

The Project will comply with the San Joaquin Valley Air Pollution Control District ("SJVAPCD") regulations related to fugitive dust. A water truck will be utilized at the site and water will be applied to unpaved portions of internal haul roads and working areas as frequently as necessary to prevent fugitive dust emissions. The number of daily applications of water varies depending on factors such as daily surface disturbance activities, temperature, and wind conditions. Alternately, other methods, such as the application of dust palliatives or gravel, may be applied to the internal haul roads to minimize fugitive dust (see Operational Statement, Question 11).

OC §858.H.9. **Traffic control and warning signs shall be installed as required by the Commission at the intersection of all private roads with public roads. The placement, size, and wording of these signs shall be approved by the Director. (Amended by Ord. T-252 adopted 12-9-80)**

N/A – See response to OC §858.H.6.

OC §858.H.10. **When the plan calls for resoiling, coarse hard mine waste shall be leveled and covered with a layer of finer material or weathered waste. A soil layer shall then be placed on this prepared surface. Surface mine operators who do not salvage soil during the initial operations shall attempt, where feasible, to upgrade remaining materials. The use of soil conditioners, mulches, or imported topsoil shall be considered where revegetation is part of the Mining and Reclamation Plan and where such measures appear necessary. It is not justified; however, to denude adjacent areas of their soil, for any such denuded areas must in turn be reclaimed.**

OC §858.H.11. **The species selected for revegetation shall be those with good survival characteristics for the topography, resoiling characteristics, and climate of the mined area. The operator shall provide a schedule and methodology for monitoring vegetation and replacing vegetation should the Department determine that replacement is necessary.**

OC §858.H.12. **Additional vegetative planting may be required in the interest of erosion control.**

See Resoiling and Revegetation section in Part A of the Reclamation Plan.

OC §858.H.13. **Grading and revegetation shall be designed to minimize erosion and to convey surface runoff to natural drainage courses or interior basins designed for water storage. Basins that will store water during periods of surface runoff shall be designed to prevent erosion of spillways when these basins have outlet to lower ground.**

OC §858.H.14. **Stockpiles of overburden and minerals shall be managed to minimize water and wind erosion.**

OC §858.H.15. **Erosion control facilities such as settling basins, ditches, stream bank stabilization, and dikes shall be constructed and maintained where necessary to control erosion.**

OC §858.H.16. **Extraction operations adjacent to any flowing stream shall be separated from the stream by closed dikes. No extractions within the stream will be permitted.**

OC §858.H.17. **All water utilized in the plant operation shall be disposed of behind a closed dike so that it will not cause impairment of water in any stream.**

OC §858.H.18. **Operations shall be conducted to substantially prevent siltation of groundwater recharge areas.**

OC §858.H.19. **Settling ponds or basins shall be constructed to prevent potential sedimentation of streams at operations where they will provide a significant benefit to water quality.**

See Hydrology and Water Quality section in Part A of the Reclamation Plan.

OC §858.H.20.a. **Good operating practices shall at all times be utilized to minimize noise, vibration, dust and unsightliness. In reviewing a proposal the Planning Commission shall consider:**

a. The location of the processing plant.

N/A – The Project will utilize the processing plant at the existing Coalinga Facility.

b. The location where unused equipment will be stored.

Designated storage areas for unused equipment are identified on Sheet 2, Existing Site Features, and described in the Operational Statement, Questions 10 and 12.

c. Proposals for the removal of all structures, metallic equipment, debris, or objects upon conclusion of the extraction operations.

See Disposition of Old Equipment section in Part A of the Reclamation Plan.

OC §858.H.21. Operating hours may be limited to designated periods except during periods of public emergency affecting the health and welfare of the community requiring continuous operation.

No change to the existing permitted hours of operation are requested.

OC §858.H.22. Any night lighting established on the property shall be arranged and controlled so as not to illuminate public rights-of-way or adjacent properties.

Consistent with existing practices, portable light towers and permanent light fixtures will be utilized to provide for a safe operating environment. Lighting will be shielded and arranged/controlled so as not to illuminate public rights-of-way or adjacent properties (see Operational Statement, Question 17).

OC §858.H.23. Processing and storage yards shall be centrally located on the site whenever possible. (Added by Ord. 490.189 adopted 10-29-79)

The Project will utilize the processing plant at the existing Coalinga Facility, and will continue to use the existing storage areas shown on Sheet 2, Existing Site Features.

OC §858.H.24. All surface mining operations and reclamation activities shall be conducted consistent with all policies of the Noise Element of the Fresno County General Plan. (Added by Ord. 490.189 adopted 10-29-79)

A site-specific noise study was conducted for the proposed Project and concludes that, with the incorporation of noise control berms along the eastern and southern boundaries, project activities will be compliant with the Noise Element of the Fresno County General Plan (see Appendix H, Noise Study, and Operational Statement, Question 11).

OC §858.H.25. **The Department shall consider the potentially adverse environmental effects of surface mining operations and will generally require that:**

a. Disturbances of vegetation and overburden in advance of mining activities be minimized.

b. Sufficient topsoil be saved to perform site reclamation in accordance with the Mining and Reclamation Plan.

c. All reasonable and practical measures be taken to protect the habitat of fish and wildlife.

d. Temporary stream or watershed diversion be restored.

e. Permanent piles or dumps of mine waste rock and overburden be stabilized and not restrict the natural drainage without suitable provisions for diversion and toxic materials be removed or confined to control leaching. (Added by Ord. 490.189 adopted 10-29-79)

See Resoiling and Revegetation, Environmental Setting and Protection of Fish and Wildlife Habitat, and Hydrology and Water Quality sections in Part A of the Reclamation Plan.

OC §858.H.26. **Reclamation of mined lands shall be implemented in conformance with applicable performance standards as set forth in the State Regulations Sections 3703 et seq. pertaining to the subjects listed below:**

a. Wildlife habitat.

b. Backfilling, regrading, slope stability, and recontouring.

c. Revegetation.

d. Drainage, diversion structures, waterways, and erosion control.

e. Prime and other agricultural land reclamation.

f. Building, structure, and equipment removal.

g. Stream protection including surface and groundwater.

h. Topsoil salvage, maintenance, and redistribution.

I. Tailing and mine waste management.

j. Closure of surface openings.

The Reclamation Plan has been developed consistent with SMARA statutes and regulations.

GRANITE CONSTRUCTION COMPANY

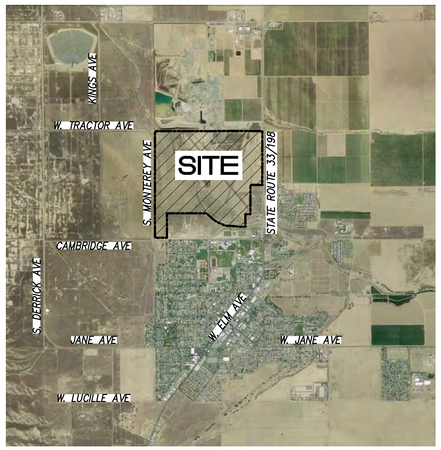
COALINGA MINE EXPANSION PROJECT

COUNTY OF FRESNO
CITY OF COALINGA

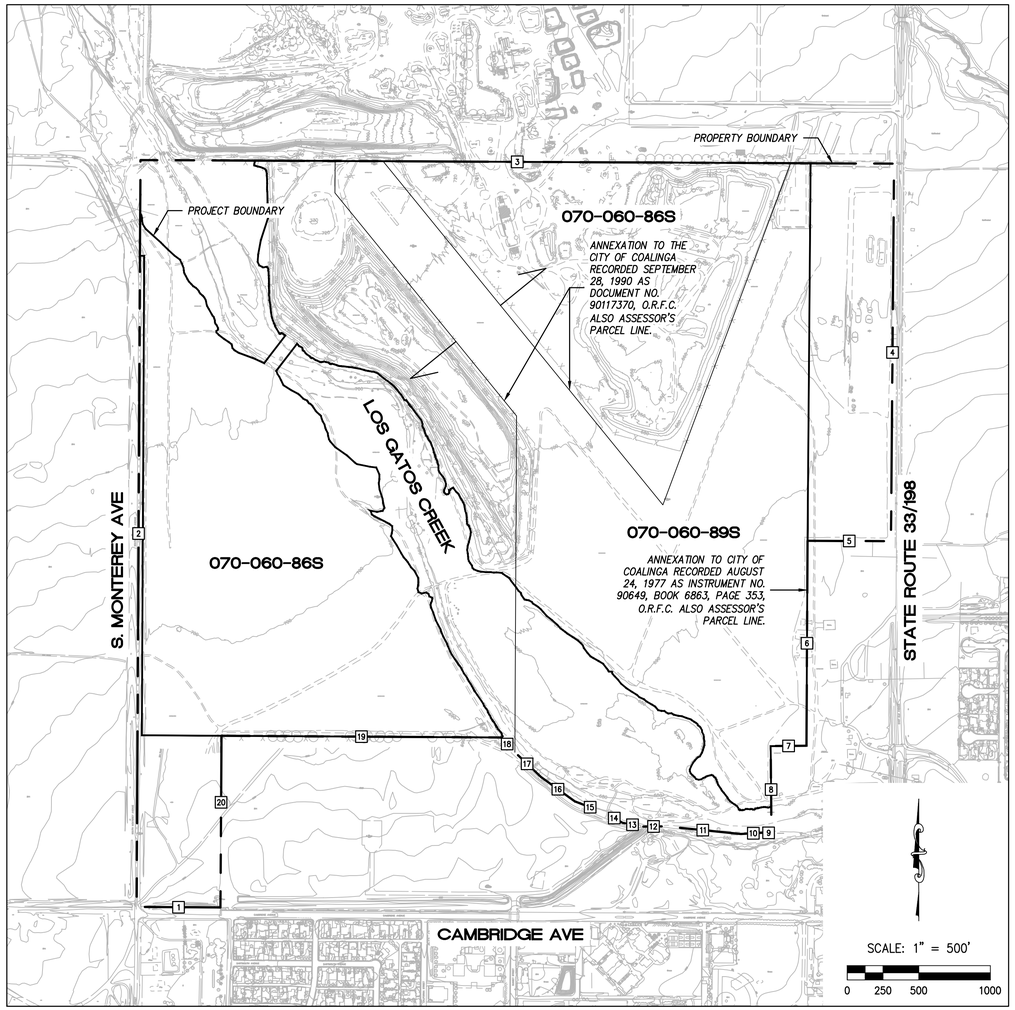
PROPERTY LINE METES AND BOUNDS				
NO.	DELTA OR BRG.	RADIUS(ft)	LENGTH(ft)	REMARKS
1	N89°32'31"E	-----	585.65	*
2	N00°31'17"W	-----	5269.47	*
3	N89°27'27"E	-----	5274.10	*
4	S00°20'54"E	-----	2638.50	*
5	S89°29'54"W	-----	583.02	*
6	N00°17'29"E	-----	1432.57	**
7	N89°28'43"E	-----	250.07	**
8	N00°31'22"W	-----	608.23	**
9	N83°58'01"W	-----	39.97	**
10	N85°42'59"E	-----	174.62	*
11	S85°00'22"E	-----	534.12	*
12	N88°15'38"E	-----	157.61	*
13	S80°00'13"E	-----	138.64	*
14	S60°49'46"E	-----	137.20	*
15	S70°04'16"E	-----	231.95	*
16	S54°57'25"E	-----	289.01	*
17	S47°25'00"E	-----	270.31	*
18	S42°42'33"E	-----	118.28	*
19	N89°32'21"E	-----	1955.92	*
20	N00°27'16"W	-----	1200.00	*

* METES AND BOUNDS ARE PER FEBRUARY 2007 ALTA/ACSM LAND TITLE SURVEY BY MCPHEETERS AND ASSOCIATES, INC. PROJECT BOUNDARY SHOWN ON THESE PLANS IS APPROXIMATED FROM ALTA SURVEY.

** METES AND BOUNDS ESTIMATED FROM CAD FILE



VICINITY MAP
NOT TO SCALE



SITE OVERVIEW MAP
SCALE: 1" = 500'

OWNER/OPERATOR/APPLICANT

GRANITE CONSTRUCTION COMPANY
ATTN: CANDICE LONGNECKER
2716 GRANITE COURT
FRESNO, CA 93706
PHONE: 559-441-5700

ENGINEER

CHANG CONSULTANTS
WAYNE CHANG, PE
P.O. BOX 9496
RANCHO SANTA FE, CA 92067-4496
MOBILE: 858-692-0760
FAX: 858-832-1402

TOPOGRAPHY SOURCE

PREPARED BY:
VERTICAL MAPPING RESOURCES, INC.
193 BLUE RAVINE ROAD, SUITE 150
FOLSOM, CA 95630
PHONE: 916-817-1486
FAX: 916-817-1487

PHOTO DATE: SEPTEMBER 30, 2014

ASSESSOR'S PARCEL NUMBERS

APN 07006086s (FRESNO COUNTY) AND
APN 07006089s (CITY OF COALINGA)

LEGAL DESCRIPTION

A PORTION OF SECTION 29, TOWNSHIP 20 SOUTH, RANGE 15 EAST, MOUNT DIABLO BASE AND MERDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF;

NOTES

1. PROJECT BOUNDARY INCLUDES THE MINING AREA, SETBACK AREAS, NOISE CONTROL BERMS, AND PERIMETER ACCESS ROADS.
2. THE LOS GATOS CREEK 100-YEAR FLOODPLAIN SHOWN ON THESE PLANS WAS OBTAINED FROM THE ANALYSIS IN CHANG CONSULTANTS JULY 16, 2015 REPORT, "HYDROLOGIC AND HYDRAULIC ANALYSES FOR GRANITE CONSTRUCTION COMPANY'S COALINGA MINE EXPANSION PROJECT." MINING SETBACKS FROM EXISTING FLOODPLAIN WERE BASED ON HYDRAULIC RESULTS AND VARY (50 FEET MINIMUM FROM NEW EXCAVATION AREAS).
3. THE PROJECT AND PROPERTY BOUNDARIES COINCIDE ALONG METES AND BOUNDS ITEMS 6, 7, AND 19 AS WELL AS A PORTION OF ITEMS 2, 3, AND 8.
4. FINAL MINING FOOTPRINT, SLOPES AND DEPTH MAY VARY DEPENDING ON FIELD CONDITIONS, ACCESSIBILITY OF PRODUCT, MARKET CONDITIONS, ABILITY OF OPERATOR TO MINE AND MEET THE RECLAMATION REQUIREMENTS, AND MARKET DEMAND.

LEGEND

EXISTING CONTOUR — 300

PARCEL BOUNDARY (501.65 ACRES)

PROPERTY BOUNDARY (501.65 ACRES)

PROJECT BOUNDARY (368.58 ACRES)

SHEET INDEX

REGISTERED PROFESSIONAL ENGINEER
WAYNE W. CHANG
No. 46548
Exp. 6/30/17
CIVIL
STATE OF CALIFORNIA

GRANITE CONSTRUCTION COMPANY
2716 GRANITE COURT
FRESNO, CA 93706

GRANITE CONSTRUCTION COMPANY
COALINGA MINE EXPANSION PROJECT
TITLE SHEET

ChangConsultants
Civil Engineering-Hydrology-Hydraulics-Sedimentation
P.O. Box 9496
Rancho Santa Fe, CA 92067-4496
T: (858) 692-0760
F: (858) 832-1402
wayne@changconsultants.com • www.changconsultants.com

	Date	Revision
D		
C		
B		
A		

AUGUST 6, 2015

EXISTING COALINGA FACILITY

EXISTING WELL

QC/QA LAB

EXISTING ENTRANCE ROAD TO COALINGA FACILITY

EXISTING 100-YEAR FLOODPLAIN

FORMER FUEL STORAGE

EXISTING INTERNAL ACCESS ROAD

APPROXIMATE LIMITS OF EXISTING EQUIPMENT PARKING

EXISTING SHOP BUILDINGS

EXISTING FENCED AREA

EXISTING EQUIPMENT PARKING

EXISTING OIL AND CHEMICAL STORAGE

LIMITS OF EXISTING SOLAR ARRAY

EXISTING FENCE

LOS GATOS CREEK

EXISTING MINE AREA

COMMERCIALLY ZONED PROPERTY

STATE ROUTE 33/198

S. MONTEREY AVENUE

30' EASEMENT PER DOCUMENT RECORDED IN VOLUME 1274, PAGE 204, O.R.F.C.

MATCH LINE SEE ABOVE RIGHT

MATCH LINE SEE BELOW LEFT

RESERVED PROPERTY

LEGEND

EXISTING CONTOUR	300
EXISTING EASEMENT	
EXISTING FENCE	
EXISTING FLOODPLAIN	
PROPERTY BOUNDARY (501.65 ACRES)	
PROJECT BOUNDARY (368.58 ACRES)	

SCALE: 1" = 200'

0 100 200 400

SHEET 2 OF 7

REGISTERED PROFESSIONAL ENGINEER WAYNE W. CHANG No. 46548 Exp. 6/30/21 CIVIL STATE OF CALIFORNIA

GRANITE CONSTRUCTION COMPANY
2716 GRANITE COURT
FRESNO, CA 93706

GRANITE CONSTRUCTION COMPANY

COALINGA MINE EXPANSION PROJECT

EXISTING SITE FEATURES

ChangConsultants
Civil Engineering-Hydrology-Hydraulics-Sedimentation
P.O. Box 9496 T: (858) 692-0760
Rancho Santa Fe, CA 92067-4496 F: (858) 832-1402
wayne@changconsultants.com • www.changconsultants.com

	Date	Revision
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MARCH 24, 2020

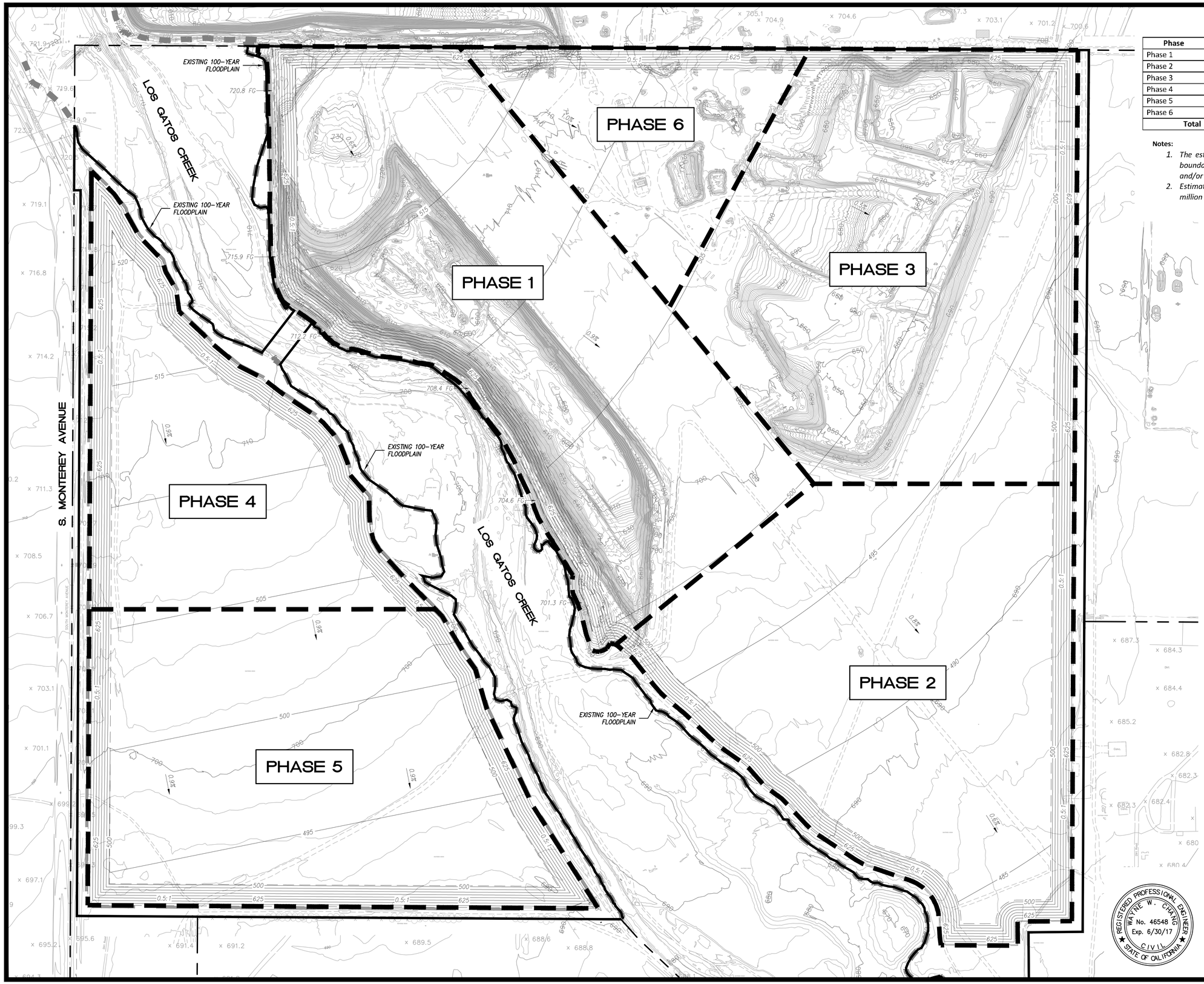

TABLE 1
ESTIMATED PROJECT PHASING

Phase	Est. Acres	Est. Tons (millions)	Est. Years to Completion
Phase 1	78	19	13
Phase 2	79	22	15
Phase 3	74	20	13
Phase 4	46	6	4
Phase 5	69	9	6
Phase 6	22	6	4
Total	**368**	**82**	**55**

Notes:

1. *The estimated project phasing is provided only as a guideline. Actual phasing depths, boundaries, quantities and timelines may be affected by unforeseen changes in geology and/or market conditions.*
2. *Estimated years to completion calculated using historical average production rate of 1.5 million tons/year.*

LEGEND

EXISTING CONTOUR
EXISTING EASEMENT
EXISTING FLOODPLAIN
PROPOSED MINING CONTOUR
PHASE BOUNDARY
PROPERTY BOUNDARY (501.65 ACRES)
PROJECT BOUNDARY (368.58 ACRES)

NOTE

FINAL MINING FOOTPRINT, SLOPES AND DEPTH MAY VARY DEPENDING ON FIELD CONDITIONS, ACCESSIBILITY OF PRODUCT, MARKET CONDITIONS, ABILITY OF OPERATOR TO MINE AND MEET THE RECLAMATION REQUIREMENTS, AND MARKET DEMAND.

SCALE: 1" = 200'
0 100 200 400

SHEET 3 OF 7

REGISTERED PROFESSIONAL ENGINEER
WAYNE W. CHANG
No. 46548
Exp. 6/30/17
CIVIL
STATE OF CALIFORNIA

GRANITE CONSTRUCTION COMPANY
2716 GRANITE COURT
FRESNO, CA 93706

GRANITE CONSTRUCTION COMPANY
COALINGA MINE EXPANSION PROJECT
MINE PHASING OVERVIEW

ChangConsultants
Civil Engineering-Hydrology-Hydraulics-Sedimentation
P.O. Box 9496
Rancho Santa Fe, CA 92067-4496
T: (858) 692-0760
F: (858) 832-1402
wayne@changconsultants.com • www.changconsultants.com

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CONCEPTUAL CONVEYOR ALIGNMENT

EXISTING 100-YEAR FLOODPLAIN

APPROXIMATE TOPSOIL STOCKPILE LOCATION (SUBJECT TO CHANGE AS MINING PROGRESSES)

APPROXIMATE LOCATION OF PROPOSED ACCESS FROM MINING PIT TO ACCESS ROAD

APPROXIMATE LOCATION OF PROPOSED ACCESS RAMP INTO MINING PIT.

LOS GATOS CREEK

CONCEPTUAL CONVEYOR ALIGNMENT

TYPICAL HAUL ROAD AND CONVEYOR LOCATIONS IN PIT. LOCATIONS CAN VARY AS MINING PROGRESSES

PROPOSED NOISE CONTROL/ VISUAL SCREENING BERM. (TYPICAL) SEE DETAIL AT RIGHT.

80' SETBACK

S. MONTEREY AVENUE

APPROXIMATE TOPSOIL STOCKPILE LOCATION (SUBJECT TO CHANGE AS MINING PROGRESSES)

PROPOSED NOISE CONTROL/VISUAL SCREENING BERM. (TYPICAL) SEE DETAIL AT RIGHT.

TYPICAL HAUL ROAD AND CONVEYOR LOCATIONS IN PIT. LOCATIONS CAN VARY AS MINING PROGRESSES.

TYPICAL HAUL ROAD LOCATION IN PIT. LOCATION CAN VARY AS MINING PROGRESSES

50' SETBACK

PROPOSED NOISE CONTROL/VISUAL SCREENING BERM. (TYPICAL) SEE DETAIL AT RIGHT.

720.8 FG
715.9 FG
712.2 FG
708.4 FG
704.6 FG
701.3 FG

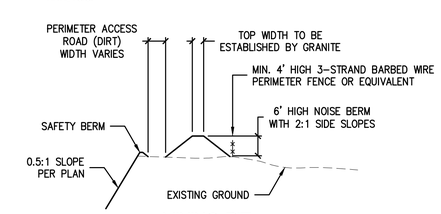
A A' B B' C C' D D'

LEGEND

- EXISTING CONTOUR
- EXISTING 100-YEAR FLOODPLAIN
- EXISTING EASEMENT
- PROPERTY BOUNDARY (501.65 ACRES)
- PROJECT BOUNDARY (368.58 ACRES)
- PROPOSED CONTOUR
- PROPOSED TOP/TOE OF SLOPE
- MIN. 4' HIGH 3-STRAND BARBED WIRE PERIMETER FENCE OR EQUIVALENT
- TYPICAL HAUL ROAD
- PROPOSED CONCEPTUAL CONVEYOR ALIGNMENT
- PROPOSED NOISE CONTROL/VISUAL SCREENING BERMS
- PROPOSED ACCESS RAMP
- PROPOSED PERIMETER ACCESS ROAD (DIRT)
- FINISHED GRADE SPOT ELEVATION — 704.6 FG

NOTES

1. FINAL MINING FOOTPRINT, SLOPES AND DEPTH MAY VARY DEPENDING ON FIELD CONDITIONS, ACCESSIBILITY OF PRODUCT, MARKET CONDITIONS, ABILITY OF OPERATOR TO MINE AND MEET THE RECLAMATION REQUIREMENTS, AND MARKET DEMAND.
2. INTERNAL HAUL ROADS ARE SHOWN IN APPROXIMATE LOCATION AND MAY CHANGE THROUGHOUT THE LIFE OF THE PROJECT.
3. CREEK CROSSING MAY CONSIST OF AN ELEVATED CONVEYOR, LOW-FLOW CROSSING, RAILCAR BRIDGE OR SIMILAR.
4. MINIMUM 50-FOOT MINING SETBACKS FROM LOS GATOS CREEK FLOODPLAIN FOR NEW EXCAVATION AREAS PER PROJECT HYDRAULIC ANALYSIS.



MINING PIT PERIMETER DETAIL

NOT TO SCALE

SCALE: 1" = 200'

0 100 200 400

SHEET 4 OF 7

REGISTERED PROFESSIONAL ENGINEER WAYNE W. CHANG No. 46548 Exp. 6/30/21 CIVIL STATE OF CALIFORNIA

GRANITE CONSTRUCTION COMPANY
2716 GRANITE COURT
FRESNO, CA 93706

GRANITE CONSTRUCTION COMPANY

COALINGA MINE EXPANSION PROJECT

MINING PLAN

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Civil Engineering-Hydrology-Hydraulics-Sedimentation
P.O. Box 9496 T: (858) 692-0760
Rancho Santa Fe, CA 92067-4496 F: (858) 832-1402
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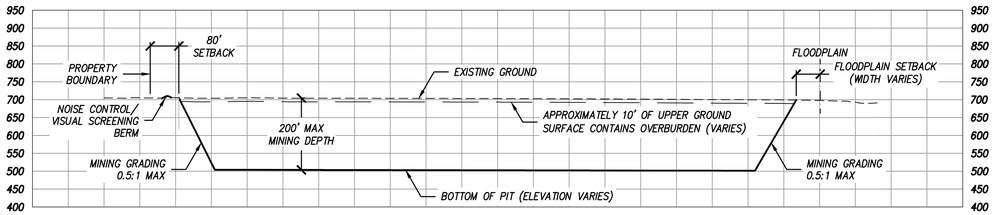
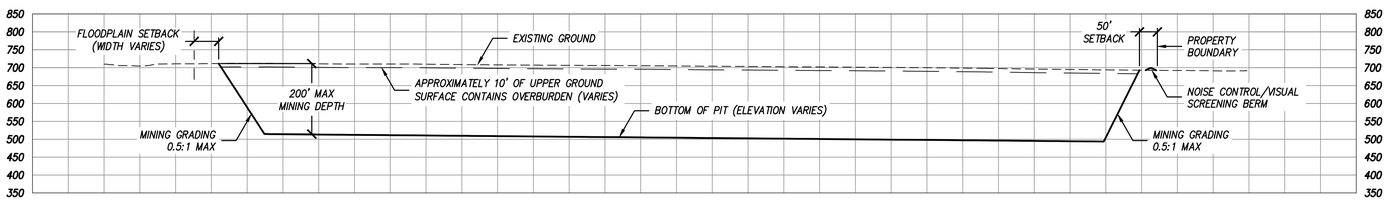
NOTES

1. GROUNDWATER DEPTHS ARE GENERALLY 100 FEET ON AVERAGE OR MORE BELOW PROPOSED BOTTOM OF PITS.
2. FINAL MINING FOOTPRINT, SLOPES AND DEPTH MAY VARY DEPENDING ON FIELD CONDITIONS, ACCESSIBILITY OF PRODUCT, MARKET CONDITIONS, ABILITY OF OPERATOR TO MINE AND MEET THE RECLAMATION REQUIREMENTS, AND MARKET DEMAND.



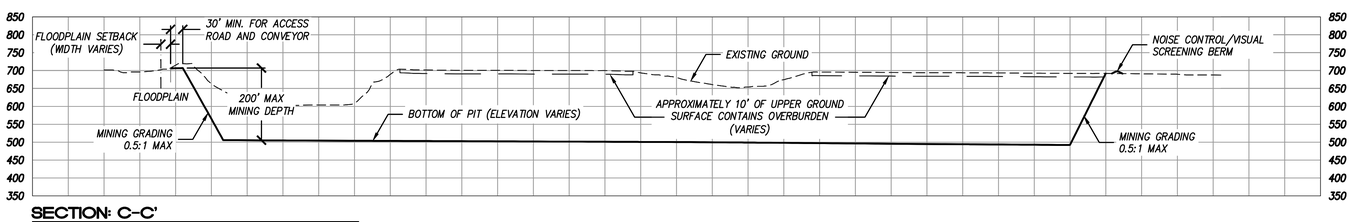
SECTION: A-A'

SCALE: HORIZ. 1"=200' VERT. 1"=200'



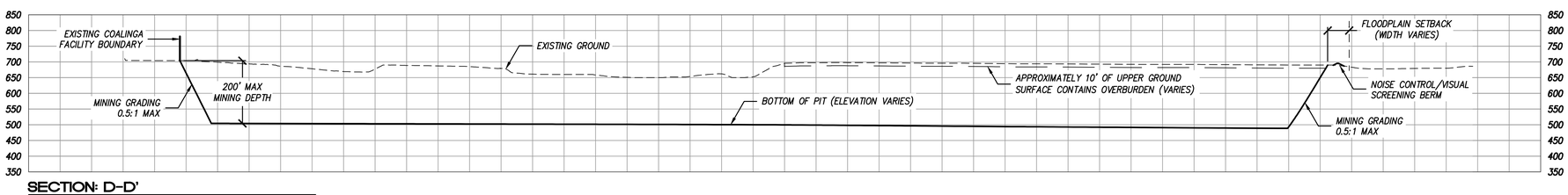
SECTION: B-B'

SCALE: HORIZ. 1"=200' VERT. 1"=200'



SECTION: C-C'

SCALE: HORIZ. 1"=200' VERT. 1"=200'



SECTION: D-D'

SCALE: HORIZ. 1"=200' VERT. 1"=200'

SCALE: 1" = 200'

0 100 200 400

SHEET 5 OF 7

REGISTERED PROFESSIONAL ENGINEER WAYNE W. CHANG No. 46548 Exp. 6/30/17 CIVIL STATE OF CALIFORNIA

GRANITE CONSTRUCTION COMPANY
2716 GRANITE COURT
FRESNO, CA 93706

GRANITE CONSTRUCTION COMPANY

COALINGA MINE EXPANSION PROJECT

MINING PLAN CROSS-SECTIONS

ChangConsultants
Civil Engineering-Hydrology-Hydraulics-Sedimentation
P.O. Box 9496 T: (858) 692-0760
Rancho Santa Fe, CA 92067-4496 F: (858) 832-1402
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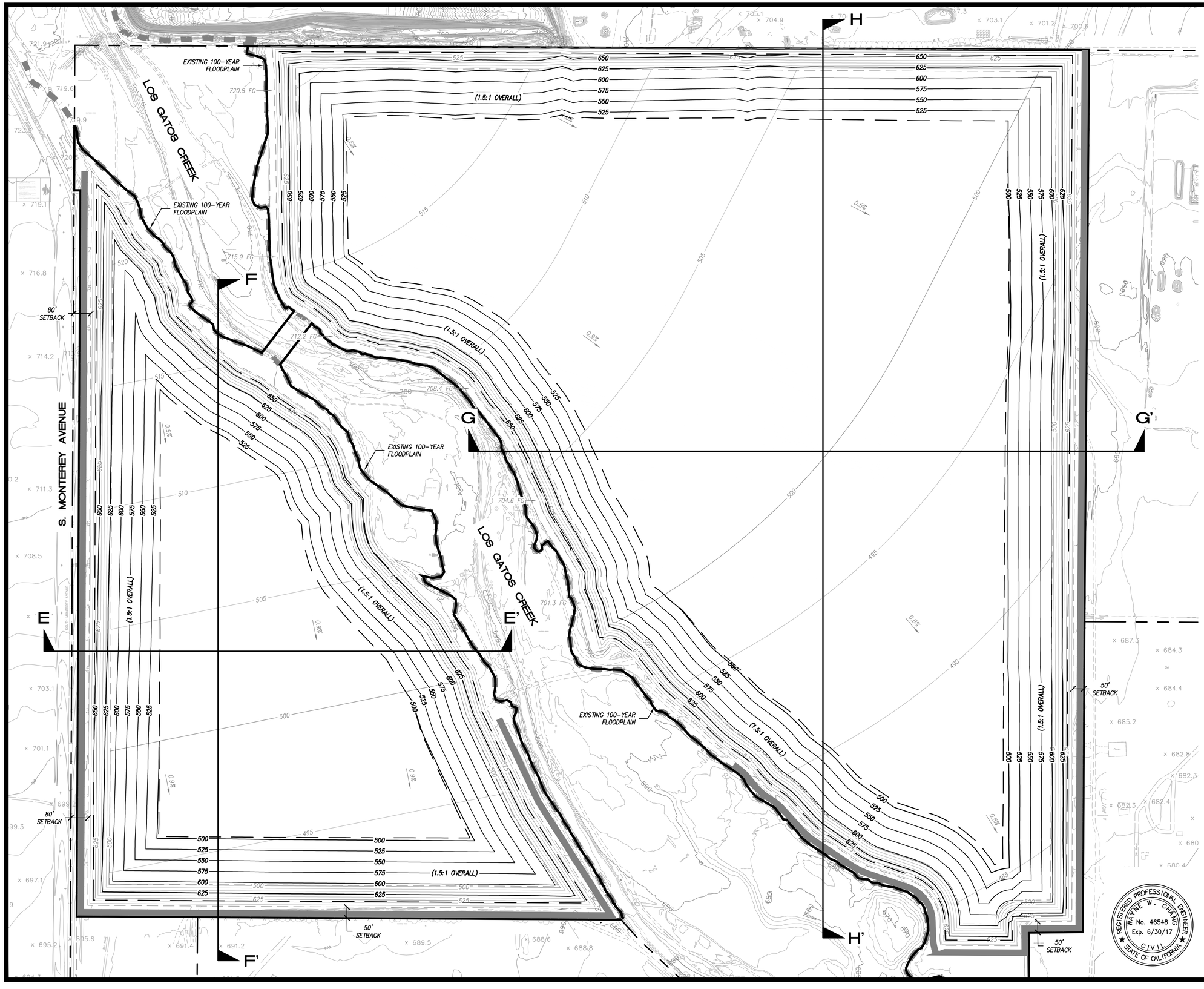
AUGUST 6, 2015



LEGEND

- EXISTING CONTOUR
- EXISTING 100-YEAR FLOODPLAIN
- EXISTING EASEMENT
- PROPERTY BOUNDARY (501.65 ACRES)
- PROJECT BOUNDARY (368.58 ACRES)
- MINE PLAN CONTOUR
- PROPOSED BACKFILL CONTOUR
- PROPOSED TOP/TOE OF SLOPE
- PROPOSED NOISE CONTROL/VISUAL SCREENING BERMS

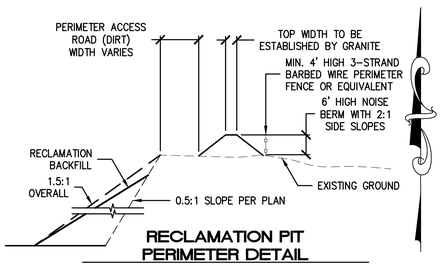
NOTES

1. CONSISTENT WITH THE FRESNO COUNTY MINING AND RECLAMATION STANDARDS, AS WELL AS RECOMMENDATIONS PROVIDED BY THE PROJECT GEOTECHNICAL ENGINEER, FINAL RECLAIMED SLOPES WILL NOT EXCEED 1.5H:1V. THE OVERALL FINAL RECLAIMED SLOPE ANGLE OF 1.5H:1V (OR FLATTER) MAY BE ACHIEVED THROUGH ONE OF THE FOLLOWING CONFIGURATIONS:
   - 1.5H:1V CUT SLOPE WITH NO BACKFILL;
   - 0.5H:1V CUT SLOPE WITH BACKFILL AT 2H:1V TO FULL SLOPE HEIGHT; OR,
   - 0.5H:1V CUT SLOPE WITH BACKFILL AT 2H:1V TO A DISTANCE OF 50 VERTICAL FEET OR LESS FROM THE TOP OF SLOPE.
2. FOR ILLUSTRATIVE PURPOSES ONLY, THE MOST LIKELY SLOPE RECLAMATION SCENARIO IS SHOWN ON THE RECLAMATION PLAN SHEETS/FIGURES (A 0.5H:1V CUT SLOPE WITH BACKFILL AT 2H:1V TO A DISTANCE OF 50 VERTICAL FEET OR LESS FROM THE TOP OF SLOPE); HOWEVER, GRANITE RESERVES THE RIGHT TO ACHIEVE THE FINAL RECLAMATION SLOPE ANGLES WITH ANY OF THE THREE ANALYZED CONFIGURATIONS.
3. FINAL RECLAMATION ELEVATIONS AND EXTENTS MAY VARY BASED ON THE AMOUNT AND QUALITY OF MATERIAL UNCOVERED, THE AVAILABILITY OF BACKFILL (E.G. OVERBURDEN), AND THE ABILITY OF THE PRODUCER TO MINE AND MEET THE RECLAMATION REQUIREMENTS.
5. NOISE CONTROL BERMS, PERIMETER ACCESS ROADS, AND PERIMETER FENCING TO REMAIN FOLLOWING RECLAMATION.
6. DISTURBED SURFACES WITHIN THE PROJECT AREA WILL BE REVEGETATED WITH THE EXCEPTION OF CUT SLOPES, NOISE CONTROL BERMS AND PERIMETER ACCESS ROADS, WITH THE FOLLOWING SEED MIX:

REVEGETATION SEED MIX

Common Name	Plant Species	Application Rate (lbs (PLS)/acre)
Cattle spinach	*Atriplex polycarpa*	4
California buckwheat	*Eriogonum fasciculatum var. polifolium*	3
Small fescue	*Festuca microstachys*	6
Desert plantain	*Plantago ovata*	4

Note:
Modifications to this seed mix may be appropriate based on availability from suppliers, cost, and species determined most suitable at the time planting occurs. Ideally, revegetation will occur in the summer to early fall.



RECLAMATION PIT PERIMETER DETAIL
NOT TO SCALE

SCALE: 1" = 200'
0 100 200 400

SHEET 6 OF 7

REGISTERED PROFESSIONAL ENGINEER
WAYNE W. CHANG
No. 46548
Exp. 6/30/17
CIVIL
STATE OF CALIFORNIA

GRANITE CONSTRUCTION COMPANY
2716 GRANITE COURT
FRESNO, CA 93706

GRANITE CONSTRUCTION COMPANY
COALINGA MINE EXPANSION PROJECT
RECLAMATION PLAN

ChangConsultants
Civil Engineering-Hydrology-Hydraulics-Sedimentation
P.O. Box 9496
Rancho Santa Fe, CA 92067-4496
T: (858) 692-0760
F: (858) 832-1402
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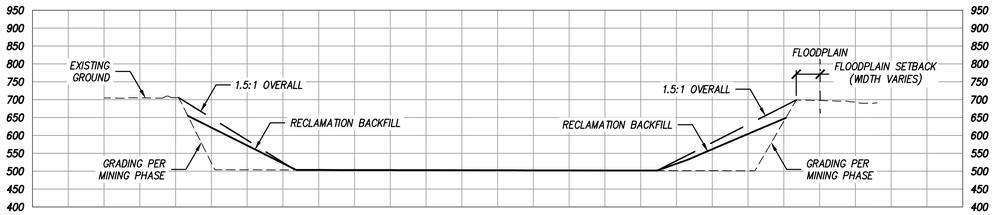
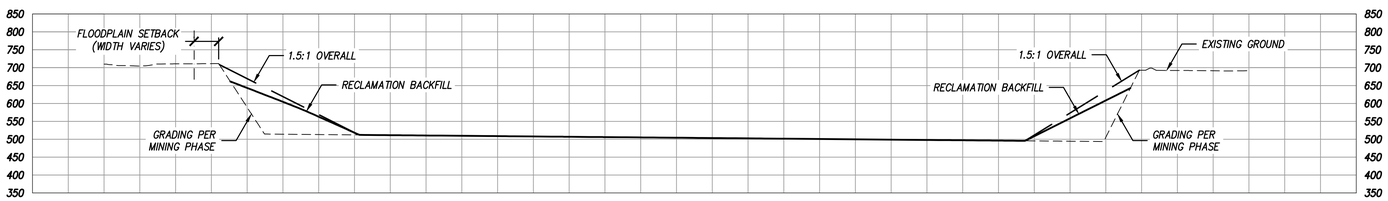


SECTION: E-E'

SCALE: HORIZ. 1"=200' VERT. 1"=200'

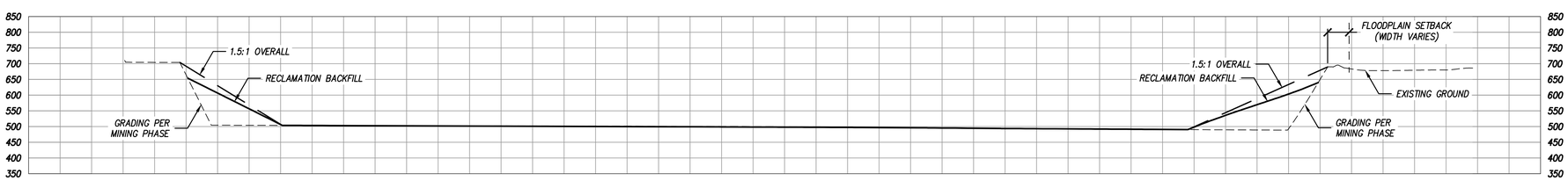


SECTION: F-F'

SCALE: HORIZ. 1"=200' VERT. 1"=200'

SECTION: G-G'

SCALE: HORIZ. 1"=200' VERT. 1"=200'



SECTION: H-H'

SCALE: HORIZ. 1"=200' VERT. 1"=200'

NOTES

1. CONSISTENT WITH THE FRESNO COUNTY MINING AND RECLAMATION STANDARDS, AS WELL AS RECOMMENDATIONS PROVIDED BY THE PROJECT GEOTECHNICAL ENGINEER, FINAL RECLAIMED SLOPES WILL NOT EXCEED 1.5H:1V. THE OVERALL FINAL RECLAIMED SLOPE ANGLE OF 1.5H:1V (OR FLATTER) MAY BE ACHIEVED THROUGH ONE OF THE FOLLOWING CONFIGURATIONS:
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3. FINAL RECLAMATION ELEVATIONS AND EXTENTS MAY VARY BASED ON THE AMOUNT AND QUALITY OF MATERIAL UNCOVERED, THE AVAILABILITY OF BACKFILL (E.G. OVERBURDEN), AND THE ABILITY OF THE PRODUCER TO MINE AND MEET THE RECLAMATION REQUIREMENTS.
4. NOISE CONTROL BERMS, PERIMETER ACCESS ROADS, AND PERIMETER FENCING TO REMAIN FOLLOWING RECLAMATION.

SCALE: 1" = 200'

0 100 200 400

SHEET 7 OF 7

REGISTERED PROFESSIONAL ENGINEER
WAYNE W. CHANG
No. 46548
Exp. 6/30/17
CIVIL
STATE OF CALIFORNIA

GRANITE CONSTRUCTION COMPANY
2716 GRANITE COURT
FRESNO, CA 93706

GRANITE CONSTRUCTION COMPANY

COALINGA MINE EXPANSION PROJECT

RECLAMATION PLAN CROSS-SECTIONS

ChangConsultants
Civil Engineering-Hydrology-Hydraulics-Sedimentation
P.O. Box 9496
Rancho Santa Fe, CA 92067-4496
T: (858) 692-0760
F: (858) 832-1402
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AUGUST 6, 2015

10680 White Rock Road
Suite 100
Rancho Cordova, CA 95670

916.366.0632 PHONE
916.366.1501 FAX

www.TRCsolutions.com

October 17, 2014

Candice Longnecker
Granite Construction Company
4001 Bradshaw Road
Sacramento, California 95827

Subject: Reconnaissance-Level Biological Survey for the ±860-Acre Property in Coalinga, Fresno County, California

Dear Candice:

Per your request, TRC conducted a preliminary assessment of the potential occurrence of special-status species and sensitive habitats on the ±860-acre property comprised of APN 07006022S, 07006086S, 07006089S, and 07006085S in Fresno County, CA ("Survey Area"; see Figure 1 – Survey Area Map). Our assessment involved the review of biological survey reports prepared for the Survey Area in 2007 by Environmental Site Restoration (ESR), a query of the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB), as well as a reconnaissance-level biological resources survey.

General Survey area Description

The Survey Area is highly disturbed with widespread evidence of routine disking and off-road vehicle use. A telephone conversation with Bruce Bunting, Granite's Plant Superintendent, revealed that the property is disked up to three times a year for vegetation management purposes. Vegetation cover ranges from very sparse and almost nonexistent to small, dense patches of ruderal (weedy) species such as Russian thistle (*Salsola tragus*), wormwood (*Artemisia* sp.) bromes (*Bromus* spp.) and oats (*Avena* sp.). Representative photographs of the survey area are attached.

Aside from Los Gatos Creek, which was completely dry during the survey, no evidence of wetlands or other aquatic features was observed within the survey area. These findings are consistent with the previous biological reports prepared by ESR. Based on Google Earth aerial photographs and quadrangle maps, the Los Gatos Creek appears to terminate just north of Huron, California with no connection to navigable water bodies.

Assessment Methods

Prior to the field survey, the ESR biological survey reports and CNDDB search results (see Figure 2 – CNDDB Map) were used to identify those areas of the survey area with the potential to support special-status species and sensitive habitats.

The Survey Area included the ±540-acre area bound by Cambridge Avenue to the south and South Monterey Avenue to the west, and the adjacent ±320-acre area immediately west of South Monterey Avenue. The larger area was mainly surveyed from a vehicle by driving transects across the property. Brief pedestrian surveys were used occasionally to inspect notable biological resources. Vehicle access to the smaller area was restricted by a perimeter ditch and locked gates, but was visually inspected from the perimeter.

Results

The CNDDB review and biological survey results are listed below in Table 1. Due to the disturbed nature of the Survey Area and lack of suitable habitats, most of the species with CNDDB occurrence records within 3 miles of the Survey Area are unlikely to occur on the property. Furthermore, no special-status species were observed during the field survey.

Table 1: Special-Status Species Assessed for Survey Area

Species	Regulatory Status[1]	Habitat Requirements	Potential for Occurrence	Survey Results (Present or Absent)
Plants				
California jewelflower *(Caulanthus californicus)*	FE, SE, 1B.1	Scrub, pinyon/juniper woodland, sandy grasslands from 180 to 3,000 feet elevation. Blooms from February through May.	None; highly disturbed nature of survey area and lack of suitable habitat preclude the presence of this species.	Absent
Hoover's eriastrum (*Eriastrum hooveri*)	FD, 4.2	Scrub, pinyon/juniper woodland, gravelly grasslands from 150 to 3,000 feet elevation. Blooms from March through July.	None; highly disturbed nature of survey area and lack of suitable habitat preclude the presence of this species.	Absent
Lemmon's jewelflower (*Caulanthus lemmonii*)	1B.1	Pinyon/juniper woodland, valley/foothill grasslands from 250 to 4,000 feet elevation. Blooms from March through May.	None; highly disturbed nature of survey area and lack of suitable habitat preclude the presence of this species.	Absent
San Joaquin woollythreads *(Monolopia congdonii)*	FE, 1B.2	Scrub and sandy grasslands from 180 to 2,500 feet elevation. Blooms from February through May.	None; highly disturbed nature of survey area and lack of suitable habitat preclude the presence of this species.	Absent

Species	Regulatory Status[1]	Habitat Requirements	Potential for Occurrence	Survey Results (Present or Absent)
Invertebrates				
Hopping's blister beetle (*Lytta hoppingi*)	No local, state or federal protection.	Inhabits the foothills at the southern end of the Central Valley.	Low; recorded CNDDB occurrence near survey area is from an unknown date prior to 1985.	Absent
Morrison's blister beetle (*Lytta morrisoni*)	No local, state or federal protection.	Inhabits the southern portion of the Central Valley.	Low; recorded CNDDB occurrence near survey area is possibly extirpated per the CNDDB.	Absent
Redheaded sphecid wasp (*Eucerceris ruficeps*)	No local, state or federal protection.	Sand dunes in Central Valley.	Low; recorded CNDDB occurrence near survey area was documented in 1970s.	Absent
Amphibians/Reptiles				
Blunt-nosed leopard lizard (*Gambelia sila*)	FE, SE; CFP	Resident of sparsely vegetated alkali and desert scrub habitats, in areas of low topographic relief. Seeks cover in mammal burrows, under shrubs or structures such as fence posts; does not excavate own burrows.	Moderate; 1989 CNDDB occurrence within Los Gatos Creek within a half-mile north of survey area. Other records occur downstream.	Absent
San Joaquin whipsnake (*Masticophis flagellum ruddocki*)	No local, state or federal protection.	Open, dry habitats with little or no tree cover. Found in valley grassland & saltbush scrub in the San Joaquin Valley. Needs mammal burrows for refuge and oviposition sites.	None; highly disturbed nature of survey area and lack of suitable habitat preclude the presence of this species.	Absent

Species	Regulatory Status[1]	Habitat Requirements	Potential for Occurrence	Survey Results (Present or Absent)
Birds				
Swainson's hawk (*Buteo swainsoni*)	ST	Nests in isolated trees or riparian woodlands adjacent to suitable foraging habitat such as agricultural fields and grasslands.	Low; very few suitable nest trees occur within the survey area and species is not prevalent in vicinity of survey area.	Absent
Tricolored blackbird (*Agelaius tricolor*)	CSC	Colonial species in the Central Valley and vicinity. Nests primarily in dense blackberry thickets, cattails, and tules.	None; survey area lacks suitable habitat for this species.	Absent
Western burrowing owl (*Athene cunicularia hypugaea*)	CSC	Nests in subterranean burrows often created by ground squirrels within open, dry grasslands; deserts; and scrublands characterized by low-growing vegetation.	Low; survey area provides limited suitable nesting habitat.	Absent
Mammals				
San Joaquin kit fox (*Vulpes macrotis mutica*)	FE, ST	Scrub and valley/foothill grasslands with sandy soil suitable for burrowing.	Low; disturbed nature of survey area and periodic disking reduces likelihood that species would utilize the survey area.	Absent

Species	Regulatory Status[1]	Habitat Requirements	Potential for Occurrence	Survey Results (Present or Absent)
Western mastiff bat (*Eumops perotis californicus*)	CSC	Inhabits semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, tall buildings, trees & tunnels.	None; survey area lacks suitable habitat for this species.	Absent

[1]Definitions

Federal		California		California Native Plant Society	
FE	Federally endangered	SE	State endangered	1B	Rare, threatened, or endangered in California and elsewhere
FT	Federally threatened	ST	State threatened	2B	Rare, threatened, or endangered in California, but more common elsewhere
FD	Federally delisted	CSC	California species of concern	4	Plants of limited distribution — A Watch List
		CFP	California fully protected	0.1	Seriously endangered in California
				0.2	Fairly endangered in California

Feel free to contact me if you have any questions or require more information.

Sincerely,

Michael Farmer
Senior Biologist

Attachments:
Figure 1 – Survey Area Map
Figure 2 – CNDDB Map
Representative Photographs

Legend

Survey Area

0 1,800 3,600 Feet

Granite Construction Coalinga Property

Survey Area Map

Figure 1

TRC Results you can rely on

Service Layer Credits: Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
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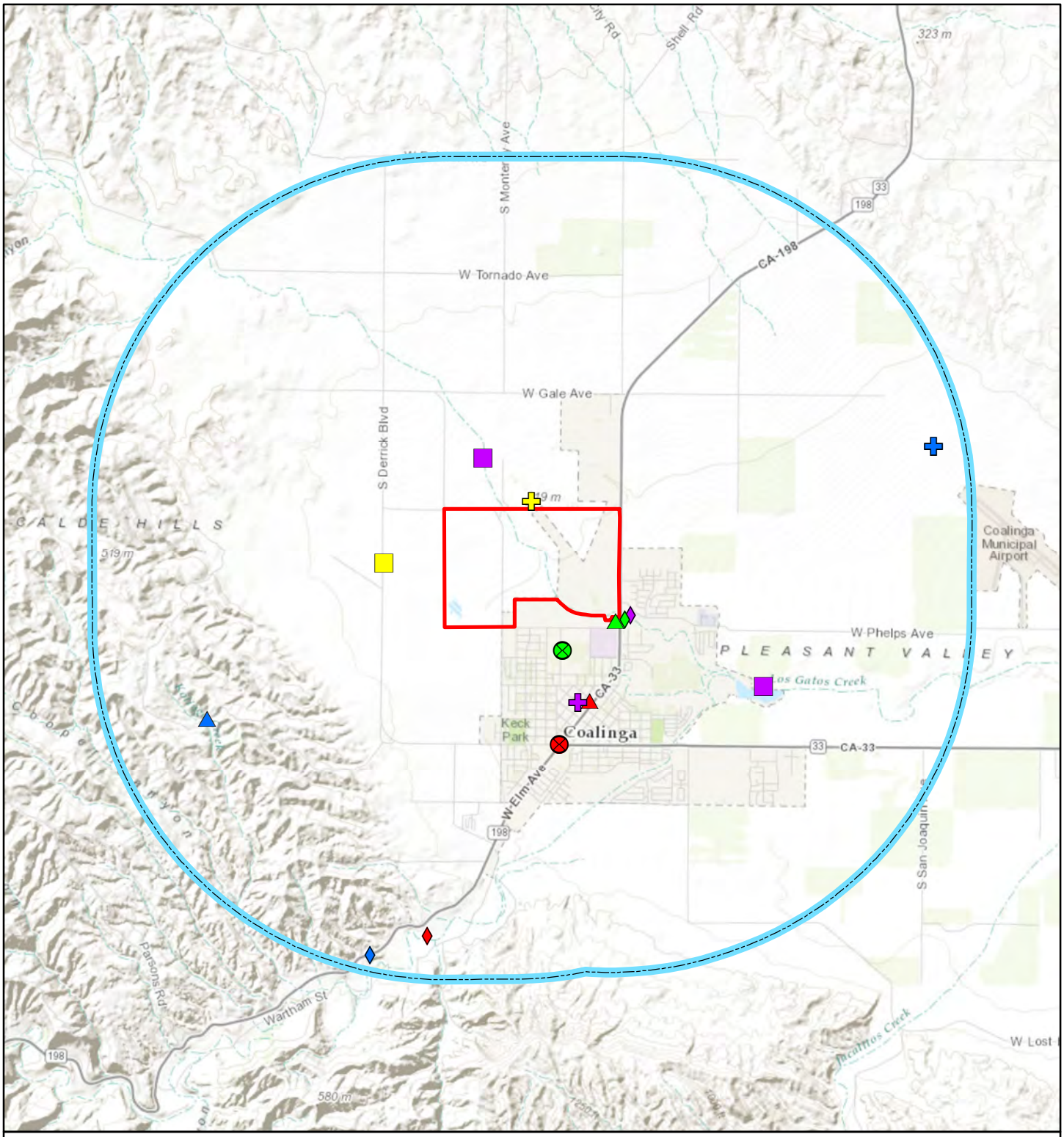

Legend

- Survey Area
- 3 Mile Buffer
- California jewelflower
- Hoover's eriastrum
- Lemmon's jewelflower
- San Joaquin woollythreads
- Hopping's blister beetle
- Morrison's blister beetle
- Redheaded sphecid wasp
- Blunt-nosed leopard lizard
- San Joaquin whipsnake
- San Joaquin kit fox
- Western mastiff bat
- Burrowing owl
- Swainson's hawk
- Tricolored blackbird

0 1.2 2.4 Miles

Granite Construction Coalinga Property

CNDDB Map

Figure 2

TRC Results you can rely on

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Coalinga Survey Area
Representative Photographs
All Photos Taken on August 19, 2014

View showing disturbed nature of survey area.

View showing typically vegetation densities within the survey area.

Coalinga Survey Area
Representative Photographs
All Photos Taken on August 19, 2014

View of Los Gatos Creek looking downstream.

View of uninhabited burrows along edges of Los Gatos Creek corridor.