County of Fresno

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

Planning Commission Staff Report
Agenda Item No. 5
November 9, 2017

SUBJECT: **Initial Study Application No. 7011 and Unclassified Conditional Use Permit Application No. 3509**

Allow continued aggregate (rock, sand, gravel) mining operations with incidental facilities approved under Conditional Use Permit No. 2461R beyond the current expiration date of 2018 on a 323.93-acre portion of a 637.81-acre parcel in the AE-20 (Exclusive Agricultural, 20-acre minimum parcel size) Zone District.

LOCATION: **The project site is located on the west side of State Highway 33 between Lost Hills Road and Sutter Avenue, approximately 6.9 miles southeast of the nearest city limits of the City of Coalinga (45315 Lost Hills Road, Coalinga, CA) (Sup. Dist. 5) (APN 085-110-26).**

OWNER/ APPLICANT: **Hewitson Farms**

STAFF CONTACT: **Ejaz Ahmad, Planner**
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RECOMMENDATION:

- Adopt the Mitigated Negative Declaration prepared for Initial Study (IS) Application No. 7011; and
- Approve Unclassified Conditional Use Permit (CUP) No. 3509 with recommended Findings and Conditions; 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 Plans
6. Project Description and Operational Statement
7. Summary of Initial Study Application No. 7011
8. Conditions of Approval for CUP No. 2461-R and CUP No. 2126
9. Reclamation Plan
10. Draft Mitigated Negative Declaration

SITE DEVELOPMENT AND OPERATIONAL INFORMATION:

Criteria	**Existing**	**Proposed**
General Plan Designation	Agriculture in the County-adopted Coalinga Regional Plan	No change
Zoning	AE-20 (Exclusive Agricultural, 20-acre minimum parcel size)	No change
Parcel Size	637.8 acres	No change
Project Site	Aggregate (rock, sand, gravel) mining operation approved by CUP No. 2461-R	Allow continued operation of an existing commercial aggregate mining operation on a 323.93- acre portion of a 637.81-acre parcel for 50 years beyond December 3, 2018
Structural Improvements	Office, scale, scale house trailer, control building, rock processing plant, portable batch plant, equipment storage area	No change
Nearest Residence	1,600 feet to the northeast and 4,200 feet to the southeast from the active mine area	No change
Surrounding Development	• Field crops of agricultural land border the site to the north and	No change

Criteria	Existing	Proposed
	east and upland grazing borders the site to the south and west • Single-family residence to the northeast and southeast	
Operational Features	• An aggregate (rock, sand, gravel) mining operation allowed by CUP No. 2461-R on a 323.93-acre portion of a 637.81-acre parcel with access from State Route 33 • Related operation includes concrete and asphalt recycling with incidental tire grinding. • Approximately 20,000 tons of concrete and asphalt recycled per year	• Allow the existing mining operation to continue for an additional 50 years beyond December 3, 2018 • The operation will remain within the scope of CUP No. 2461-R • No changes to intensity, hours of operation, volume, site access, site extraction boundaries or excavation depth (linear or vertical) would occur
Employees	Up to five employees in each shift (a total of three shifts each day)	No change
Customers	• Two (2) visitors per week • One (1) UPS delivery vehicle each day • One (1) supply delivery each day	No change
Traffic Trips	Based on the Year 2015 Plant Operation • 334 one-way trips per day (167 round trips, includes 24 AM peak-hour trips and 18 PM peak-hour trips). Of 334 one-way trips, 120 are truck trips and 47 are non-truck trips (standard vehicles) • CUP No. 2461-R approved in 1998 allowed up to 400 one-way trips per day (200 round trips)	No change
Lighting	Pole-mounted lighting in the mining area, exterior of the office, scale house trailer, and control building	No change
Hours of Operation	• 7 am to 5 pm (Monday thru Friday)	No change

Criteria	Existing	Proposed
	• On weekends per CUP 2461-R	

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 7.

Notice of Intent to Adopt a Mitigated Negative Declaration publication date: September 11, 2017

PUBLIC NOTICE:

Notices were sent to nine (9) 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 (CUP) may be approved only if four Findings specified in the Fresno County Zoning Ordinance, Section 873-F are made by the Planning Commission.

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

BACKGROUND INFORMATION:

On March 28, 1968, Conditional Use Permit No. 800 was approved to allow a borrow pit, rock plant, and asphalt concrete batch plant on a 320-acre portion of the subject 637.8-acre project site lying on the west side of State Route (SR) 33. County permit records indicate that this use permit was not exercised and therefore lapsed.

On February 28, 1985, Unclassified Conditional Use Permit No. 2126 was approved to allow a rock, sand, and gravel extraction operation and concrete and asphalt batching plant on the property, but limited operations to a 178-acre portion within the 320 acres. This permit was exercised and the operation has remained active.

On November 12, 1998, Conditional Use Permit No. 2461-R was approved to allow the expansion of an existing rock, sand and gravel extraction operation to include approximately 79 acres of additional extraction area, and concrete and asphalt recycling with incidental tire grinding (as part of asphalt recycling). Approval of CUP 2461-R allowed aggregate mining operation on a total 257-acre portion within the 320 acres for 20 years until December 3, 2018. Rock, sand and gravel has been extracted for the past 18 years consistent with the Mitigation Measures and Conditions of Approval approved for CUP No. 2461-R.

The subject proposal (CUP No. 3509) would extend the life of CUP No. 2461-R an additional 50 years beyond December 3, 2018. The aggregate mining operation will continue within the same boundaries and same operational characteristics as was originally approved by CUP 2461-R.

No changes in intensity, hours of operation, volume, site extraction boundaries or excavation depth (linear or vertical) would occur from this proposal.

As a point of note, the California Department of Fish and Wildlife (CDFW) reviewed the Initial Study (IS) prepared for the project during public comment period and suggested revisions to several Mitigation Measures included in the IS document. The Applicant has accepted those revisions/additions and they have been included as **bold** items in Section IV. A. Biological Resources of Initial Study No. 7011 (Exhibit 7)

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	Front (northwesterly property line: 100 feet mining setback from highway Side (south property line: 25 feet Rear (west property line): 25 feet	Yes, of Section 858 of the Fresno County Zoning Ordinance
Parking	One (1) off-street parking space for each two (2) permanent employees	No changes to the existing on-site parking for employees	N/A
Lot Coverage	No requirement	N/A	N/A
Separation Between Buildings	Six-foot minimum	N/A	N/A
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: No concerns with the proposal.

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

Analysis:

The subject proposal would extend the life of an existing aggregate mining operation authorized by CUP 2461-R. If approved, the mining operations will continue for an additional 50 years and end on December 3, 2068.

Improvements associated with the existing mining operation include a scale, scale house, rock processing plant, portable batch plant, and an equipment storage area. These improvements are located within the excavation site and away from property boundaries. Portable recycling equipment located near the existing portable batch plant will relocate with the batch plant as the extraction phases proceed.

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 as required by Section 858 of the County Zoning Ordinance. The prior conditional use permit (CUP No. 2126) included a condition requiring setbacks for excavation 25 feet from property lines and 100 feet along SR 33 (Exhibit 5). Staff is recommending a condition requiring that all Conditions of Approval imposed under Conditional Use Permit No. 2126 remain in full force and effect for this proposal. 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.

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
Private Road	No		No change
Public Road Frontage	Yes	State Route 33: Good condition	No change
Direct Access to Public Road	Yes	State Route 33	No changes to the current site access off State Route 33
Road ADT (Average Daily Traffic)		N/A	N/A

	Existing Conditions	Proposed Operation
Road Classification	State Route 33; Good condition	No change
Road Width	Unknown	No change
Road Surface	Asphalt-concrete paved	No change
Traffic Trips	Based on the Year 2015 Plant Operation • 334 one-way trips per day (167 round trips, includes 24 AM peak-hour trips and 18 PM peak-hour trips). Of 334 one-way trips, 120 are truck trips and 47 are non-truck trips (standard vehicles)	No change
Traffic Impact Study (TIS) Prepared	No TIS required for the current mining operation authorized by CUP 2461-R which allows up to 400 one-way trips per day (200 round trips)	JLB Traffic Engineering assessed the site traffic on March 29, 2016. The trip generation estimates provided by the current site operator and those observed by JLB Traffic Engineering at the project site were found to be generally consistent with the estimated trip generation totals provided for and evaluated as part of the current Conditional Use Permit No. 2461-R
Road Improvements Required	Good; no improvements required by the California Department of Transportation	No change

Reviewing Agency/Department Comments:

California Department of Transportation (Caltrans): Mitigation Measure No. 9. a. b. approved for CUP 2461-R which requires the Applicant to monitor traffic on State Route (SR) 33 and install turn lanes when warranted shall remain in full force and applicable to the subject proposal. This has been included as a Condition of Approval.

Development Engineering Section of the Fresno County Department of Public Works and Planning: Any work done within the right-of-way to construct a new driveway or improve an existing driveway off State Route (SR) 33 shall require an encroachment permit from the

California Department of Transportation (Caltrans). This has been included as a Project Note.

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

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

Analysis:

Access to the project site is from State Route (SR) 33. Currently there is one access point from SR 33 approved by prior use permit applications. The subject application proposes no new access or changes to the existing access point to the site.

JLB Traffic Engineering assessed the site traffic on March 29, 2016 and developed project trip generation in consultation with the current site operator and staff from the Design Division of the Fresno County Department of Public Works and Planning and the California Department of Transportation (Caltrans).

The trip generation estimates provided by the current site operator and those observed by JLB Traffic Engineering at the project site were found to be generally consistent with the estimated trip generation totals provided for and evaluated as part of the current Conditional Use Permit No. 2461-R. In addition, it was determined that the site maintains adequate sight distance consistent with applicable standards. As such, no impact associated with increased road hazards due to continued mining operation proposed by this application would occur.

Furthermore, as required by the California Department of Transportation (Caltrans) and Design Division of the Fresno County Department of Public Works and Planning, the proposal will adhere to Mitigation Measure No. 9. a. b. approved for CUP 2461-R, which requires the Applicant to monitor traffic on State Route (SR) 33 and install turn lanes when warranted. This Mitigation Measure will remain in full force and applicable to the subject proposal.

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

Recommended Conditions of Approval:

See Conditions of Approval 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	2 acres 304.3 acres	Orchard with a single-family residence	AE-20	1,600 feet northeast

Surrounding Parcels				
South	240 acres	Unfarmed and undeveloped	AE-20	None
East	318.8 acres 304.3 acres 5 acres 2 acres	Unfarmed with a single-family residence	AE-20	300 feet southeast
West	240 acres 240 acres	Unfarmed and undeveloped	AE-20	None

Reviewing Agency/Department Comments:

Development Engineering Section of the Fresno County Department of Public Works and Planning: Any additional runoff generated by the proposal shall be retained on site. According to the FEMA Panel 3425H, 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.

Fresno County Department of Public Health, Environmental Health Division: 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. Any business that handles a hazardous material or hazardous waste may be required to submit a Hazardous Materials Business Plan pursuant to the HSC, Division 20, Chapter 6.95. All hazardous waste shall be handled in accordance with requirements set forth in the California Code of Regulations (CCR), Title 22, Division 4.5.

Fresno County Fire Protection District (CalFire): Future development shall require the property to annex to Community Facilities District No. 20010-01 of the District and be subject to the current Fire Code and Building Code prior to issuance of any building permit or certificate of occupancy.

San Joaquin Valley Air Pollution Control District (Air District): The project shall be subject to An Authority to Construct (ATC) permit if the facility operations changes, and Regulation VIII (Fugitive PM10 Prohibitions), Rule 4102 (Nuisance), 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 aforementioned requirements have been included as Project Notes.

Army Corps of Engineers (ACOE): A 25-foot setback buffer from the top of the Chino Zapato Creek shall be maintained in order to avoid impact on the Creek. This requirement has been included as a Condition of Approval for CUP No. 2461-R.

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; Regional Water Quality Control Board; California State Lands Commission; Fresno County Department of Agriculture; Design Division, Water and Natural Resources Division, Site Plan Review Section and Building/ Safety Sections of the Fresno County Department of Public Works and Planning; Table Mountain Rancheria, Tribal Government Office: No concerns with the proposal.

Analysis:

The subject 637.81-acre project site is located in an area of limited agricultural activities with low residential density. Field crops of agricultural land border the site to the north and east and upland grazing borders the site to the south and west. State Route (SR) 33 traverses thorough the property in a north and south direction.

The subject proposal would extend the life of an existing commercial aggregate mining operation authorized by Unclassified Conditional Use Permit (CUP) No. 2461–R on a 323.93-acre portion of a 637.81-acre parcel. CUP No. 2461-R approval allowed an aggregate (rock, sand, gravel) mining operation for 20 years until December 3, 2018. This proposal will allow an additional 50 years of aggregate mining to occur within the same mining area as approved for CUP No. 2461-R, ending in December 3, 2068. The proposal will remain within the scope of the CUP No. 2461-R with no changes in intensity, hours of operation, volume, site extraction boundaries, or excavation depth (linear or vertical).

An Initial Study prepared for the project has identified potential impact to aesthetics, biological resources, cultural resources, and noise. 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 included in a Habitat Survey prepared for the project by ESR, Inc., dated March 25, 2016, including those recommended by the California Department of Fish and Wildlife and U.S. Fish and Wildlife Service. To mitigate cultural resources impact, any cultural resources discovered during excavation will require all project-related activities halted until an archeologist evaluates the discovery. To mitigate noise impact, an earthen berm will be erected in the area of excavation to reduce noise impact on nearby residential development, and mining activities will be limited to daytime hours. These requirements have been included as Mitigation Measures (Exhibit 1).

Potential impacts related to air quality, geology and soils, hazards and hazardous materials, hydrology and water quality, and transportation/traffic are considered to be 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; require any structures located within the flood hazard area be raised to or above the Base Flood Elevation (BFE); and adhere to a mitigation measure from CUP No. 2461-R for traffic monitoring on State Route (SR) 33 and installation of turn lanes when warranted. 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 the current and prior archeological Records Search on the property were provided 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 7; Section V. Cultural Resources) will suffice in reducing impact on Tribal Cultural Resources 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 operations with incidental facilities on a 323.93-acre portion of a 637.81-acre parcel approved under CUP No. 2461-R beyond the current expiration date of 2018 for an additional 50 years. 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 has been actively mined for decades. With regard to Criteria "c", the mining operation uses a combination of well water, recycled processing water and water pumped from excavated mine cells to reduce water demand. With regard to Criteria "d", the nearby community of Coalinga will continue to provide 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.	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 to allow mining operation for an additional 50 years was determined to be consistent with the General Plan under prior Conditional Use Permit No. 2461-R and Conditional Use Permit No. 2126, and will adhere to Mitigation Measures and Conditions of Approval

Relevant Policies:	Consistency/Considerations:
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.	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 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.	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 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, Conditions of Approval, and mandatory Project Notes included in the Initial Study prepared for the project (Exhibit 7). 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 Regional 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 637.81-acre project site is subject to Williamson Act Land Conservation Contract No. 3217. A Notice of Non-Renewal recorded with the County Recorder's Office on September 8, 2017 will remove a 323.93-acre portion of the site from the Contract.

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; is an allowed use on land designated for agriculture with discretionary approval and adherence to the

applicable General Plan Policies; and was determined to be consistent with the General Plan under prior Conditional Use Permit Nos. 2461-R and 2126. 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.

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 operations on a 323.93-acre portion of a 637.81-acre parcel in the AE-20 (Exclusive Agricultural, 20-acre minimum parcel size) Zone District. The current mining operation approved by CUP No. 2461-R is set to expire on December 3, 2018. This proposal would allow an additional 50 years of mining operation until December 3, 2068. The mining activities resulting will remain within the scope of CUP No. 2461-R with no changes in intensity, hours of operation, volume, site access site extraction boundaries, or excavation depth (linear or vertical). An estimated 350,000 cubic yards 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 September 5, 2017 containing revised/supplemental information from the Applicant and information on a public hearing for the project to take place 30-days after September 5, 2017. 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 4 can be made.

PUBLIC COMMENT:

None

CONCLUSION:

Based on the factors cited in the analysis, staff believes the required Findings for granting the Unclassified Conditional Use Permit can be made. Staff therefore recommends adoption of the Mitigated Negative Declaration prepared for the project and approval of Unclassified Conditional Use Permit No. 3509, 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. 7011; and

- Move to determine the required Findings can be made and move to approve Unclassified Conditional Use Permit No. 3509, 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. 3509; 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 Application No. 7011
Unclassified Conditional Use Permit Application No. 3509

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 downward so as to not shine toward adjacent properties and public streets.	Operator	Operator/Fresno County Department of Public Works and Planning (PWP)	On-going; for duration of the project
*2.	Biological Resources	Security fences installed on the perimeter of the project site shall be designed to enable passage of San Joaquin kit foxes and their prey, while impeding the passage of larger predators of kit foxes, such as coyotes and larger domestic dogs. All fencing shall leave a 4- to 8-inch opening between the fence mesh and the ground. The bottom of the fence fabric shall be knuckled (wrapped back to form a smooth edge) to protect wildlife that pass under the fence. Fences shall be monitored regularly to ensure that any damage or vandalism is quickly repaired.	Operator	Operator/PWP	On-going; for duration of the project
*3.	Biological Resources	Areas of the project site between the active quarrying locations shall be left fallow and managed (*e.g.*, mowed, disked, weed-whacked) to allow annual grassland species and prey species to recolonize the project site and to maintain a wildlife corridor through the action area in a generally north-south direction.	Operator	Operator/PWP	On-going; for duration of the project
*4.	Biological Resources	The grassland areas within the project site not disturbed by mining activities shall be left in their existing condition.	Operator	Operator/PWP	On-going; for duration of the project
*5.	Biological Resources	To avoid impacts to wetlands and waterways, the following no-disturbance buffers shall be delineated before ground-disturbing activities begin: (1) for areas with riparian vegetation, a minimum 25-foot no-disturbance buffer from the top of the bank of Zapata Chino	Operator	Operator/PWP	As noted

EXHIBIT 1

		Creek, or from the outside edge of its surrounding riparian vegetation; (2) for areas with no riparian vegetation, a minimum 25-foot no-disturbance buffer around the top of the bank of Zapata Chino Creek. To prevent mining-related erosion and deposition, soil stockpiles shall be protected to prevent erosion and placed where soil will not pass into waters of the State, in accordance with California Fish and Game Code Section 5650. To accomplish this, disturbed soils on the project site near the appropriate no-disturbance buffer described above shall be stabilized to reduce erosion potential, both during and following project activity. To stabilize stockpiles and prevent siltation of the stream, temporary erosion control devices such as straw bales, silt fencing, and sand bags shall be used as appropriate. To minimize the risk of ensnaring and strangling wildlife, coir rolls, erosion control mats or blankets, straw or fiber wattles, or similar erosion control products shall comprise only natural fiber or biodegradable materials. "Photodegradable" or other plastic erosion control materials shall not be used. Per California Fish and Game Code Section 1600 *et seq.*, the Operator shall notify CDFW before beginning any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake (including the removal of riparian vegetation); or (c) deposit debris, waste or other materials that could pass into any river, stream, or lake. "Any river, stream, or lake" includes those that are ephemeral or intermittent and those that are perennial. CDFW must comply with CEQA in the issuance of a Lake and Streambed Alteration Agreement. For additional information on notification requirements, contact Lake and Streambed Alteration Program staff at (559) 243-4593.			
*6.	Biological Resources	All employees, consultants, and contractors shall receive environmental training by a qualified biologist before mining activities begin. The avoidance and minimization measures shall be outlined in the training. All personnel on the quarry site shall follow these measures to avoid or reduce effects on covered species. The training shall include a printed handout that shall be handed to all personnel. All employees and contractors shall be required to sign a register indicating that they attended the training and understand the material	Operator	Operator/PWP	As noted

		presented. The handout shall contain the following information: a) descriptions of the covered species (including photographs) and their habitat needs; b) a current report of the occurrences of the covered species at the project site; c) an explanation of the protected status of each covered species under the federal and state endangered species acts and legal obligations; d) avoidance and minimization measures followed to reduce impacts on the covered species during all project activities: mining, operation and maintenance, and site closure, and the penalties for not following the avoidance and mitigation measures; and e) instructions on the procedures implemented if a covered species is found on site, including contact information of a biological monitor and U.S. Fish and Wildlife Service and California Department of Fish and Wildlife personnel. An electronic copy of the signed register shall be provided to the Fresno County Department of Public Works and Planning before mining activities begin within a new mining phase.			
*7.	Biological Resources	At least 30 days before the onset of ground-disturbing activities within a new mine phase, the name(s) and credentials of a supervisory project biologist responsible for approving and overseeing all project biological monitors and other site-trained monitors performing biological work shall be submitted to the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife for approval. If no response is given by agencies within the 30 days, it is implicit that the use of the supervisory project biologist is approved.	Operator	Operator/PWP	As noted
*8.		Biological monitor(s) approved by the supervisory project biologist shall be required on site as long as quarrying crews and vehicles are accessing and affecting the undisturbed areas of the site. Monitoring shall cease once development mining traffic and activity has ceased and the expanded quarrying area is operable. An electronic copy of a signed and dated log of visits to the site by the biological monitor shall be provided to the Fresno County Department of Public Works and Planning upon determination that development mining traffic and activities	Operator	Operator/PWP	As noted

		haves ceased and the expanded new mining phase quarrying area is operable.			
*9.	Biological Resources	Biological monitors shall have the authority to order a halt to mining activities, and shall order halts to mining activities in the following instances: (1) the monitor observes activities that may result in mortality or harm to a covered species; (2) the monitor observes any of the avoidance and minimization measures not being implemented; or (3) if at any time a covered species is in danger of experiencing mortality or harm. Work shall not resume until the situation has been rectified to the satisfaction of the supervisory project biologist. If a biological monitor orders a halt to mining activities, he or she shall immediately contact the supervisory project biologist for further instructions. Consultation with CDFW is advised if the potential for take exists (as defined by Fish and Game Code Section 86) of species listed pursuant to the California Endangered Species Act or the Native Plant Protection Act (Fish and Game Code Section 1908).	Operator	Operator/PWP	As noted
*10.	Biological Resources	All mining-related activities shall occur within designated work areas.	Operator	Operator/PWP	As noted
*11.	Biological Resources	All mining activities shall terminate 30 minutes before sunset and shall not resume until 30 minutes after sunrise, except as described below. Sunrise and sunset times are established by the U.S. Naval Observatory Astronomical Applications Department for the geographic area where the project is located. Some discrete maintenance activities must occur when the facility is not actively mining. Those activities shall be conducted under the guidance of a qualified biologist. Some operation and maintenance activities must occur when materials are not being produced, which may also occur at night. Those activities that must occur at night are to be authorized by the supervisory project biologist.	Operator	Operator/PWP	As noted
*12.	Biological Resources	Speed limits within the project site shall be limited to 15 miles per hour (mph) during the day and 10 mph at night. All project-related vehicles and equipment shall be restricted to established roads, mining areas, and designated staging areas.	Operator	Operator/PWP	As noted
*13.	Biological Resources	Food-related trash shall be disposed of in closed containers and removed from the project site at least once daily.	Operator	Operator/PWP	As noted

*14.	Biological Resources	No pets or firearms shall be permitted on the project site.	Operator	Operator/PWP	As noted
*15.	Biological Resources	Within one working day of finding a dead, sick, or injured covered species on the project site, the biologist shall notify USFWS and CDFW orally and within three working days in writing. Notification in writing shall include the date, time, and location where the specimen was found and information about the conditions under which it was found.	Operator	Operator/PWP	As noted
*16.	Biological Resources	A map of the location of all observations of covered species observed during preconstruction surveys and during monitoring shall be prepared and submitted to USFWS and CDFW before any ground-disturbing activities begin. This information shall also be submitted to the California Natural Diversity Database (CNDDB).	Operator	Operator/PWP	As noted
*17.	Biological Resources	A reclamation plan shall be prepared for the project. Upon completion of the project, all areas temporarily subject to ground disturbance, including staging areas, shall be revegetated according to the project reclamation plan.	Operator	Operator/PWP	As noted
*18.	Biological Resources	The guidelines described in *San Joaquin Kit Fox from U.S. Fish and Wildlife Service, Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance*, prepared by the Sacramento Fish and Wildlife Office, January 2011 (2011 standardized recommendations), or the most recent version of these guidelines, shall be implemented. The Operator shall inquire with the USFWS yearly to obtain the most recent guidelines.	Operator	Operator/PWP	As noted
*19.	Biological Resources	As described in the 2011 recommendations, the preconstruction survey shall be conducted no less than 14 days and no more than 30 days before the beginning of ground disturbance, or any activity likely to affect San Joaquin kit fox. The results of the survey shall be submitted to USFWS, CDFW, and the Fresno County Department of Public Works and Planning before ground disturbance begins. The biologists shall conduct den searches by systematically walking transects through the project site and a buffer area 200 hundred feet from the project boundary as required by USFWS. Transect distance shall be based on the height of vegetation such that 100 percent visual coverage of the project site is achieved. If a potential or known den is found during the survey, the biologist shall evaluate the shape of the den entrances, taking note of	Operator	Operator/PWP	As noted

		tracks, scat, prey remains, and recent excavations at the den site. Dens shall be classified into the den status categories defined by the 2011 standardized recommendations.			
*20.	Biological Resources	If San Joaquin kit fox are found within the project area either during preconstruction surveys or during mining activities, the Operator shall consult with CDFW to discuss how to implement the project and avoid take, or if avoidance is not feasible, to acquire an Incidental Take Permit prior to any ground-disturbing activities. If San Joaquin kit fox are found occupying a typical (*i.e.*, manmade structure) den site, a 50-foot no-disturbance buffer shall be used around the occupied den structure in accordance with the USFWS (2011) *Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance*.	Operator	Operator/USFWS/ CDFW	As noted
*21.	Biological Resources	All materials staged on the project site, and especially in staging areas, shall be stored so as to not provide areas suitable for covered species to seek shelter. At no time shall materials be haphazardly piled on the project sites. All materials shall be inspected thoroughly by the biological monitor prior to being moved.	Operator	Operator/PWP	As noted
*22.	Biological Resources	Rodenticide and pesticide use is prohibited. Herbicide application shall be limited to areas where mowing, disking, weed-whacking, etc. is not possible (*e.g.*, around buildings and against poles and other infrastructure).	Operator	Operator/PWP	As noted
*23.	Biological Resources	During the active season for Blunt-nosed leopard lizards (generally starting April 15, but any time of year with temperatures of 77 degrees Fahrenheit as measured two centimeters above the ground), prior to any planned ground-disturbing mining, reclamation, or closure activities, a biologist with experience in surveying for Blunt-nosed leopard lizard shall assess site conditions for supporting the species.	Operator	Operator/PWP	As noted
*24	Biological Resources	To evaluate presence/absence of project work areas by Blunt-nosed leopard lizard, survey methods described in the *Approved Survey Methodology for the Blunt-nosed Leopard Lizard* (CDFG 2004) shall be implemented. Note that protocol-level surveys must be conducted on multiple dates during late spring, summer, and fall. Within these time periods, specific protocol-level date, temperature, and time parameters must be met. Blunt-nosed leopard lizard surveys must be completed no more than one year before ground or	Operator	Operator/PWP	As noted

		vegetation disturbance begins, if mining activities will affect potential habitat. If Blunt-nosed leopard lizard is detected during protocol-level surveys or mining activities, the Operator shall consult with CDFW to discuss how to implement the project and avoid take. Burrows shall be avoided by a minimum of 50 feet to avoid take and potentially significant impacts of burrow collapse. The results of the surveys shall be submitted to USFWS, CDFW, and the Fresno County Department of Public Works and Planning before ground disturbance begins and after completion of each subsequent survey.			
*25	Biological Resources	If a Blunt-nosed leopard lizard is encountered during these surveys, the location of the observation shall be marked and USFWS and CDFW shall be contacted. No ground-disturbing activities shall occur until the lizard has been allowed to passively disperse.	Operator	Operator/USFWS/ CDFW	As noted
*26	Biological Resources	No monofilament plastic or soil strengthening agents, geo fabrics, or dust suppression products that would adversely affect these species shall be used for erosion control. Only natural fiber, biodegradable meshes shall be used in erosion control mats, blankets, and straw or fiber wattles, and these features shall be installed in such a way as to prevent entrapment of special-status reptiles or amphibians while maintaining access to potential breeding habitat.	Operator	Operator/PWP	As noted
*27.	Biological Resources	Optimal activity temperatures for Blunt-nosed leopard lizards are between 77 and 95°F measured 1-2 centimeters (cm) above the ground over the surface of a project site (CDFW 2004). The period between September 30 and April 1 (*i.e.*, October-March) would be preferentially used to control vegetative growth to coincide with the animals being underground and temperatures below 75°F, measured 1 cm above the ground in the sun.	Operator	Operator/PWP	As noted
*28.	Biological Resources	Before project implementation, a qualified botanist shall survey the project site for special-status plants by following the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFG 2009). The results of this survey shall be submitted to USFWS, CDFW, and the Fresno County Department of Public Works and Planning before ground disturbance begins. This protocol, which is intended to maximize detectability, includes identification of reference populations to facilitate the likelihood of field investigations	Operator	Operator/PWP	As noted

		occurring during the appropriate floristic period. If protocol-level surveys are not performed, additional surveys may be necessary. Special-status plant species shall be avoided whenever possible by delineation and observation of a no-disturbance buffer of at least 50 feet from the outer edge of the plant population(s) or specific habitat type(s) required by special-status plant species. If buffers cannot be maintained, then the Operator shall consult with CDFW to determine appropriate minimization and mitigation measures for impacts to special-status plant species. If a state-listed or federally-listed plant species is identified during botanical surveys, the Operator shall consult with CDFW and/or USFWS to determine permitting needs.			
*29.	Biological Resources	To evaluate presence/absence of San Joaquin antelope squirrel in the project area, a qualified wildlife biologist shall visit the site before project implementation to determine whether suitable habitat for San Joaquin antelope squirrel is present within or adjacent to the project area. If habitat is present, the qualified biologist shall conduct daytime visual surveys using line transects with 10- to 30-meter spacing when temperatures are between 68–86°F. If suitable habitat is present and surveys or trapping are not feasible, CDFW advises maintenance of a 50-foot minimum no-disturbance buffer around all small mammal burrows of suitable size for San Joaquin antelope squirrel. If full avoidance is not feasible and project implementation could result in take, the Operator shall acquire an Incidental Take Permit, pursuant to California Fish and Game Code Section 2081(b), before initiating ground-disturbing activities. The results of this survey shall be submitted to USFWS, CDFW, and the Fresno County Department of Public Works and Planning before ground disturbance begins.	Operator	Operator/PWP	As noted
*30.	Biological Resources	Presence/absence of burrowing owl shall be assessed before project implementation by conducting surveys following the California Burrowing Owl Consortium's *Burrowing Owl Survey Protocol and Mitigation Guidelines* (CBOC 1993). The *Staff Report on Burrowing Owl Mitigation* (Staff Report) (CDFG 2012) shall be followed before and during ground-disturbing activities associated with project implementation. CDFW's Staff Report recommends avoiding impacts to occupied burrows in accordance with the information in the following table unless a CDFW-approved qualified biologist verifies through noninvasive methods that either (1) the birds have not begun egg laying and incubation or (2) juveniles			

<table>
<tr><td></td><td></td><td>from the occupied burrows are foraging independently and are capable of independent survival.

Distance of Buffer for Avoidance of Burrows<table><tr><td rowspan="2">Time of Year</td><td colspan="3">Level of Disturbance</td></tr><tr><td>Low</td><td>Medium</td><td>High</td></tr><tr><td>April 1–August 15</td><td>200 m</td><td>500 m</td><td>500 m</td></tr><tr><td>August 15–October 15</td><td>200 m</td><td>200 m</td><td>500 m</td></tr><tr><td>October 16–March 31</td><td>50 m</td><td>100 m</td><td>500 m</td></tr><tr><td colspan="4">Note: m = meters.</td></tr></table>If a burrowing owl is found to occupy a project site and avoidance is not possible, according to the Staff Report, exclusion in and of itself is not a take avoidance, minimization, or mitigation method. However, if necessary, burrow exclusion may be conducted by qualified biologists during the nonbreeding season only, before breeding behavior is exhibited and after the burrow is confirmed empty through noninvasive methods, such as surveillance. Occupied burrows shall be replaced with artificial burrows at a ratio of one burrow collapsed to one artificial burrow constructed (1:1) to mitigate eviction of burrowing owl. In addition, burrow closure shall be employed only where adjacent natural burrows exist and sufficient habitat that is unaffected by the project exists for burrowing owl to occupy with permanent protection mechanisms in place. In</td><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td>addition, burrowing owl may attempt to colonize or recolonize an area that the project will disturb; thus, ongoing surveillance of the project site during project activities shall occur at a rate sufficient to detect burrowing owl if they return.</td><td></td><td></td><td></td></tr>
<tr><td>*31.</td><td>Biological Resources</td><td>Qualified biologists shall conduct focused surveys for special-status species before project implementation to determine whether impacts to these species could occur. Avoidance of all state species of special concern whenever possible is encouraged via delineation and observation of appropriate no-disturbance buffers for each species. The results of this survey shall be submitted to USFWS, CDFW, and the Fresno County Department of Public Works and Planning before ground disturbance begins.</td><td>Operator</td><td>Operator/PWP</td><td>As noted</td></tr>
<tr><td>*32.</td><td>Cultural Resources</td><td>In the event that cultural resources are unearthed during ground-disturbing activities, all work shall be halted in the area of the find. An Archeologist should be called to evaluate</td><td>Operator</td><td>PWP</td><td>As noted</td></tr>
</table>

		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 should 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.			
*33.	Noise	As required by Noise Study by Bollard Acoustical Consultants, Inc., March 30, 2016, before daytime excavation operations begin within 1,000 feet of a single-family residence located 300 feet southeast of the property, a 10-foot-tall earthen berm shall be constructed adjacent to the State Route (SR) 33 right-of-way and near the southeast corner of the property.	Operator	Operator/Fresno County Department of Public Health, Environmental Health Division (Health Department)	As noted
*34.	Noise	Excavation activities within 1,000 feet of the single-family residence located 300 feet southeast of the property shall be limited to daytime hours until the excavation equipment has recessed at least 10 feet below existing ground elevation.	Operator	Operator/Health Department	As noted

Conditions of Approval	
1.	Development of the property shall be in accordance with the Site Plan, **Reclamation Plan**, Floor Plans, Elevations and Operational Statement approved by the Commission.
2.	All Conditions of Approval of Unclassified Conditional Use Permit No. 2461-R and Unclassified Conditional Use Permit No. 2126 shall remain in full force and effect, except as modified by this application.
3.	**If the east slope of the North Reserve is to be extended below its current depth of 575 feet mean sea level, the operator shall have a geotechnical analysis prepared to determine the final slope angle. The evaluation shall be submitted to the California Division of Mine Reclamation for review and comment as an amendment to the reclamation plan prior to any mining in this area.**

*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.

REFERENCES CITED:

California Burrowing Owl Consortium, 1993. Burrowing owl survey protocol and mitigation guidelines. Pages 171-177 in Lincer, J. L. and K. Steenhof (editors). The burrowing owl, its biology and management. *Raptor Research* Report Number 9.

California Department of Fish and Game, 2004 (May). *Approved Survey Methodology for the Blunt-nosed Leopard Lizard*.

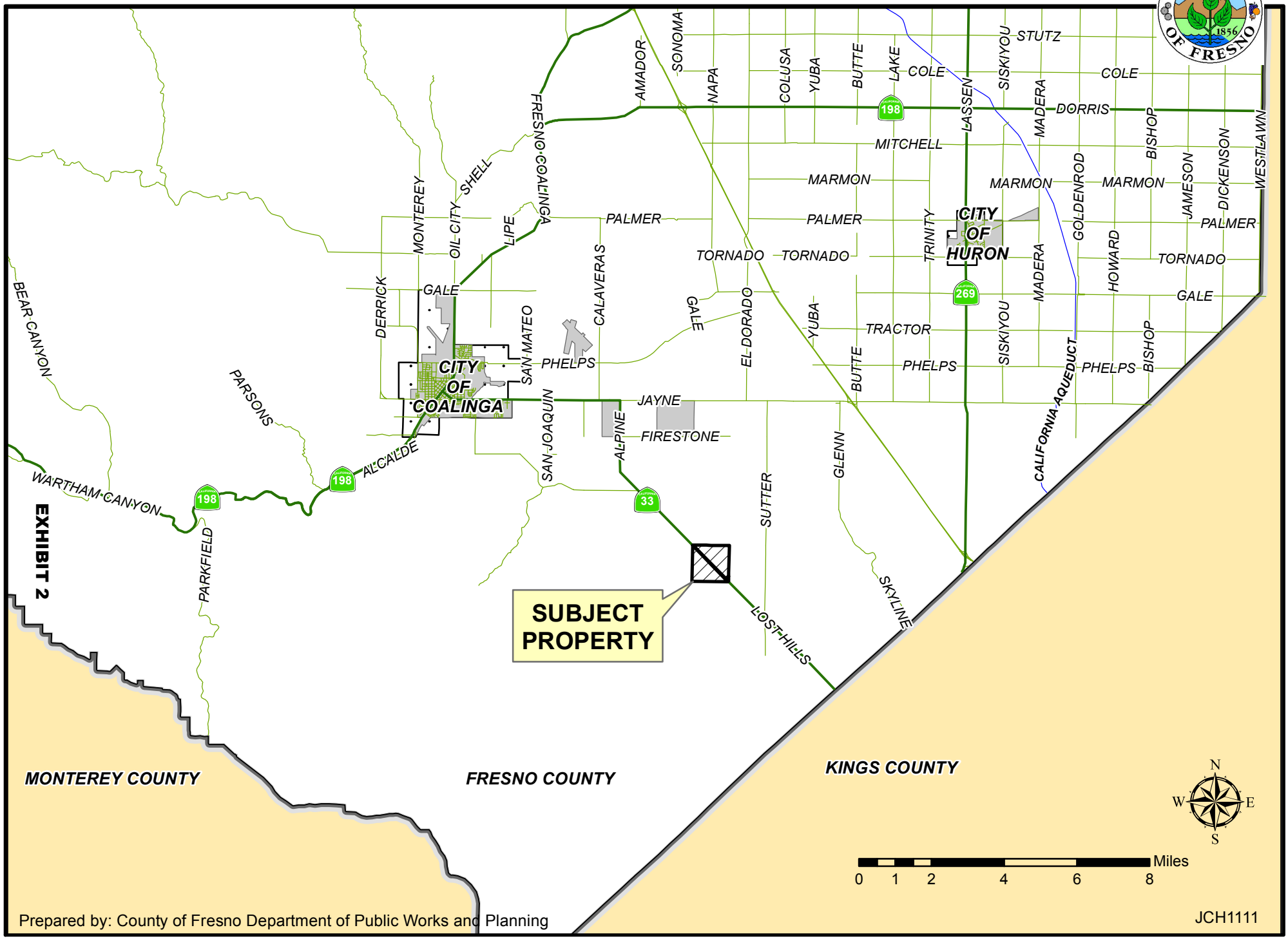
California Department of Fish and Game, 2009 (November 24). *Protocol for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural*

Communities.
California Department of Fish and Game, 2012 (March 7). *Staff Report on Burrowing Owl Mitigation*.
CBOC. *See* California Burrowing Owl Consortium.
CDFG. *See* California Department of Fish and Game,
U.S. Fish and Wildlife Service, 2011 (January). *Standardized Recommendations for the Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance*.
USFWS. *See* U.S. Fish and Wildlife Service.

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.
2.	Any additional runoff generated by the subject proposal (mining operation) shall be retained on site.
3.	According to the FEMA Panel 3425H, 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.
4.	Any work done within the right-of-way to construct a new driveway or improve an existing driveway off State Route (SR) 33 shall require an encroachment permit from the California Department of Transportation (Caltrans).
5.	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.
6.	Any business that handles a hazardous material or hazardous waste may be required to submit a Hazardous Materials Business Plan pursuant to the HSC, Division 20, Chapter 6.95.
7.	All hazardous waste shall be handled in accordance with requirements set forth in the California Code of Regulations (CCR), Title 22, Division 4.5.
8.	Future development shall require the property to annex to Community Facilities District No. 20010-01 of the Fresno County Fire Protection District (CalFire) District and be subject to current the Fire Code and Building Code prior to issuance of a building permit or certificate of occupancy.
9.	If facility operations change, the project proponent shall contact the San Joaquin Valley Air Pollution Control District to determine if an Authority to Construct (ATC) permit would be required for the project.
10.	The project may be subject to the San Joaquin Valley Air Pollution Control District Regulation VIII (Fugitive Dust Rules) to address impacts related to PM-10; Rule 4102 (Nuisance) to address any source operation that emits air contaminants or other materials; Rule 4601 (Architectural Coatings); and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt Paving and Maintenance Operations).

085-110-26s

LOCATION MAP



Prepared by: County of Fresno Department of Public Works and Planning

JCH1111

085-110-26s
STR 27 - 21/16

EXISTING ZONING MAP

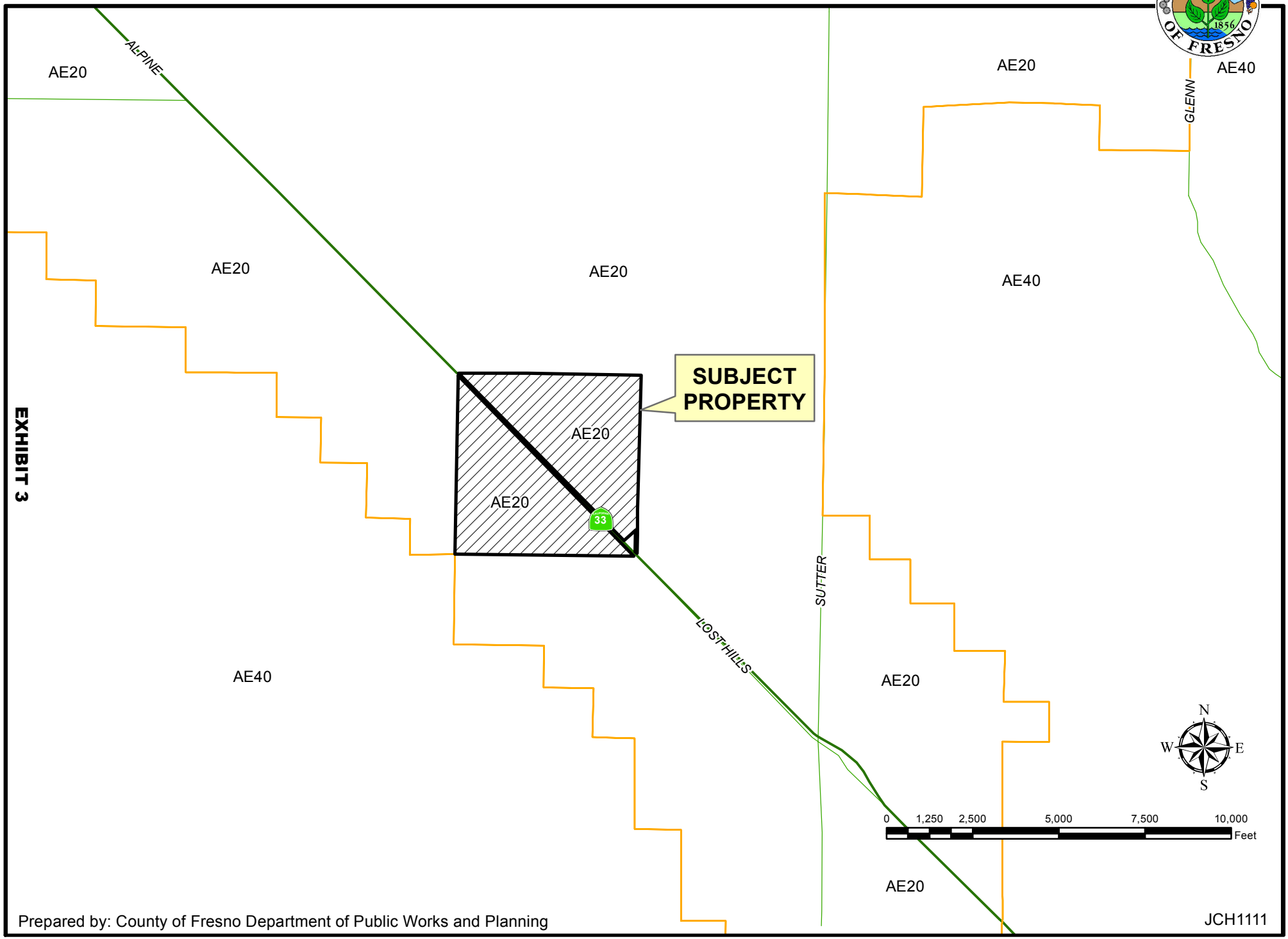


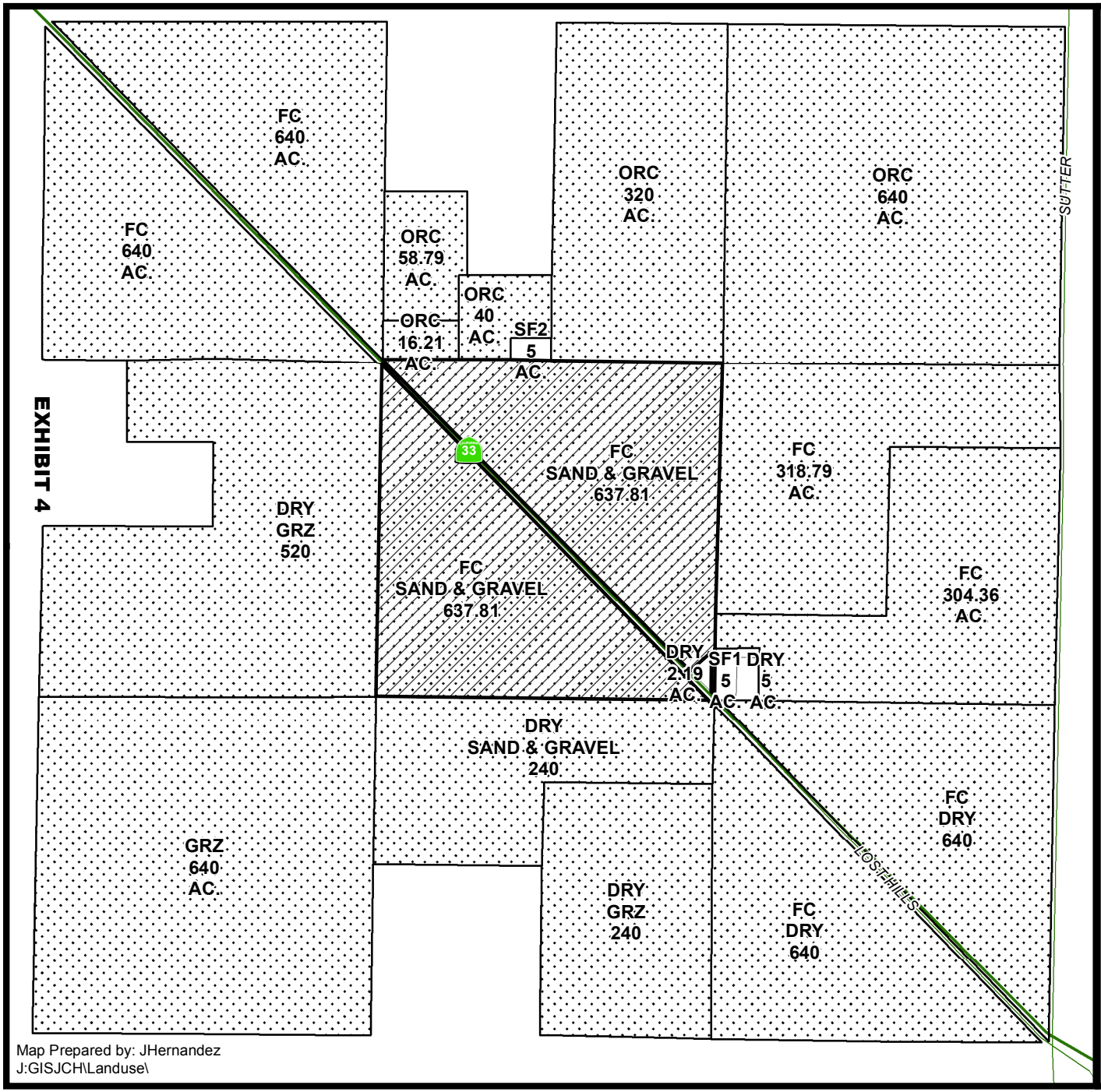
EXHIBIT 3

Prepared by: County of Fresno Department of Public Works and Planning

JCH1111

085-110-26s

EXISTING LAND USE MAP



Map Prepared by: JHernandez
J:GISJCH\Landuse\

LEGEND

DRY - DRY FARMING
FC - FIELD CROP
GRZ - GRAZING
ORC - ORCHARD
SF#- SINGLE FAMILY RESIDENCE
V - VACANT

LEGEND:

Subject Property

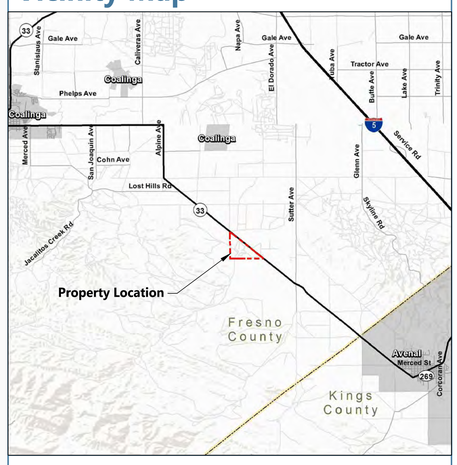
Ag Contract Land

N
W E
S

0 550 1,100 2,200 3,300 4,400 Feet

Department of Public Works and Planning
Development Sevices Division

Vicinity Map



Project and Property Data

Legal Description

All of Section 27, Township 21 South, Range 16 East, Mount Diablo Base and Meridian, County of Fresno, State of California, according to the official plat thereof, excepting them from the following described property:

Beginning at the southeast corner of Section 27, Township 21 South, Range 16 East, Mount Diablo Base and Meridian, thence north 0 12' east along the east lines of said Section 27 a distance of 143.73 feel to a point; thence north 45 16' 30" west along a line parallel to the centerline of California State Highway number 33 and distant 30 feet northerly therefrom, a distance of 42.08 feet to a point which is the true point of beginning; thence north 45 16' 30" west along said parallel line a distance of 432.81 feet to a point thence northerly 44 43' 30" east a distance of 440.06 feet to a point on a line which is 30 feet west of and parallel to the east line of said Section 27, thence south 0 12' west along said line which is 30 feet west of and parallel to the east line of said Section 27, a distance of 637.24 feet to the true point ofbeginning.

(276 acres more or less)

Parcel Data

APN: 085-110-26
Township, Range, Section: T21 South, R16 East, Section 27
Property Address: 45315 Lost Hills Rd Coalinga, CA 93210-9660
Parcel Area: 637.81
Parcel Area within Site: ±298 acres
Zoning District: (AE-20) Exclusive Twenty Acre - Agricultural

Site Owener Information

Owner: Hewitson Farms, Inc.
Address: 39482 Highway 33, Avenal, CA 93204

Permits

Existing Use Permit: CUP 2461-R

Legend

- Property Line
- Acces Road
- Creek Centerline
- Parcel Line
- Paved Road
- Dirt Road
- Fence Line
- Easement
- 625 Primary Contour Line (25-foot interval)
- 605 Intermediate Contour Line (5-foot interval)
- Existing Sheet Flow
- Existing Berm
- Building
- Vegetation
- Tree
- Well
- Water Tank
- Utility Post
- Pole

NOTES:
1. Vicinity map is not to scale.
2. The parcel line used to derive the project property boundary (APN 085-110-26) was determined from data collected on-site by a licensed surveyor. All other surrounding parcels were determined using geographical data from the Fresno County website.
3. See Sheet 2 for cross sections noted on figure.

TOPOGRAPHY SURVEY & AERIAL: Yamabe and Horn Engineering, Inc., Flown 2016-03-30; SOURCE: Fresno County 2016; compiled by Benchmark Resources in 2016

EXHIBIT 5

N

0 100 200 400 600 Feet

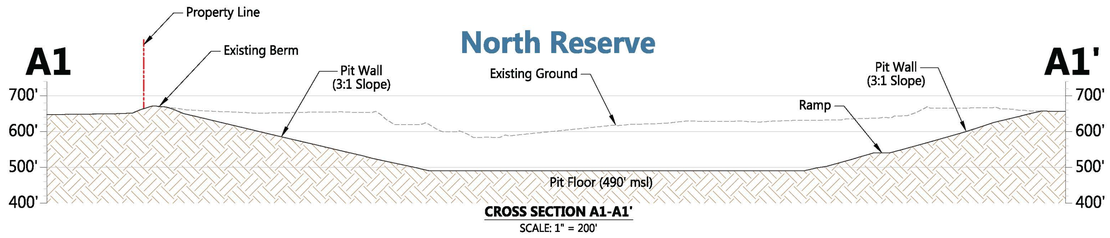
BENCHMARK RESOURCES

Existing Conditions

HEWITSON GRAVEL MINE SITE PLAN

Sheet 1

North Reserve



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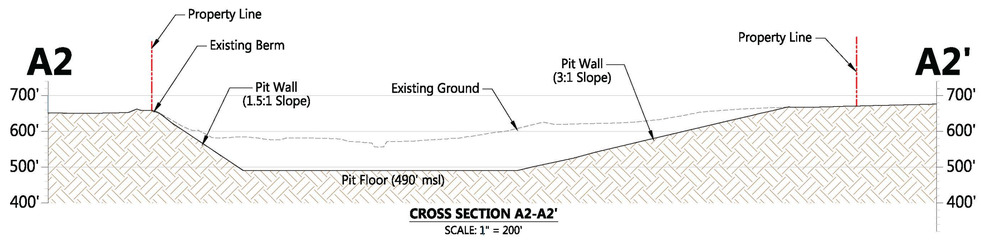

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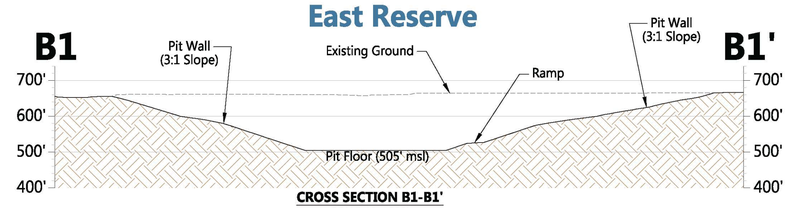
East Reserve



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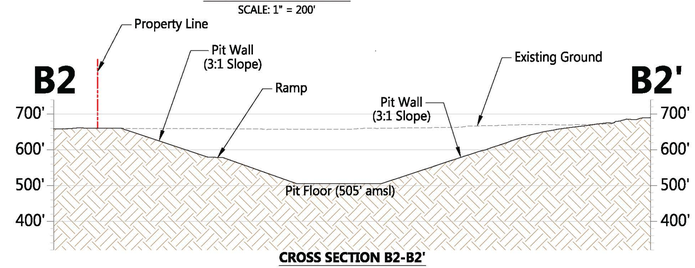

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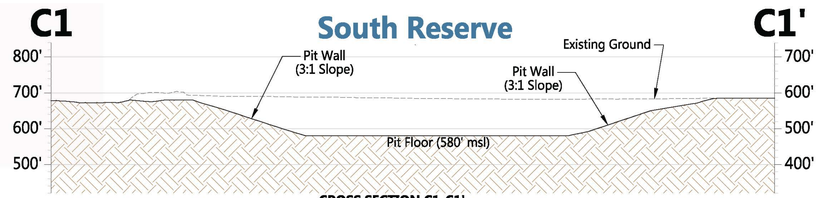
South Reserve



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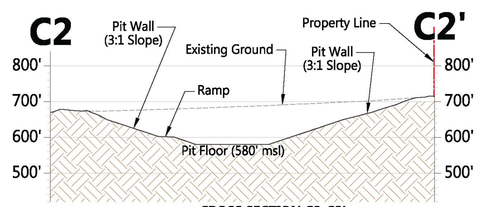
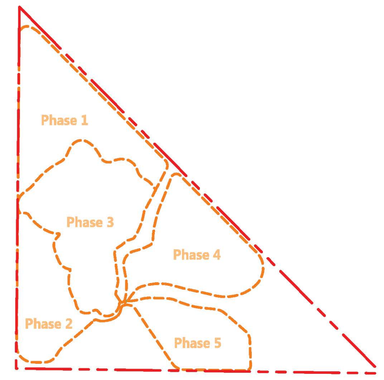


CROSS SECTION C2-C2'
SCALE: 1" = 200'

Mining Phase Map



NOTES:
1. Mining phase map not to scale.

LEGEND

- Property Line
- Phase Boundary
- Surface Disturbance Boundary
- Potential Soil Stockpiles
- Access Road
- Creek Centerline
- Paved Road
- Dirt Road
- Fence Line
- Primary Contour Line (25-foot interval)
- Intermediate Contour Line (5-foot interval)
- Sheet Flow
- Building
- Vegetation
- Tree
- Well
- Water Tank
- Utility Post
- Pole

NOTES:
1. "msl" = mean sea level.
2. Ramp designs are for volume calculations only and do not reflect the final constructed ramp designs.
3. Phase boundaries are subject to change.

SOURCE: TOPOGRAPHY SURVEY & AERIAL: Yamabe and Horn Engineering, Inc., Flown 2016-03-30; compiled by Benchmark Resources in 2016

N

0 100 200 400 600 Feet

BENCHMARK RESOURCES

Mine Plan

HEWITSON GRAVEL MINE SITE PLAN

Sheet 2

HEWITSON GRAVEL MINE
Fresno County, California

PROJECT DESCRIPTION

SEPTEMBER | 2016

Lead Agency
Fresno County Public Works and Planning

Owner/Applicant
Hewitson Farms

BENCHMARK RESOURCES

EXHIBIT 6

HEWITSON GRAVEL MINE
Fresno County, California
PROJECT DESCRIPTION

SEPTEMBER | 2016

Lead Agency
Fresno County, Public Works and Planning
2220 Tulare Street, Sixth Floor, Fresno, CA 93721

Owner/Applicant
Hewitson Farms
39482 CA-33, Avenal, CA 93204

Preparer
Benchmark Resources
2515 East Bidwell Street, Folsom, CA 95630

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1. PROJECT OVERVIEW

Hewitson Farms (Applicant) requests approval of an unclassified conditional use permit to extend the life of Unclassified Conditional Use Permit No. 2461–R, allowing rock, sand, and gravel to continue to be extracted from an existing mine site, Hewitson Gravel Mine (referred to as the "project"). The site is located on the west side of State Route (SR) 33 (also known as Lost Hills Road) as shown on Figure 1, "Regional Location," and Figure 2, "Site Location." No changes to the general nature of operations is proposed at this time.

1.1 BACKGROUND

Mining activity has been a periodic activity at the Hewitson Gravel Mine. Brown Materials of Avenal mined the property beginning in the 1920s, Thompson Material of Avenal mined it during the late 1940s and 1950s, and Fresno Paving Company mined it during the mid-1960s. Those areas of previous extraction were located primarily in the southern portion of the site, south of Chino Zapato Creek, an ephemeral drainage that bisects the site.

Conditional Use Permit No. 800 was approved in 1968 to allow a borrow pit, rock plant, and asphalt concrete batch plant on a 320-acre portion of the site, which is located on the west side of SR 33. Fresno County (County) permit records indicate that this use permit was not exercised and therefore lapsed.

In 1985, Conditional Use Permit No. 2126 was approved to allow a rock, sand, and gravel extraction operation and concrete and asphalt batching plant in the same 320-acre area of the previously approved extraction permits, but limited operations to a 178-acre portion of the 320 acres. Subsequently, Site Plan Review No. 5689 was approved, allowing implementation of Conditional Use Permit No. 2126. The operation has remained active consistent with Conditional Use Permit No. 2126 and Site Plan Review No. 5689.

On December 3, 1998, Acme Paving Company, Inc., of Avenal obtained Conditional Use Permit No. 2461-R to allow the continued excavation of rock, sand, and gravel on the site. Under that request, the use expanded operations to include a total of 257 acres and to allow the existing asphalt batching facility to incorporate concrete and asphalt recycling with incidental tire grinding.

Subsequently, over time the County approved various site plan review applications. The facility now operates under Conditional Use Permit No. 2461-R and Site Plan

Review No. 6949, which was approved on August 9, 1999. The current operation is conducted pursuant to Conditional Use Permit No. 2461 and Site Plan Review No. 6949.

1.2 PURPOSE AND NEED

The overall project goal is to provide a local source of aggregate products to the western Fresno county region from an existing facility, in the quantities (both for reserves and annual production rate) and high qualities needed to support the local economy and provide a regional supply base from a major roadway with access to the rural area with minimal impacts. Specific objectives have been defined to achieve this goal (see Section 3.1, "Project Objectives").

The availability, consumption, and demand for aggregate reserves throughout California are of concern and interest not only to local industries, but also to state and local planning and transportation agencies because of the diminishing supplies of these essential resources, according to a study by the California Geological Survey (2012). Aggregates provide the materials necessary for a wide range of public works and private-sector construction projects. The cost of aggregate is heavily influenced by the costs to transport it from where it is mined and processed to where it is used; thus, the availability of local sources play a key role in the costs of infrastructure maintenance and development and the costs of other local development.

The largest component of a project's air quality impacts are the on-road trucks used to deliver the aggregate from the mine site to the consumers. In this instance, the project would continue a supply of local aggregate reserves; thus, continued operation of Hewitson Gravel Mine would continue to provide reduced truck-trip distances by providing the local aggregate to help meet the local demand of the public and private sector.

The project includes state of the art mitigation to reduce on-site air quality impacts to a less-than-significant level. Further, if the existing permitted reserves are not mined, local demand would need to be supplied from sites located farther away from local market; therefore, from a global and regional context, no net increase of on-road truck emissions would occur with implementation of this project. In fact, the project would result in a net reduction of on-road trucks and related emissions compared to conditions without the project, because of the efficiency of getting the material to the end user with the project.

The population in the San Joaquin Valley is growing at a faster rate than the rest of the state, and Fresno County is participating in this growth. From 1990 to 2000, the County grew by 20 percent to 799,400 residents. During the first 2 decades of this century, the

State of California is estimating Fresno County's population growth at 42 percent. Other estimates indicate that by the year 2040, the population of Fresno County may grow to 2,498,000, or more than three times its current size.

2. SITE DESCRIPTION

2.1 LOCATION

The Hewitson Gravel Mine is located along SR 33 in an unincorporated area of western Fresno County approximately 6.5 miles west of the community of Avenal, at 45315 Lost Hills Road, Coalinga, California. The site location is shown on Figures 1 and 2. The location is also identified as listed below:

Fresno County Assessor's Parcel Number's: 085-110-265

U.S. Geological Survey Township and Range: West half of Section 27, Township 21 South, Range 16 East of the Mount Diablo Base and Meridian

Latitude and Longitude: 36°04'26"N, 120°13'45"W, at site entrance

Acreage: The property includes approximately 638 acres; however, the mining permit covers a 298-acre portion of this site.

The mine is bordered to the north and east by field crop agricultural lands and to the south and west by upland grazing, as visible in Figure 3, "Site Ownership and Surrounding Parcels."

2.2 ACCESS

The site entrance is approximately 6.5 miles west of the city of Avenal on SR 33.

2.3 EXISTING CONDITIONS

2.3.1 Land Use

Land use at the property is dominated by mining. Land use on-site is visible in Figure 4, "Existing Operations Aerial Photograph." Mining activity has been an ongoing activity on-site for more than 80 years. The site has been heavily disturbed by the historical mining activities and agriculture. A diversion structure in Chino Zapato Creek directed surface flows into a ditch ending at SR 33. The ditch was used to irrigate farmlands. Use of the ditch has long been abandoned.

The northern portion of the site is extensively mined, including surface disturbance from aggregate extraction activities, processing plant facilities for the current mining operations, roads, and various power transmission poles and lines that serve the on-site wells, maintenance and administration buildings, and an aggregate processing plant.

Figure 4 shows the current topography and nomenclature of the site features referenced in this document.

2.3.2 General Plan and Zoning

The *Fresno County General Plan* (Fresno County 2000) designates the site as Agriculture and the County Zoning Code provides that the site is zoned AE-20 (Agriculture Exclusive, 20-acre minimum lot size). Mining excavations are allowed in the AE-20 zone with approval of a conditional use permit.

2.4 SURFACE AND GROUNDWATER

2.4.1 Surface Water

Surface Water Conditions

The site is located in a semiarid region characterized by hot, dry summers and mild winters. Summer temperatures may reach 110°F, while winter temperatures may fall below 25°F. The high summer temperatures and low relative humidity combine for a high rate of surface water evaporation. The city of Coalinga is located approximately 8 miles northwest of the site, at an elevation of 650 feet mean sea level (msl). The average annual rainfall from 1942 to 2016 is 7.6 inches.

The western area of Fresno County between the Coast Range and Fresno Slough is sparsely populated, with land uses primarily consisting of agriculture and grazing land. A complex system of streams drains the eastern slope of the Coast Range toward the Fresno Slough on the valley floor. Due to their large drainage areas, many small creeks are prone to high flows and contribute to flooding in the western area of the valley. Urban areas in western Fresno County that are subject to flooding include the cities of Coalinga, Huron, and Mendota. Major facilities such as the California Aqueduct and Interstate 5 are also subject to flooding during large storm events.

Runoff from the site vicinity flows through the site via Chino Zapato Creek for about 7 miles north through agricultural lands, where it drains into Los Gatos Creek downstream of Coalinga. Los Gatos Creek continues northeasterly for another 7 miles to a point north of Huron, where it ends.

Surface Water Protection

Current surface water drainage on-site is shown in Figure 4. Processing water is kept separate from stormwater. It is retained on-site for reuse and is not discharged off-site. Surface water runoff is collected in drainage ditches and culverts on-site as it travels generally east. The site drainage is mostly contained within the property. Discharge of

water from the site from overland flow exits the site through silt fencing or it is collected in the drainage basin.

An approved and implemented site storm water pollution prevention plan (SWPPP) specifies best management practices that include good housekeeping, preventative maintenance, spill prevention and response, stormwater management practices, employee training, inspections, and monitoring. In accordance with the SWPPP, an inspection for erosion of slopes, of drainage channels, and of unpaved areas at the facility is completed after each significant rain storm. The SWPPP is required to be revised and implemented before implementing specific changes in industrial activities, as specified by the National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Industrial Activities.

At full buildout and reclamation of the site, the North Reserve, South Reserve, and East Reserve (see Figure 5, "Reclamation Plan") will drain internally. The remainder of the site will flow generally easterly, consistent with premining conditions. The site design and actions to control drainage, siltation, and erosion will be effective in protecting downstream beneficial uses of surface water in accordance with the Porter-Cologne Water Quality Control Act, Water Code Section 13000, et seq., and the federal Clean Water Act, 33 U.S. Code Section 1251, et seq.

2.4.2 Groundwater

Groundwater at the site is located below the floor of the existing operation and the final floor of the planned final topography. Local water levels are known to be over 300 feet below ground surface (CGI Technical Services, Inc. 2014).

Current mining has occurred to a depth of 540 feet msl, within 50 feet of the planned depth of the North Reserve. Groundwater has not been encountered. While small amounts of water may seep from lenses of sand and gravel when first encountered, the flow from such seeps rapidly diminishes. Thus, while shallow groundwater may be present in limited quantities in isolated lenses of sand and gravel, deep groundwater occurs at the site consistent with the local reported depth.

2.5 AGGREGATE RESOURCES

2.5.1 Use and Need for Aggregates

Sand, gravel, and crushed stone are referred to as "aggregates." These basic raw materials are the first step in the construction process and are used in a large variety of products. Aggregates are required for making Portland Cement Concrete and asphaltic concrete, two essential substances for building and maintaining our public and private

infrastructure. Buildings, homes, hospitals, roads, airports, shopping centers, sewers, and stormwater systems all depend on aggregates. Between 40 and 60 percent of all aggregates are used in public works projects. Sand, gravel, and stone comprise nearly 90 percent of the materials needed to build federal, state, and local roads.

2.5.2 State and Local Planning

Because aggregate is a low-value, high-bulk weight commodity, a major part of the cost of aggregate to the consumer is for transportation, and the farther the distance from the mine to the end user, the greater the cost. In many cases, for each additional 30 miles of haul distance, the price of aggregate per ton doubles. Transporting aggregate from distant sources also results in increased construction costs, fuel consumption, greenhouse gas emissions, air pollution, traffic congestion, and road maintenance (California Geological Survey 2012).

Transportation cost is the principal constraint defining the market area for a specific production region. In areas lacking nearby aggregate sources, delivery charges may be greater than the plant site's sale price for the material. This is a key factor underscoring the economic importance of maintaining local aggregate sources (CDMG 1988, 1999). Much of the statewide use of aggregates is for public works projects; thus, each doubling of the price of the construction aggregate materials means fewer public improvements (e.g., roadway maintenance projects and public building construction) can be accomplished for each public dollar.

The economic importance of locally available construction materials sources is recognized by the State of California, as articulated in California State Mining and Geology Board (SMGB) guidelines and employed in provisions of the State Geologist to identify and plan for aggregate resources throughout the state.

The *Fresno County General Plan* includes the following goals and policies in support of preserving the future availability of the County's mineral resources (Fresno County 2000: Open Space Element):

Goal OS-C To conserve areas identified as containing significant mineral deposits and oil and gas resources for potential future use, while promoting the reasonable, safe, and orderly operation of mining and extraction activities within areas designated for such use, where environmental, aesthetic, and adjacent land use compatibility impacts can be adequately mitigated.

Policy OS-C.1 The County shall not permit incompatible land uses within the impact area of existing or potential surface mining areas.

Policy OS-C.2 The County shall not permit land uses incompatible with mineral resource recovery within areas designated as Mineral Resource Zone 2 (MRZ-2).

Policy OS-C.10 The County shall not permit land uses that threaten the future availability of mineral resource or preclude future extraction of those resources.

2.5.3 Aggregate Reserves

The geologic materials to be permitted as a construction aggregates reserves consist of quaternary alluvial deposits, which are high-quality rock suitable for a broad range of construction purposes.

The current mine plan (under Conditional Use Permit 2461-R), shown in Figure 6, "Mine Plan," provides 25 million cubic yards of reserves. Experience at the operation has shown that unusable materials, consisting of soil, overburden, and process fines, comprise up to 30 percent of the total volume. As a result, the saleable product is estimated at 18 million cubic yards.

Although maximum production levels are primarily determined by market demand, approximately 18 million cubic yards (approximately 31 million tons) of construction aggregates materials are anticipated to be produced if the current design is fully completed. The maximum processing rate is estimated at 350,000 cubic yards annually.

The planned quarry depth is 160 feet below ground surface, or approximately 490 feet msl. Mining elevations are monitored relative to topographic survey elevations shown in this plan.

3. PROPOSED MINING AND RECLAMATION ACTIONS

3.1 PROJECT OBJECTIVES

The Applicant has developed a set of basic objectives surrounding this project and its operational requirements. As a commercial mining and aggregate products business, the project objectives consist of:

- a rural supply of sufficient proven resources for long-term (more than 50 years) supply to public and private projects;
- a property of sufficient size and existing land uses that minimize land use compatibility issues;
- a location with competitive distance to aggregate consumption markets;
- property under one ownership;
- ability to efficiently transport product principally via the state highway system; and
- a site with no prohibitive easement, agreement, or contract restrictions.

3.2 EXISTING MINE AND RECLAMATION PLAN DATA

The site contains sufficient acreage containing mineral reserves supporting a predictable, permitted, long-term operation. The site boundary is shown in Figure 6. Mine and reclamation plan data is listed in Table 1, "Mine and Reclamation Plan Data."

TABLE 1
EXISTING MINE AND RECLAMATION PLAN DATA

Design/Operating Characteristics	Description/Parameters/Assumptions[1]
OPERATIONAL ACTIVITIES	
Mining	The equipment to be used in the extraction operation includes rubber-tired scrapers, rubber-tired loaders, tractor-bulldozers, water trucks, graders, belt conveyors, sizing screens, and jaw- and cone-type crushers.
Processing	Aggregate processing plant, asphaltic concrete plant, ready-mix concrete plant, and recycling plant.
Reclamation	Mine slopes will generally not exceed 3:1 (horizontal:vertical) (3H:1V), with the exception of the east slope of the North Reserve, which will be 1.5H:1V,

Design/Operating Characteristics	Description/Parameters/Assumptions[1]
	and will remain in a stable reclaimed configuration. Final slopes are to be consistent with geotechnical specifications for long-term stability. Fill slopes will generally not exceed 3H:1V after final reclamation. Revegetation will involve seeding with shrubs and forbs for erosion control pending other agricultural uses of the property. The main access roads created for mining will remain for future use.
MINE AND RECLAMATION DATA	
Volume Maximum Annual Mine Production[2] (mined) Maximum Annual Mine Production (marketed)	 Up to 455,000 cubic yards Up to 350,000 cubic yards
Total Production[3] (mined)	25 million cubic yards
Total Production (marketed)	18 million cubic yards
Waste in Processing	30 percent
Depth of Mining Average Low	 The planned quarry depth is 160 feet below ground surface, or approximately 490 feet mean sea level.
Reclamation Areas Open space and Agriculture land	 255 acres

Notes:

1 All values approximate.

2 Amount includes aggregate and overburden. Overburden will be used for reclamation.

3 Total aggregate for the proposed 50-year life of the permit. Mining and reclamation may be completed within a shorter time frame depending on market demand for the product.

3.3 MINING OPERATIONS AND EQUIPMENT

The operation generally involves excavation using conventional mining practices common to the industry, processing by screening, and transport of the aggregate materials off-site. Mining activities are initiated with removal of soil and stockpiling for reclamation.

Excavated materials are crushed, screened, and washed as needed and stockpiled. Material is transferred from these stockpiles to roadable trucks for transport to construction sites.

The types of mobile equipment and/or machines employed are typical excavation equipment, such as a dozer, a front-end wheel loader, a portable water pump, a motor grader, conveyers, and haul trucks. A water truck is used to maintain surfaces and control dust. Table 2, "Typical Equipment," provides typical equipment that has been and will continue to be used at the mine site.

TABLE 2
TYPICAL EQUIPMENT

Equipment[1]	Quantity x Daily Hours	HP	Fuel/Tier	Uses
MINING OPERATIONS[2]				
DZ2012 dozer (CAT D9R or similar) AT2003 Challenger tractor (CAT ag tractor) Excavator (Hitachi 650 or similar)	1 x 1 1 x 1 1 x 2	405 717 463	Diesel/T1 Diesel/T3 Diesel/T3	Used to remove topsoil and overburden and excavate aggregate-bearing strata. The Beegee would also be used to maintain the roads on-site.
T50008 water truck	1 x 1	355	Diesel	Used to water haul roads.
LD2015 front-end loader (CAT 988G)	1 x 3	520	Diesel/T2	Used to load raw materials (rock, sand, and gravel products) onto the conveyor belt.
Conveyor belt	–	–	Electricity	Used to convey raw materials to raw material stockpiles at the rock processing plant.
HT2003 mine haul trucks (CAT 740B)	2 x 2	464	Diesel/T2	Used to convey raw materials to raw material stockpiles at the rock processing plant.
ROCK PROCESSING PLANT OPERATIONS				
Pick-up trucks	2 x 0.2	385	Diesel	Used to transport materials at the processing plant.
LD2013 loader (CAT 988F)	1 x 1	475	Diesel/T1	Used to load raw materials into plant for processing and to load processed aggregate materials onto trucks for delivery off-site.
LD2024 loader (CAT 982M or similar)	1 x 4	430	Diesel/T4	Used to load processed aggregate materials onto trucks for delivery off-site.
FL6004 manlift (self-propelled)	1 x 0.1	–	Propane	Used to elevate workers.
LD6008 Bobcat/skid steer	1 x 0.1	78	Diesel/T2	Used to move smaller material.

Notes: HP = horsepower.

The types of vehicles used vary over time because of availability and the use of new models to suit different on-site conditions and perform specific short-term reclamation tasks. In addition, over time newer technology will provide more energy-efficient equipment with a smaller emission profile. A maintenance area and parking for aggregate delivery trucks is located at the plant site. Equipment, supplies, and other materials are stored at the plant site. Current storage areas are shown in Figure 4.

3.4 PROCESSING OPERATIONS

3.4.1 Hours of Operation, Work Force, and Production Rate

No change to operational times is proposed. Hours of operation are consistent with those of Conditional Use Permit No. 2461-R. Days and hours of operations will occur as required to meet market demand. Current approved hours are from 7:00 a.m. to 5:00 p.m., Monday through Friday. On weekends, operations will occur only as needed. On an occasional basis, the site may operate any time during the day (any time during a 24-hour period) to meet customer demand.

3.4.2 Plant Site Location and Layouts

The mine will be developed in phases, as shown in Figure 6. The North Reserve is expected to be fully excavated before development of the South Reserve and East Reserve, requiring the plant site to be relocated. Alternatively, the plant site could remain as is during development of the South Reserve and East Reserve, and the North Reserve could be completed last. Reclamation phasing should generally track mine development phasing.

3.4.3 Ancillary Facilities and Materials Storage

No change to buildings or the need for new buildings will occur. As depicted on the project site plan, an existing office, scale house, and scale house trailer exist on-site. An existing control building exists at the asphalt batching plant area. No new buildings are proposed.

No change to what supplies or materials are used and how are they stored is proposed. The processing plant operation requires raw materials for producing marketable products, including asphalt oil, recycled concrete, and hydrocarbon fuels for vehicles and equipment. Storage facilities range in capacity. Diesel is stored in a 10,000 gallon aboveground storage tank with approved spillage protection that meets all applicable spillage and retention requirements. Asphalt oil is stored in a 30,000 gallon aboveground storage tank with approved spillage protection. Lubricants necessary for general equipment maintenance are stored in a locked container.

3.4.4 Waste Fines

The raw materials arriving via conveyor or haul trucks from the excavation areas will be elevated to the large surge pile from which material will travel to a conveyor that will feed a primary screen and crushers. Materials will continue to travel through one or more wet and dry screens and secondary crushers until the various components meet

specifications for different uses of sand products, washed concrete aggregates, and pavement aggregates. The materials will then be conveyed to individual stockpiles for shipment or used in the on-site batch plants.

Process water used to wash excavated materials will be recycled via a closed-circuit recirculation system. Because some water is retained by the materials during processing, groundwater will also be used as a supplemental source of process water. Initially, the amount of supplemental water required for processing will be pumped from existing on-site wells. Once sufficient groundwater is exposed in the excavation phases, supplemental water will be pumped from the excavated areas.

Process water systems are projected to create solids (clays and nonmarketable soil fines) for placement of previously excavated areas..

3.5 ACCESS AND TRIP GENERATION

No change to site access is proposed. All traffic will continue to use SR 33. The site has access from an existing egress and ingress point approved by previous use permits, which includes a paved driveway approach built to California Department of Transportation and County standards. This drive approach extends to the existing scale house. An existing gate is located at the site entrance to provide security during nonbusiness hours. A 4-foot-high barbed-wire fence is located along the site frontage along SR 33, from the northerly tip of the site south to the Zapato Chino Creek to prevent trespass and injuries to members of the public on-site.

The owner retained Fresno-based registered traffic engineer José Benevides to perform an assessment of the appropriate site distance from the entry of the facility to SR 33. Based on site visits and observation of the facility in operation, Mr. Benevides concluded that adequate site distance exists at the project entry, consistent with applicable standards. These conclusions were shared with the County traffic engineering division and California Department of Transportation (Caltrans) staff.

The project trip generation totals in Table 3, “Proposed Project Trip Generation,” were developed in consultation with the current site operator. These trips were observed by Mr. Benevides on Tuesday, March 29, 2016. The day of week (Tuesday) was selected based on consultation with the County and Caltrans District 6 staff. Tuesday was selected because recent count data revealed that traffic volumes on a Tuesday were the highest during the week for SR 33 near the project. The trip generation estimates provided by the current site operator and those observed by Mr. Benevides are generally consistent with the estimated trip generation totals provided for and evaluated as part of Unclassified Conditional Use Permit No. 2461-R.

TABLE 3
PROPOSED PROJECT TRIP GENERATION

Uses by Vehicle Classification	Number of Axles	Peak Season Daily Trips	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Facility employees[1]	2	47	12	2	14	3	11	14
Ready mix trucks[2]	3/4	0	0	0	0	0	0	0
Asphalt trucks[3]	5	47	2	2	4	0	0	0
Aggregate trucks[3]	5	137	6	6	12	0	7	7
Cement trucks[2]	5	0	0	0	0	0	0	0
Liquid asphalt trucks[3]	5	3	0	0	0	0	0	0
Recycled materials trucks[3]	5	7	0	0	0	0	0	0
Fuel/propane trucks[3]	5	3	0	0	0	0	0	0
Outside services/delivery trucks[3]	2	3	0	0	0	0	0	0
Totals (standard vehicles and trucks combined)	**n/a**	**247**	**20**	**10**	**30**	**3**	**18**	**21**
Totals (trucks only)	**n/a**	**200**	**8**	**8**	**16**	**0**	**7**	**7**

Notes:
[1] Estimate based on 14 employees operating the entire facility and trip rates and splits pursuant to the ITE Trip Generation Manual 9th Edition using land use Code 130 - Industrial Park.
[2] The project does not produce cement products.
[3] Based on 2015 project trip generation being prorated upward to 200 daily truck trips.

3.6 WATER SUPPLY AND USE

No change in the estimated volume of water to be used or its source is proposed. Water is used for the production of aggregate, washing truck tires, and operating the asphalt ready-mix plant. Water is also lost to evaporation from settling and water-recycling ponds. All water is supplied from on-site wells, owned by the Hewitson Farms, and conveyed from the northeasterly portion of the site via a pipeline extending under SR 33. Recycled processing water and water pumped from excavated mine cells are used to reduce water demand. The total annual net consumptive water use for these activities will remain the same as exists under current operations.

3.7 RECLAMATION

The California Surface Mining and Reclamation Act (SMARA) requires mines to be reclaimed to a usable condition that is readily adaptable for a productive alternative land use that does not endanger public health or safety. A reclamation plan has been

submitted as part of the application materials in compliance with SMARA and County requirements.

Figure 5 shows the proposed plan for reclamation. The plan provides for a site that is suitable for postmining open space and agricultural land as allowed under the proposed *Fresno County General Plan* and Zoning Code designation for the site is consistent with historical use of the property. Following the completion of mining and reclamation activities, equipment associated with mining and processing would be removed from the site, including, but not limited to, the office building, scale, screens, and conveyors.

The removal, handling, and replacement of soil to be used in reclamation would be accomplished in accordance with SMGB reclamation performance standards.

3.8 FINANCIAL ASSURANCE

SMARA requires surface mining operators to obtain lead agency–approved financial assurance for the reclamation of mined lands to ensure the public does not bear the cost of reclaiming abandoned operations. In the event of financial incapability by the operator, the lead agency (or the California Department of Conservation) would use the financial assurance funds to reclaim the mined site and to ensure that mine operations comply with the approved reclamation plan. A financial assurance is currently on file with the County for the existing operation and will continue to be updated on an annual basis.

4. POTENTIAL PERMITS AND APPROVALS

4.1 COUNTY LAND USE ENTITLEMENTS

Table 4, "Potential Permits and Approvals," provides a preliminary list of federal, state, and local agency approval that may be required during permitting and following approval of this operation.

TABLE 4
POTENTIAL PERMITS AND APPROVALS

Agency/Department	Permit/Approval/Process	Purpose
FEDERAL AGENCIES		
Mine Safety and Health Administration	Notice of Commencement of Operations	Noticing the ownership and location of the mine
	Emergency Fire, Evacuation, and Rescue Plan	Potential emergency situations plans required for surface operations
	Legal Identity Report	Noticing the ownership and location of the mine
	Miner Training Program	Mine safety training programs educating workers
	Mine Safety and Health Administration Identification Number	Tracking all mine sites
STATE AGENCIES		
Central Valley Regional Water Quality Control Board	Waste Discharge Requirements Permit Code of Federal Regulations Title 40, Section 436, Subpart B	Required for on-site gravel washing and discharge of wash water to on-site settling basins
State Water Resources Control Board	Compliance with the California Aboveground Petroleum Storage Act	Requires owners or operators of aboveground petroleum storage tanks to file a storage statement and prepare a federal spill prevention and control countermeasure plan
California Department of Transportation	Encroachment Permit	Potential renewal of existing encroachment permit
California Occupational Safety and Health Administration	Construction Permit	Worker safety/health

Agency/Department	Permit/Approval/Process	Purpose
FRESNO COUNTY		
Fresno County Department of Public Works and Planning	Environmental Impact Report	Compliance with the California Environmental Quality Act
	Mining/Reclamation Plan and Financial Assurance (Public Resources Code [PRC] 2710 et seq.)	Compliance with the Surface Mining and Reclamation Act (SMARA)
	Use Permit/Mining Permit (SMARA PRC 2710 et seq.)	Activities where mining use is conditional in a particular zone
Road Division	Road Encroachment	Activities within County rights-of-way
Fresno County Environmental Health Department	Ordinances Regulating Storage Tanks	Storage of regulated materials
	Hazardous Materials Business Plan, Hazardous Materials Inventory	Handling hazardous materials in quantities equal to or greater than state minimum threshold quantities
Fresno County Fire Protection District	Fire Protection Plan	Ensuring adequate water storage, mains, and hydrants for fires and access to accommodate firefighting equipment
San Joaquin Valley Air Pollution Control District	Authority to Construct, Permit to Operate	Constructing, modifying, or operating a facility or equipment that may emit pollutants from a stationary source

5. References

California Department of Conservation, Division of Mines and Geology. 1988. *Mineral Land Classification: Aggregate Materials in the Fresno Production-Consumption Region*. Special Report 158.

California Department of Conservation, Division of Mines and Geology. 1999. *Update of Mineral Land Classification: Aggregate Materials in the Fresno Production-Consumption Region, California*. OFR 99-02.

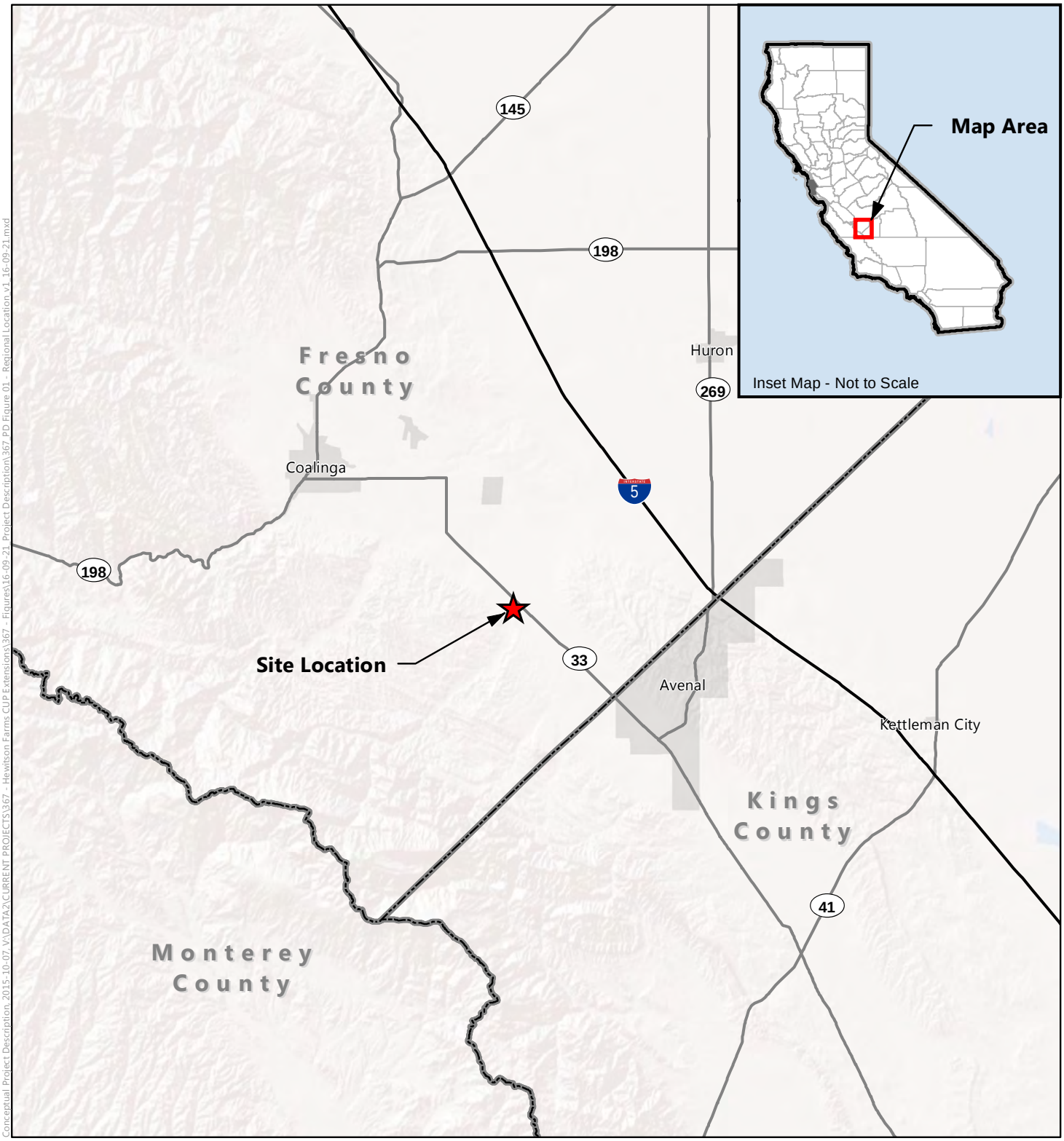
California Geological Survey. 2012. *Aggregate Sustainability in California*, Map Sheet 52. Sacramento, CA.

CDMG. *See* California Department of Conservation, Division of Mines and Geology

CGI Technical Services, Inc. 2014 (December 4). *Slope Stability Study, Avenal Quarry, Fresno County, California*. Redding, CA. Prepared for Jaxon Enterprises, Redding, CA.

Fresno County. 2000 (October). *Fresno County General Plan*. Fresno, CA: Public Works and Planning.

FIGURES



SOURCE: ESRI World Shaded Relief (2016); ESRI World Streetmap (2009); compiled by Benchmark Resources in 2016

LEGEND

- County Boundary
- Interstate
- State Route
- Urban Area

N

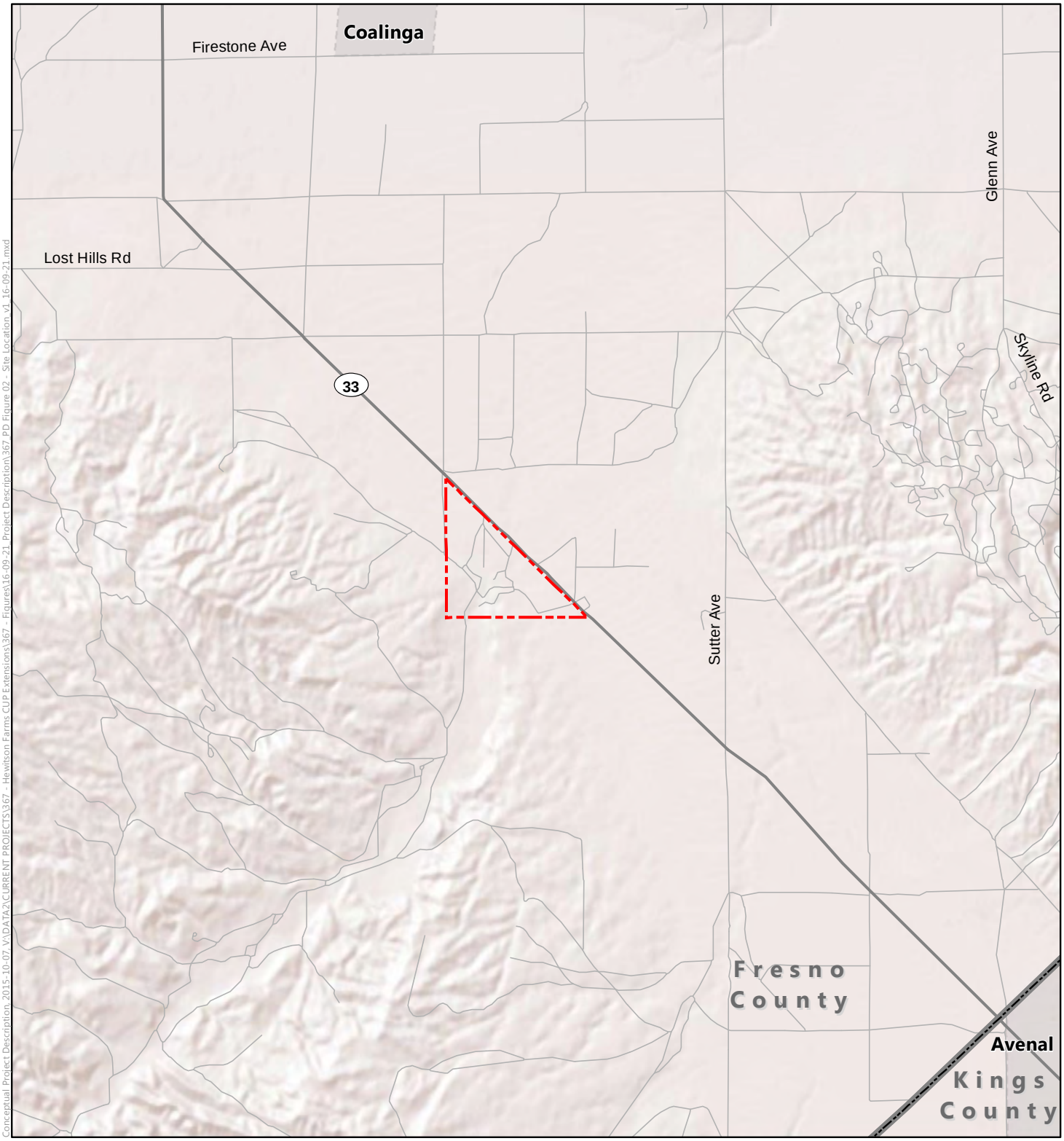
0 2.5 5 7.5 10 Miles

BENCHMARK RESOURCES

Regional Location

HEWITSON GRAVEL MINE PROJECT DESCRIPTION

Figure 1



Conceptual Project Description_2015-10-07_V:\DATA2\CURRENT PROJECTS\367 - Hewitson Farms CUP Extensions\367 - Figures\16-09-21_Project Description\367 PD Figure 02 - Site Location v1_16-09-21.mxd

SOURCE: ESRI World Shaded Relief (2016); ESRI World Streetmap (2009); compiled by Benchmark Resources in 2016

LEGEND

- Site Location
- County Boundary
- State Route
- Street
- Urban Area

N

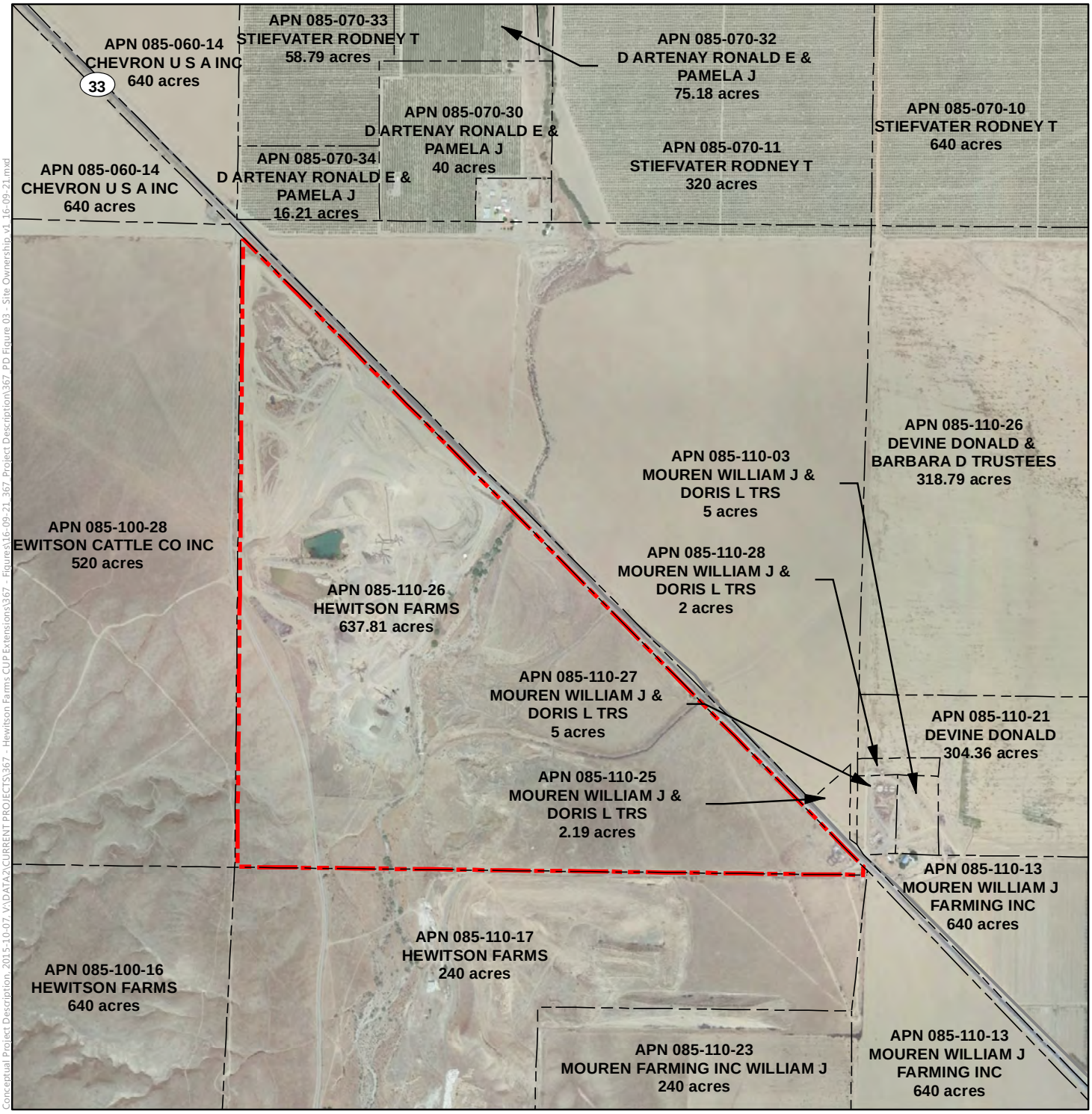
0 0.5 1 1.5 2 Miles

BENCHMARK RESOURCES

Site Location

HEWITSON GRAVEL MINE PROJECT DESCRIPTION

Figure 2



Conceptual Project Description, 2015-10-07, V:\DATA2\CURRENT PROJECTS\367 - Hewitson Farms CUP Extensions\367 - Figures\16-09-21_367_Project Description\367_PD Figure 03 - Site Ownership_v1_16-09-21.mxd

TOPOGRAPHY SURVEY: Yamabe and Horn Engineering, Inc., Flown 2016-03-30; SOURCE: Fresno County, 2016; ESRI World Streetmap (2009);
AERIAL: Google Earth Pro (2015-05-02); compiled by Benchmark Resources in 2016

NOTES:

1. The parcel line used to derive the project property boundary (APN 085-110-26) was determined from data collected on-site by a licensed surveyor. All other surrounding parcels were determined using geographical data from the Fresno County website.

LEGEND

- Site Location
- Parcel Lines
- State Route

N

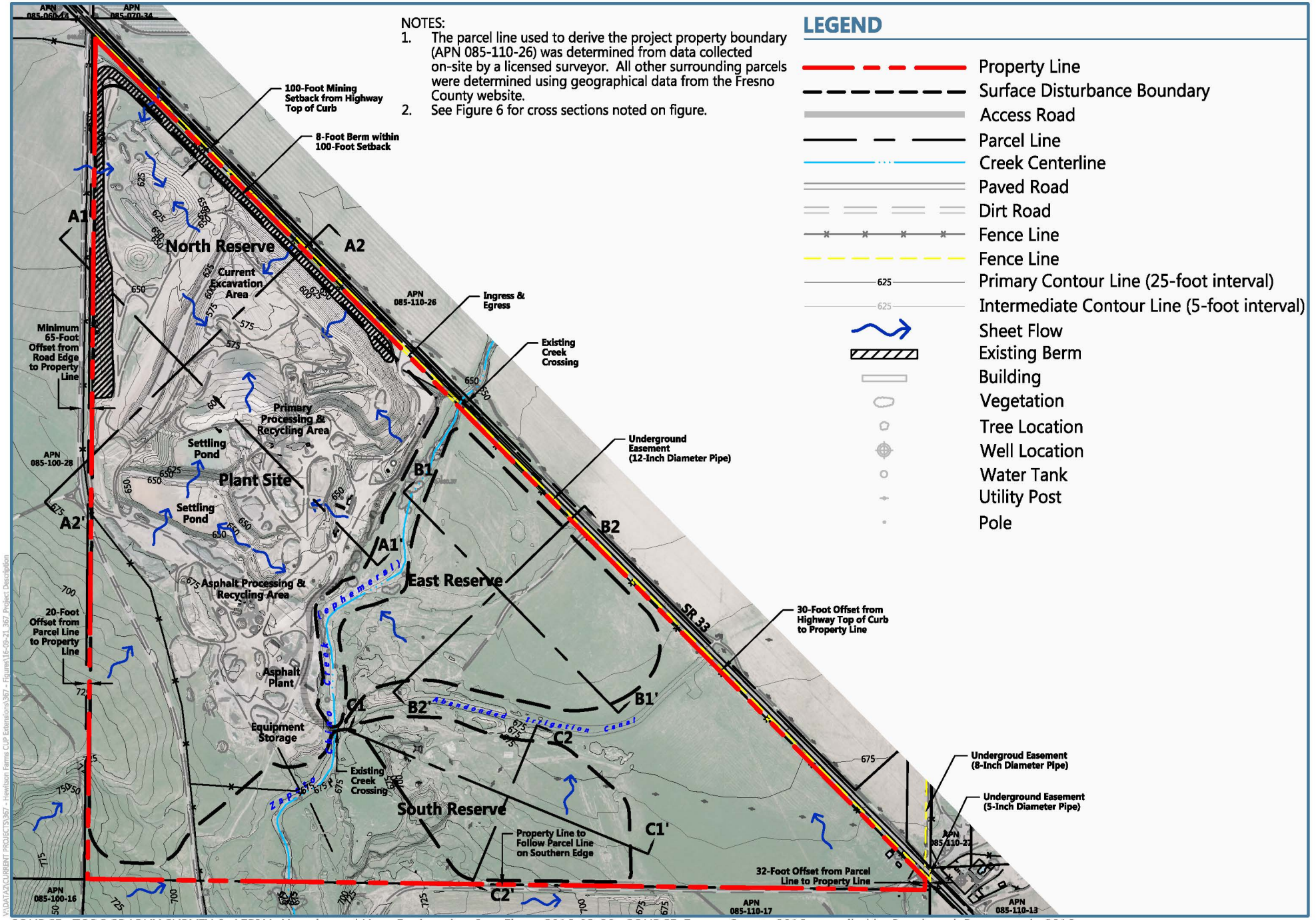
0 600 1,200 1,800 2,400 Feet

BENCHMARK RESOURCES

Site Ownership and Surrounding Parcels

HEWITSON GRAVEL MINE PROJECT DESCRIPTION

Figure 3



SOURCE: TOPOGRAPHY SURVEY & AERIAL: Yamabe and Horn Engineering, Inc., Flown 2016-03-30; SOURCE: Fresno County 2016; compiled by Benchmark Resources in 2016

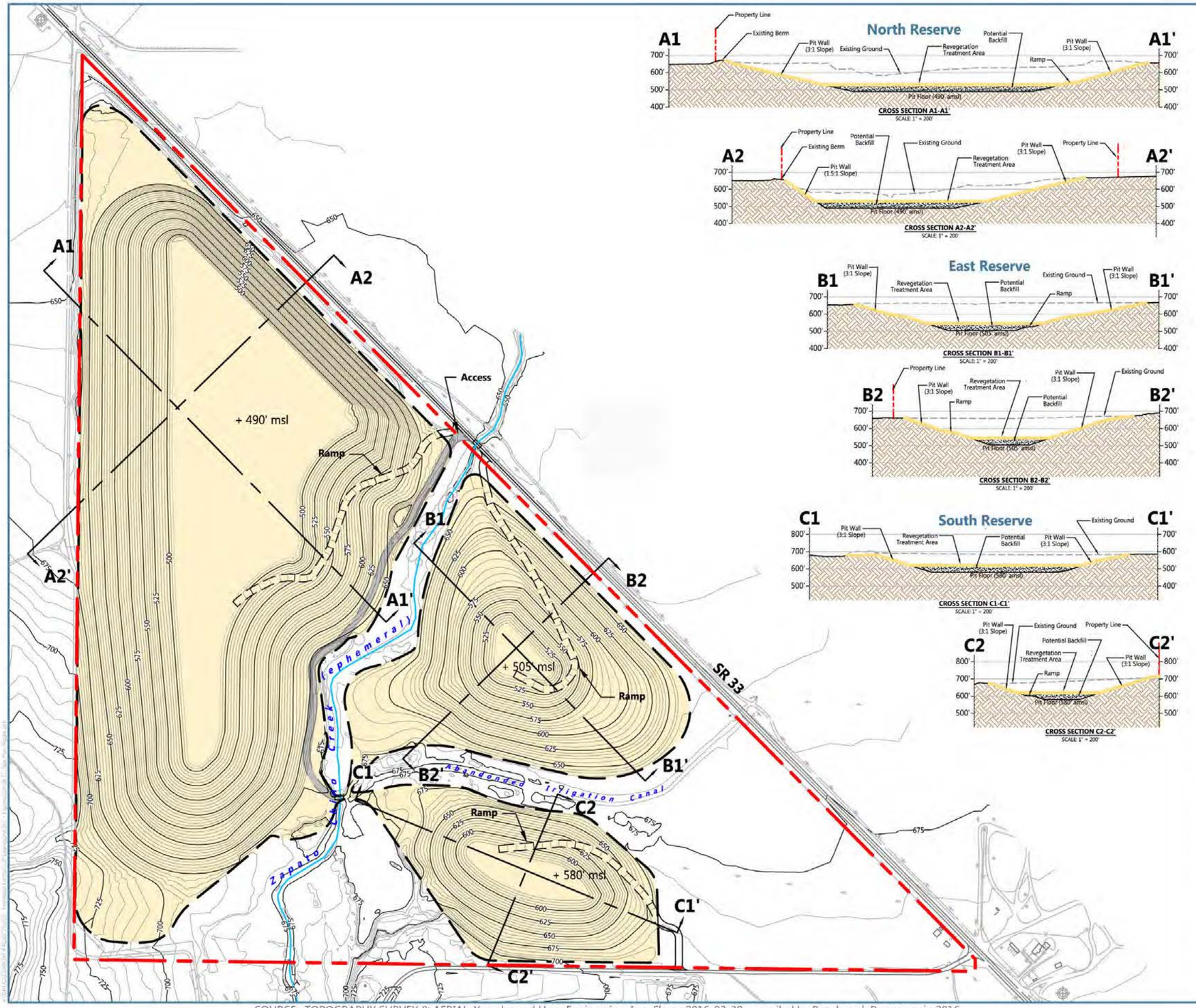
0 200 400 800 Feet

BENCHMARK RESOURCES

Existing Operations Aerial Photograph

HEWITSON GRAVEL MINE PROJECT DESCRIPTION

Figure 4



LEGEND

- Property Line
- Phase Boundary
- Surface Disturbace Boundary
- Access Road
- Creek Centerline
- Paved Road
- Dirt Road
- Fence Line
- Primary Contour Line (25-foot interval)
- Intermediate Contour Line (5-foot interval)
- Building
- Vegetation
- Tree
- Well
- Water Tank
- Utility Post
- Pole

RECLAMATION SUMMARY

Revegetation Treatment Areas	±223 ac
Roads and Surface to Remain	±2 ac

REVEGETATION SEED MIX

Common Name	Latin Name	Pounds PLS Per Acre
Mormon tea	*Ephedra Nevadensis*	4
Cattle spinach	*Atriplex polycarpa*	8
Quailbush	*Atriplex lentiformis*	6
Zorro fescue	*Festuca megalura*	10
Bladderpod	*Isomeris arborea*	6
Dwarf goldfields	*Lasthenia chrysostoma*	2
Pigmy-leafed lupine	*Lupinis bicolor*	5
	TOTAL	**41**

Note: PLS= Pure Live Seed.

NOTES:
1. "msl" = mean sea level.
2. Ramp designs are for volume calculations only and do not reflect the final constructed ramp designs.

N

0 300 600 1,200 Feet

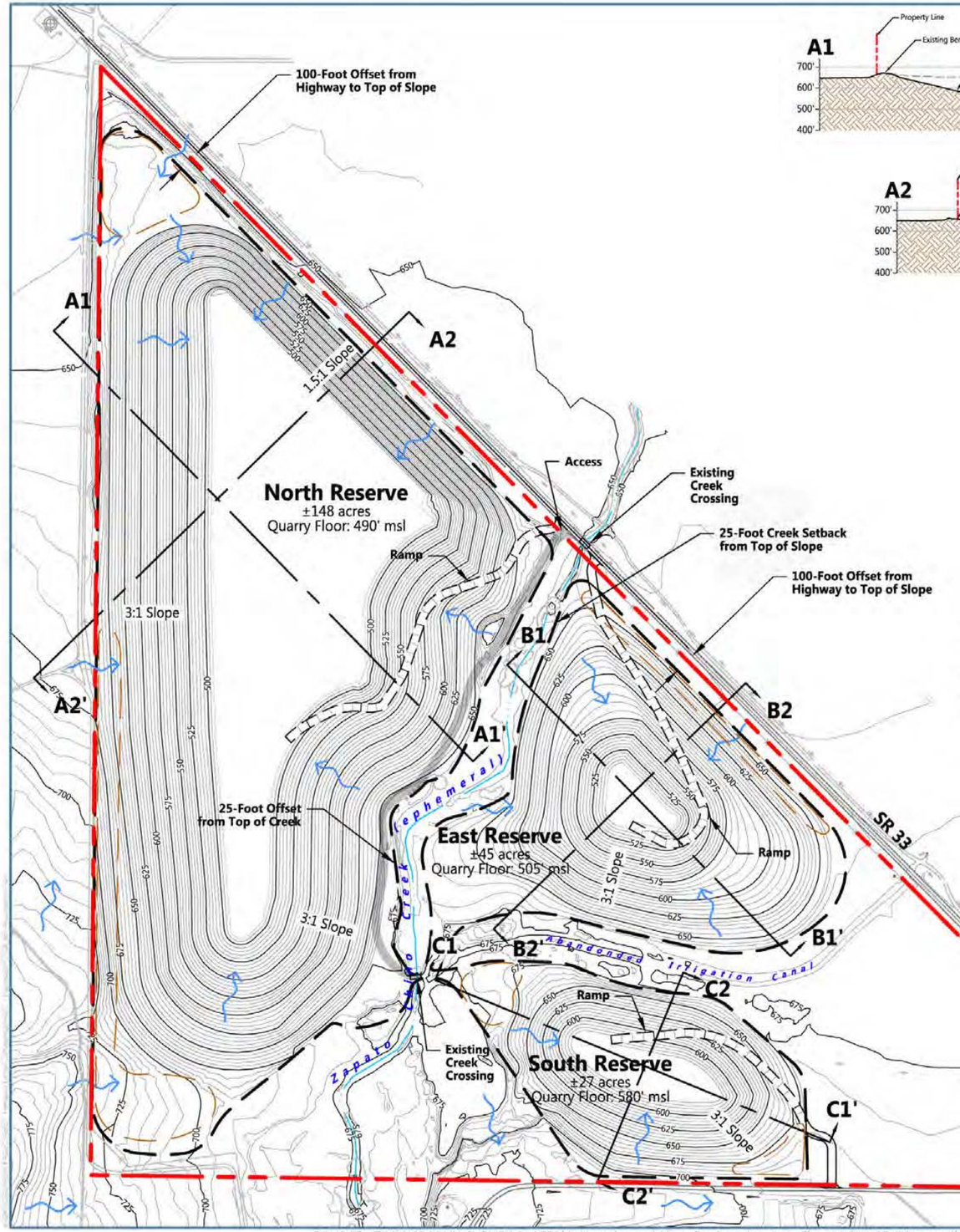
SOURCE: TOPOGRAPHY SURVEY & AERIAL: Yamabe and Horn Engineering, Inc., Flown 2016-03-30; compiled by Benchmark Resources in 2016

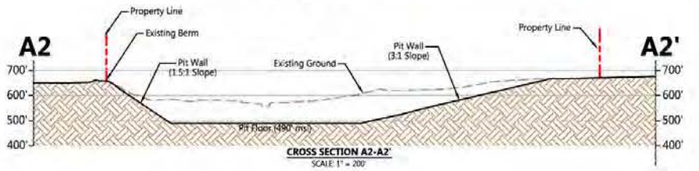
BENCHMARK RESOURCES

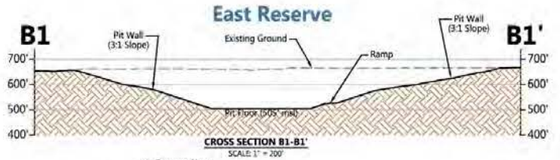
Reclamation Plan

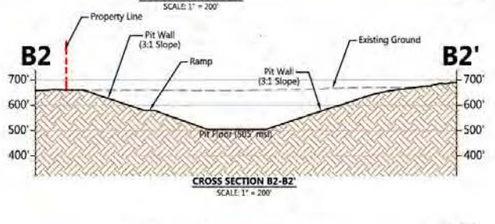
HEWITSON GRAVEL MINE PROJECT DESCRIPTION

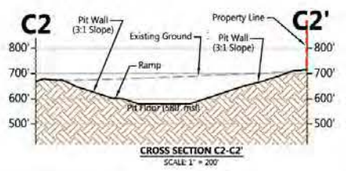
Figure 5







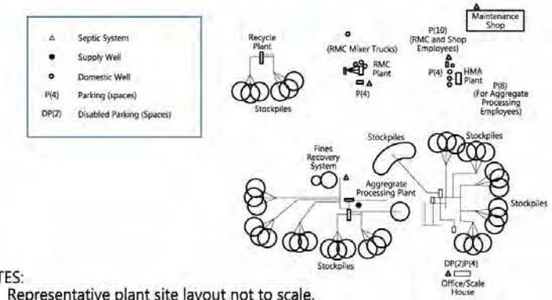




Mining Phase Map

NOTES:
1. Mining phase map not to scale.

Representative Plant Site Layout



NOTES:
1. Representative plant site layout not to scale.
2. Plant location varies over life of mine.
3. RMC = ready-mix concrete

LEGEND

- Property Line
- Phase Boundary
- Surface Disturbace Boundary
- Potential Soil Stockpiles
- Access Road
- Creek Centerline
- Paved Road
- Dirt Road
- Fence Line
- Primary Contour Line (25-foot interval)
- Intermediate Contour Line (5-foot interval)
- Sheet Flow
- Building
- Vegetation
- Tree
- Well
- Water Tank
- Utility Post
- Pole

NOTES:
1. "msl" = mean sea level.
2. Ramp designs are for volume calculations only and do not reflect the final constructed ramp designs.
3. Phase boundaries are subject to change.

N

0 300 600 1,200 Feet

SOURCE: TOPOGRAPHY SURVEY & AERIAL: Yamabe and Horn Engineering, Inc., Flown 2016-03-30; compiled by Benchmark Resources in 2016

BENCHMARK RESOURCES

Mine Plan

HEWITSON GRAVEL MINE PROJECT DESCRIPTION

Figure 6

HEWITSON GRAVEL MINE

OPERATIONAL STATEMENT

SEPTEMBER | 2016

Lead Agency
Fresno County Public Works and Planning

Owner/Applicant
Hewitson Gravel Mine

BENCHMARK RESOURCES

HEWITSON GRAVEL MINE

OPERATIONAL STATEMENT

SEPTEMBER | 2016

Lead Agency
Fresno County, Public Works and Planning
2220 Tulare Street, Sixth Floor, Fresno, CA 93721

Owner/Applicant
Hewitson Farms
39482 CA-33, Avenal, CA 93204

Preparer
Benchmark Resources
2515 East Bidwell Street, Folsom, CA 95630

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APPENDICES

Appendix A Fresno County Operational Statement Checklist Form
Appendix B San Joaquin Air Quality Permits

OPERATIONAL STATEMENT

Hewitson Farms (owner) requests approval of an unclassified conditional use permit to extend the life of Unclassified Conditional Use Permit No. 2461–R, allowing rock, sand, and gravel to continue to be extracted from an existing mine site, Hewitson Gravel Mine. The site is located on the west side of State Route (SR) 33 (also known as Lost Hills Road) as shown on Figure 1, "Regional Location," and Figure 2, "Site Location." The following information responds to Fresno County's (County's) requirements for an operational statement, which are provided in Appendix A, "Fresno County Operational Statement Checklist Form."

1. NATURE OF THE OPERATIONS

No change to the nature of operations is proposed at this time. The Hewitson Gravel Mine has been mined in various locations under various mine names. Brown Materials of Avenal mined the site starting in the late 1920s, followed by Thompson Material of Avenal during the late 1940s and 1950s and Fresno Paving Company in the mid-1960s.

In 1968, Conditional Use Permit No. 800 was approved to allow a borrow pit, rock plant, and asphalt concrete batch plant on a 320-acre portion of the site (see Figure 2). County permit records indicate that this use permit was not exercised and therefore lapsed.

In 1985, Conditional Use Permit No. 2126 was approved to allow a rock, sand, and gravel extraction operation and concrete and asphalt batching plant in the same 320-acre area of the previously approved extraction permits, but limited operations to a 178-acre portion within the 320 acres. Subsequently, Site Plan Review No. 5689 was approved. Conditional Use Permit No. 2126 was exercised and the operation has remained active since that time.

On December 3, 1998, Acme Paving Company Inc. of Avenal obtained Conditional Use Permit No. 2461-R to allow the continued excavation of rock, sand, and gravel on the site. Under that request, the use expanded operations to include a total of 257 acres and to allow the existing asphalt batching facility to incorporate concrete and asphalt recycling with incidental tire grinding. At the time of Conditional Use Permit No. 2461-R approval, the County also found that Environmental Assessment No. 3637-R appropriately included an evaluation of a range of potential environmental issues and included the determination that said potential environmental issues could be mitigated to a less-than-significant level with appropriate project mitigation measures and project-

related conditions. A negative declaration was published for Unclassified Conditional Use Permit No. 2461–R on October 23, 1998.

Subsequently, over time the County has approved various site plan review applications. Hewitson Gravel Mine now operates under Site Plan Review No. 6949, which was approved on August 9, 1999. Please see Figure 3, "Existing Operations Aerial Photograph," for a current aerial of the site. Rock, sand, and gravel has been extracted on-site consistent with the terms, conditions, and mitigation measures outlined in the aforementioned Unclassified Conditional Use Permit 2461–R and related site plan reviews for approximately 18 years.

Hewitson Farms now requests an unclassified conditional use permit that extends the life of Unclassified Conditional Use Permit No. 2461–R for an additional 50 years to allow for the extraction within the same boundaries and same operational characteristics as was originally approved in 1998. No changes in intensity, hours of operation, volumes, site extraction boundaries, depths, or other related project characteristics are proposed to occur. As part of the County's site monitoring effort, the County requested on August 6, 2015 that the site plan be updated to reflect which phases have been mined and which phases remain to be mined. The site plan has been updated as shown in Figure 4, "Site Plan."

2. OPERATIONAL TIME LIMITS

No change to operational times is proposed at this time. Hours of operation are consistent with those of Conditional Use Permit No. 2461-R. Days and hours of operations will occur as required to meet market demand. Current approved hours are from 7:00 a.m. to 5:00 p.m., Monday through Friday. On weekends, operations will occur only as needed. On an occasional basis, the site may operate any time during the day (any time during a 24 hour period) to meet customer demand.

3. NUMBER OF CUSTOMERS AND VISITORS

No change in customers and visitors is proposed at this time. Approximately two visitors access the site per week; service and delivery vehicles include one UPS daily delivery and one project related supply delivery per day.

4. NUMBER OF EMPLOYEES

No change to the number of employees is proposed at this time. Up to five employees are included in each shift. There are three shifts.

5. SERVICE AND DELIVERY VEHICLES

See Item 3, above.

6. ACCESS TO SITE

No change to site access is proposed at this time. All traffic will continue to use SR 33. The site has access from an existing egress and ingress point approved by previous use permits, which includes a paved driveway approach built to California Department of Transportation and County standards. This drive approach extends to the existing scale house. An existing gate is located at the site entrance to provide security during nonbusiness hours. A 4-foot-high barbed-wire fence is located along the site frontage along SR 33, from the northerly tip of the site south to the Zapato Chino Creek to prevent trespass and injuries to members of the public on-site.

The owner retained Fresno-based registered traffic engineer José Benevides to perform an assessment of the appropriate site distance from the entry of the facility to SR 33. Based on site visits and observation of the facility in operation, Mr. Benevides concluded that adequate site distance exists, consistent with applicable standards. These conclusions were shared with the County traffic engineering division and California Department of Transportation (Caltrans) staff.

The project trip generation totals in Table 1, "Proposed Project Trip Generation," were developed in consultation with the current site operator. These trips were observed by Mr. Benevides on Tuesday, March 29, 2016. The day of week (Tuesday) was selected based on consultation with the County and Caltrans District 6 staff. Tuesday was selected because recent count data revealed that traffic volumes on a Tuesday were the highest during the week for SR 33 near the Project. The trip generation estimates provided by the current site operator and those observed by Mr. Benevides are generally consistent with the estimated trip generation totals provided for and evaluated as part of Unclassified Conditional Use Permit No. 2461-R.

TABLE 1
PROPOSED PROJECT TRIP GENERATION

Uses by Vehicle Classification	Number of Axles	Peak Season Daily Trips	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Facility employees[1]	2	47	12	2	14	3	11	14
Ready mix trucks[2]	3/4	0	0	0	0	0	0	0
Asphalt trucks[3]	5	47	2	2	4	0	0	0
Aggregate trucks[3]	5	137	6	6	12	0	7	7
Cement trucks[2]	5	0	0	0	0	0	0	0
Liquid asphalt trucks[3]	5	3	0	0	0	0	0	0
Recycled materials trucks[3]	5	7	0	0	0	0	0	0
Fuel/propane trucks[3]	5	3	0	0	0	0	0	0
Outside services/delivery trucks[3]	2	3	0	0	0	0	0	0
Totals (standard vehicles and trucks combined)	**n/a**	**247**	**20**	**10**	**30**	**3**	**18**	**21**
Totals (trucks only)	**n/a**	**200**	**8**	**8**	**16**	**0**	**7**	**7**

Notes:

1 Estimate based on 14 employees operating the entire facility and trip rates and splits pursuant to the ITE Trip Generation Manual 9th Edition using land use Code 130 - Industrial Park.

2 The project does not produce cement products.

3 Based on 2015 project trip generation being prorated upward to 200 daily truck trips.

7. NUMBER OF PARKING SPACES FOR EMPLOYEES, CUSTOMERS, AND SERVICE/DELIVERY VEHICLES

No change to the number of parking spaces for employees, customers, or service delivery vehicles, as approved by Site Plan Review No. 6949, is proposed at this time. This site plan review indicates that five parking spaces are provided south of the office. Parking locations and dimensions are provided in Figure 4.

8. ARE ANY GOODS TO BE SOLD ON-SITE? IF SO, ARE THESE GOODS GROWN OR PRODUCED ON-SITE OR AT SOME OTHER LOCATION?

No change to goods sold on-site is proposed at this time. Consistent with Conditional Use Permit No. 2461-R, asphalt and gravel are sold to contractors on a wholesale basis. The contractors use the materials at off-site locations.

9. WHAT EQUIPMENT IS USED?

No change to the general nature of equipment is proposed at this time. The equipment to be used in the extraction operation includes rubber-tired scrapers, rubber-tired loaders, tractor-bulldozers, water trucks, graders, belt conveyors, sizing screens, and jaw- and cone-type crushers. Table 2, "Typical Equipment," provides typical equipment that has been and will continue to be used at the mine site.

TABLE 2
TYPICAL EQUIPMENT

Equipment[1]	Quantity x Daily Hours	HP	Fuel/ Tier	Uses
MINING OPERATIONS[2]				
DZ2012 dozer (CAT D9R or similar)	1 x 1	405	Diesel/T1	Used to remove topsoil and overburden and excavate aggregate-bearing strata. The Beegee would also be used to maintain the roads on-site.
AT2003 Challenger tractor (CAT ag tractor)	1 x 1	717	Diesel/T3	
Excavator (Hitachi 650 or similar)	1 x 2	463	Diesel/T3	
T50008 water truck	1 x 1	355	Diesel	Used to water haul roads.
LD2015 front-end loader (CAT 988G)	1 x 3	520	Diesel/T2	Used to load raw materials (rock, sand, and gravel products) onto the conveyor belt.
Conveyor belt	–	–	Electricity	Used to convey raw materials to raw material stockpiles at the rock processing plant.
HT2003 mine haul trucks (CAT 740B)	2 x 2	464	Diesel/T2	Used to convey raw materials to raw material stockpiles at the rock processing plant.
ROCK PROCESSING PLANT OPERATIONS				
Pick-up trucks	2 x 0.2	385	Diesel	Used to transport materials at the processing plant.
LD2013 loader (CAT 988F)	1 x 1	475	Diesel/T1	Used to load raw materials into plant for processing and to load processed aggregate materials onto trucks for delivery off-site.
LD2024 loader (CAT 982M or similar)	1 x 4	430	Diesel/T4	Used to load processed aggregate materials onto trucks for delivery off-site.
FL6004 manlift (self-propelled)	1 x 0.1		Propane	Used to elevate workers.
LD6008 Bobcat/skid steer	1 x 0.1	78	Diesel/T2	Used to move smaller material.

Notes: HP = horsepower.

10. WHAT SUPPLIES OR MATERIALS ARE USED AND HOW ARE THEY STORED?

No change to what supplies or materials are used and how they are stored is proposed at this time. The processing plant operation requires raw materials for producing marketable products, including asphalt oil, recycled concrete, and hydrocarbon fuels for vehicles and equipment. Storage facilities range in capacity. Diesel is stored in a 10,000 gallon aboveground storage tank with approved spillage protection that meets all applicable spillage and retention requirements. Asphalt oil is stored in a 30,000 gallon aboveground storage tank with approved spillage protection. Lubricants necessary for general equipment maintenance are stored in a locked container.

Site Plan Review No. 6949 defined materials used for servicing equipment, and these materials are included in the approved hazardous materials management plans and business owner/operator operations identification plans, which identify the products stored on-site. Copies of the referenced plans have been provided to the County Health Department and have been retained on-site.

11. DOES THE USE CAUSE AN UNSIGHTLY APPEARANCE? NOISE? GLARE? DUST? ODOR? IF SO, EXPLAIN HOW WILL THIS BE REDUCED OR ELIMINATED?

No change in site appearance, noise, glare, dust, or odor is proposed. The site is located in a rural area of Fresno County. As illustrated in Figure 5, "Photographs of Earthen Berm," a large earthen berm exits along the northern portion of the site, limiting views of the property and reducing potential noise and fugitive dust impacts. The closest residence t is approximately 300 feet southeast of a future phase of the mine site. Please see Figure 6, "Surrounding Residences."

As part of this application submittal for a new conditional use permit, a preliminary environmental assessment prepared by the owner has been conducted to identify potential impacts related to, for example, traffic, air quality, noise, glare, dust, and odor. In addition, as noted above, the Hewitson Gravel Mine is in compliance with its existing conditions of approval and mitigation measures that ensure potential environmental impacts are less than significant. The draft overview of potential environmental impacts, which is provided under separate cover by the owner, documents existing conditions, previous approvals, and mitigation measures that apply to the project's potential impacts.

Visual/Appearance

No change to visual appearance will occur over that which was previously evaluated and approved. Over time the site will convert from an open field to an excavated

gravel mine closed in accordance with an approved reclamation plan. As mentioned above, the site is in a rural and sparsely populated area of Fresno County.

The site is landscaped in accordance with the previously approved conditional use permit and related site plan review. The applicant has constructed a berm a minimum of 6 feet high within the 100-foot setback area adjacent to SR 33. The berm has been and will be planted with the specified rehabilitation seed mix. See Figure 5.

Glare and Lighting Impact

No change to glare or lighting will occur. All project lighting consists of downward-directed and hooded lights mounted on building exteriors or poles. Lighting will enhance site security and has been installed in a manner to minimize light from interfering with adjacent properties. The site's distance from nearby residences and the public road ensure no lighting or glare impacts will occur as a result of the project.

Air Quality/Dust Impact

No change to air quality or dust impacts will occur. While air quality standards and mandatory conditions of operation have changed since the approval of Unclassified Conditional Use Permit No. 2461–R, the applicant has complied with the conditions of approval established as part of the current conditional use permit and statutory requirements imposed by the San Joaquin Valley Unified Air Pollution Control District.

Environmental Assessment No. 3637-R analyzed the impacts associated with Unclassified Conditional Use Permit No. 2461–R, evaluated potential air quality impacts and concluded that the project improvements, equipment, and operation related to the project's effect on air quality would be less than significant. After the aforementioned approvals, construction equipment and air quality requirements have become more stringent, thereby reducing potential air quality impacts.

A copy of the existing operating permit issued by the San Joaquin Valley Air Pollution Control District is attached as Appendix B, "San Joaquin Air Quality Permits."

Odor Impact

No change to the generation of odors will occur. Unclassified Conditional Use Permit No. 2461–R and Environmental Assessment No. 3637-R include evaluation of potential odor impacts and the conclusion that the project improvements, equipment, and operation related to odor would be less than significant. After the aforementioned approvals, construction equipment and air quality requirements have become more stringent, thereby reducing potential odor impacts.

The mine operations also comply with all San Joaquin Valley Air Pollution Control District standards. A copy of the existing operating permit issued by the San Joaquin Valley Air Pollution Control District is attached as Appendix B.

Noise Impact

No change to noise impacts will occur. Unclassified Conditional Use Permit No. 2461–R and Environmental Assessment No. 3637-R evaluated potential short- and long-term noise impacts. That environmental assessment concluded that the potential for noise impacts would be less than significant because the project site is located in a sparsely populated agricultural area of primarily large parcels, with the nearest neighboring residence located over one-quarter of a mile away from active disturbance area at the time of that evaluation. In addition, all equipment used in the operation is equipped with noise-suppression devices. No noise complaints have been filed regarding the existing operation. As previously approved, the applicant will continue to use product storage fine piles to form noise barriers. This method of mitigation provides noise reduction barriers adequate to meet County Noise Ordinance requirements.

The owner retained Mr. Paul Bollard of Bollard Acoustical Consultants, Inc., to monitor current noise levels and ensure that the facility is in compliance with applicable noise standards and project conditions. To accurately assess potential noise impacts, before conducting his assessment, Mr. Bollard coordinated his study with the current project operator to ensure that all major components of the operation were in use during the aforementioned study. The Bollard Acoustical Consultants, Inc., report, dated March 30, 2016, concluded that the subject operation complies with all applicable noise standards and operational requirements. In addition, the report recommends incorporating the mitigation measures, included in an Environmental Assessment submitted under separate cover, to ensure impacts to nearby residences are less than significant.

12. LIST ANY SOLID OR LIQUID WASTE TO BE PRODUCED.

No change in the production of solid or liquid waste is proposed at this time. Unused materials will include decomposed rock that is not suitable as construction aggregate and fines from washing aggregate. These materials will be used as backfill material in site reclamation. Domestic sewage is handled by a conventional, standard septic system. Commercial septic services pumping and maintenance will be used as needed. No postreclamation storage of supplies or other mining-related materials is planned or expected.

Refuse such as paper and food scraps from operations staff is collected on-site and transported to an approved landfill by the County-designated waste collection hauler.

The operator regularly monitors the area for refuse to keep the site clean and free of debris and reduce a potential food source for vermin.

13. ESTIMATED VOLUME OF WATER TO BE USED (GALLONS PER DAY); SOURCE OF WATER?

No change in the estimated volume of water to be used for production of aggregate, washing truck tires, and operating the asphalt ready-mix plant, or the source of the water, is proposed at this time. Water is also lost to evaporation from settling and water-recycling ponds. All water is supplied from on-site wells, which are located on the project site plan (Figure 4). Recycled processing water and water pumped from excavated mine cells are used to reduce water demand. The total annual net consumptive water use for these activities will remain the same as exists under current operations.

14. DESCRIBE ANY PROPOSED ADVERTISING INCLUDING SIZE, APPEARANCE, AND PLACEMENT.

No change to project signage is proposed at this time. Signage was approved by Site Plan Review No. 6949. A 4 x 8 sign is located at the entrance to the site. Said signage complies with Standard H.4, Section 858 of the County Zoning Ordinance, which states, "Traffic control and warning signs shall be installed as required by the Commission at the intersection of all private roads with public roads."

15. WILL EXISTING BUILDINGS BE USED OR WILL NEW BUILDINGS BE CONSTRUCTED?

No change to buildings or the need for new buildings will occur. As depicted on the project site plan, an existing office, scale house, and scale house trailer exist on-site. An existing control building exists at the asphalt batching plant area. No new buildings are proposed.

16. EXPLAIN WHICH BUILDING OR WHAT PORTION OF BUILDINGS WILL BE USED IN THE OPERATION.

See Number 15, above.

17. WILL ANY OUTDOOR LIGHTING OR OUTDOOR SOUND AMPLIFICATION SYSTEMS BE USED?

No change to outdoor lighting or sound amplification systems is proposed at this time. All project lighting consists of downward-directed and hooded lights mounted on building exteriors or poles. Lighting will enhance site security and has been installed in a manner to minimize light from interfering with adjacent properties.

18. LANDSCAPING OR FENCING PROPOSED?

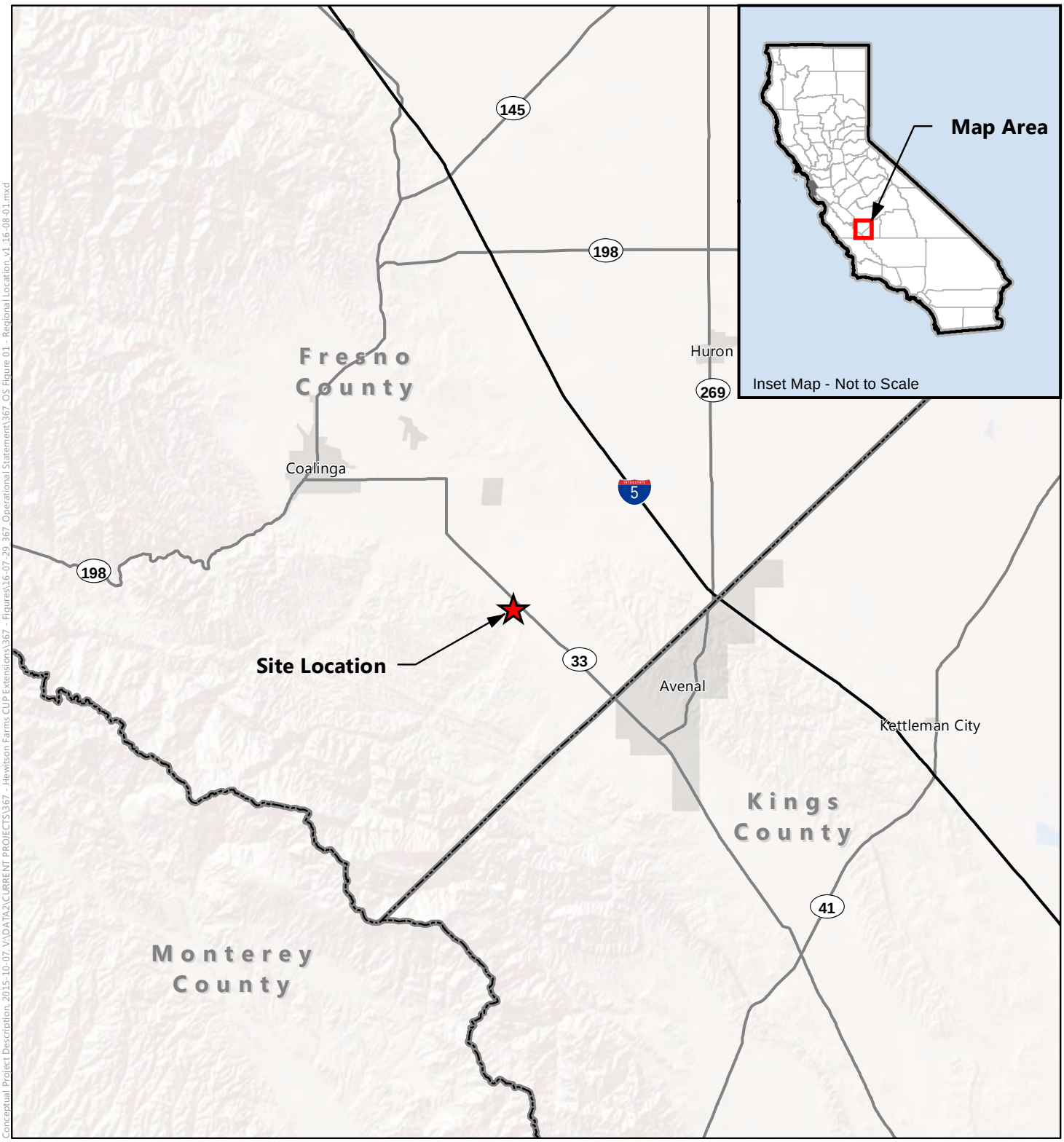
No change to project landscaping or fencing is proposed at this time. Unclassified Conditional Use Permit No. 2461–R and Environmental Assessment No. 3637-R include evaluation of potential aesthetic impacts and the conclusion that the project improvements, equipment, and operation are not easily visible from SR 33 because the current area of excavation is several hundred feet from the edge of the aforementioned roadway. The use of berms that are a minimum of 6 feet tall and located within the 100-foot setback area adjacent to SR 33 have been constructed and rehabilitated with a specific planting seed mix as specified in Site Plan Review No. 6949.

Visits to the project site by the owner's consultants and County staff confirm that the aforementioned measures to reduce aesthetic impacts are effective and comply with applicable project conditions.

19. ANY OTHER INFORMATION THAT WILL PROVIDE A CLEAR UNDERSTANDING OF THE PROJECT OR OPERATION

For a detailed illustration of the Hewitson Gravel Mine, please see Figure 2. Also see the reclamation plan and project description, which are provided under separate cover.

FIGURES



Conceptual Project Description_2015-10-07, V:\DATA2\CURRENT PROJECTS\367 - Hewitson Farms CUP Extensions\367 - Figures\16-07-29_367_Operational Statement\367 OS Figure 01 - Regional Location_v1_16-08-01.mxd

SOURCE: ESRI World Shaded Relief (2016); ESRI World Streetmap (2009); compiled by Benchmark Resources in 2016

LEGEND

- County Boundary
- Interstate
- State Route
- Urban Area

N

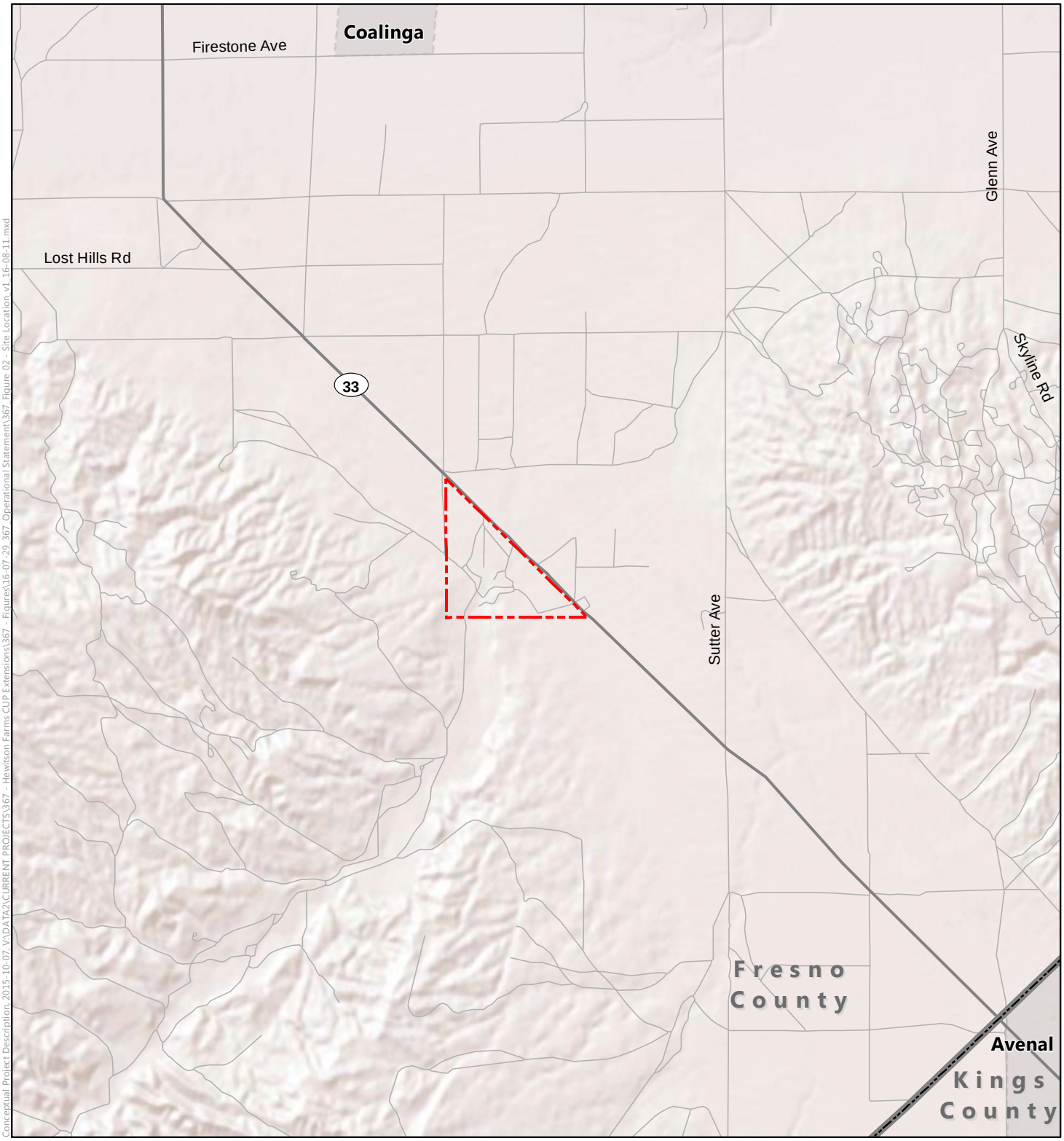
0 2.5 5 7.5 10 Miles

BENCHMARK RESOURCES

Regional Location

HEWITSON GRAVEL MINE OPERATIONAL STATEMENT

Figure 1



Conceptual Project Description_2015-10-07_V:\DATA2\CURRENT PROJECTS\367 - Hewitson Farms CUP Extensions\367 - Figures\16-07-29_367_Operational Statement\367 Figure_02 - Site Location_v1_16-08-11.mxd

SOURCE: ESRI World Shaded Relief (2016); ESRI World Streetmap (2009); compiled by Benchmark Resources in 2016

LEGEND

- Site Location
- County Boundary
- State Route
- Street
- Urban Area

N

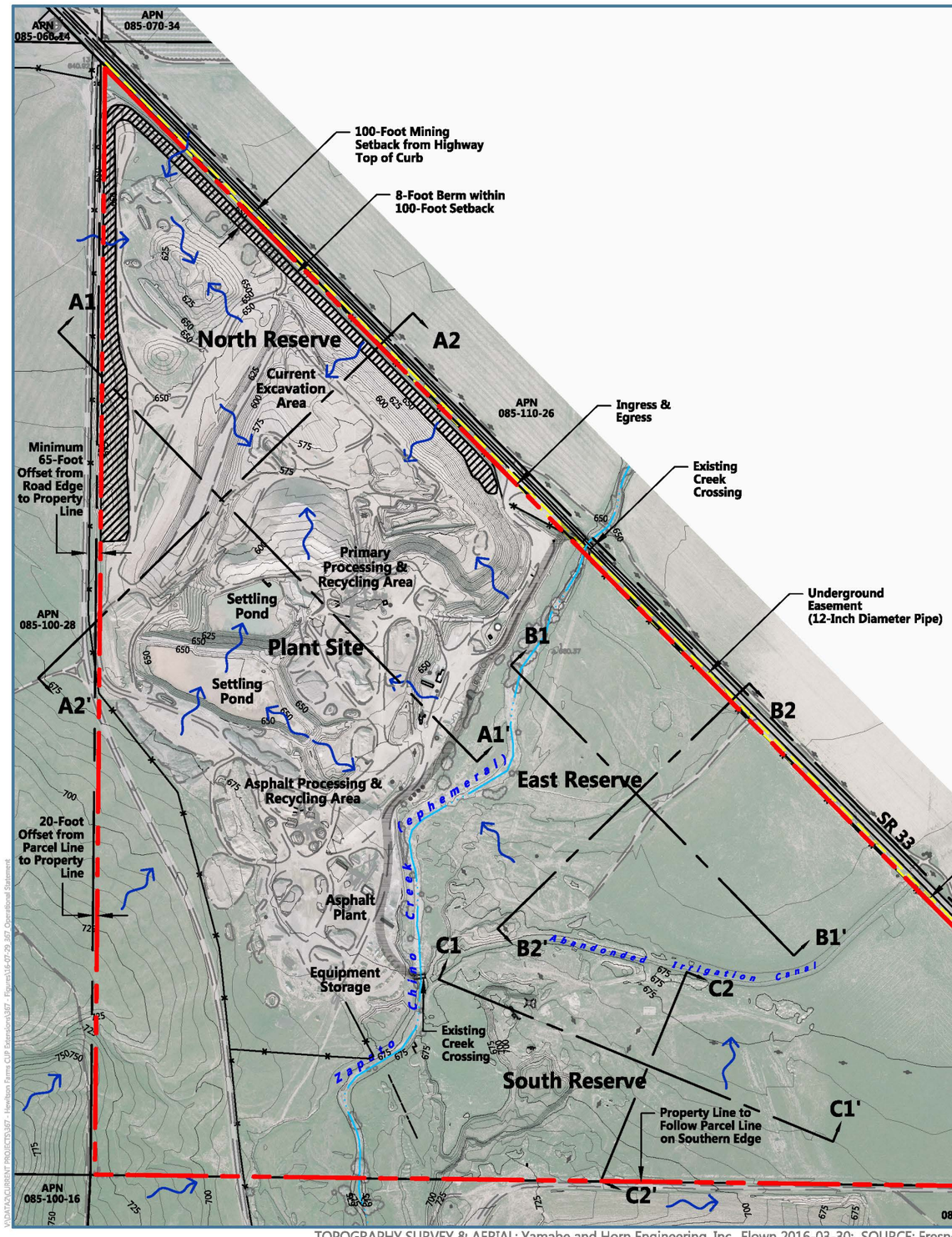
0 0.5 1 1.5 2 Miles

BENCHMARK RESOURCES

Site Location

HEWITSON GRAVEL MINE OPERATIONAL STATEMENT

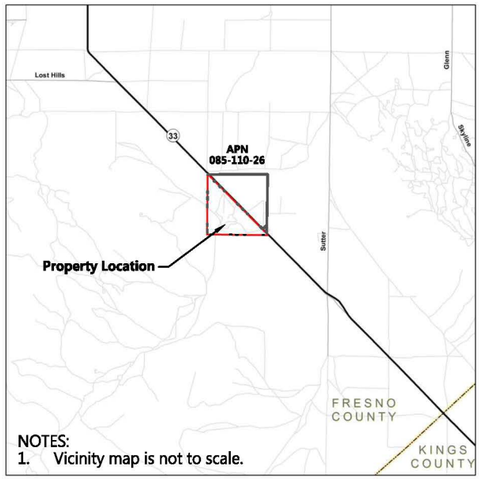
Figure 2



TOPOGRAPHY SURVEY & AERIAL: Yamabe and Horn Engineering, Inc., Flown 2016-03-30; SOURCE: Fresno County 2016; compiled by Benchmark Resources in 2016

BENCHMARK RESOURCES

Vicinity Map



NOTES:
1. Vicinity map is not to scale.

Project and Property Data

Legal Description

ALL OF SECTION 27, TOWNSHIP 21 SOUTH, RANGE 16 EAST, MOUNT DIABLO BASE AND MERIDIAN, COUNTY OF FRESNO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PROPERTY:

BEGINNING AT THE SOUTHEAST CORNER OF SECTION 27, TOWNSHIP 21 SOUTH, RANGE 16 EAST, MOUNT DIABLO BASE AND MERIDIAN, THENCE NORTH 0° 12' EAST ALONG THE EAST LINE OF SAID SECTION 27 A DISTANCE OF 143.73 FEET TO A POINT; THENCE NORTH 45° 16' 30" WEST ALONG A LINE PARALLEL TO THE CENTERLINE OF CALIFORNIA STATE HIGHWAY NUMBER 33 AND DISTANT 30 FEET NOTHERLY THEREFROM, A DISTANCE OF 42.08 FEET TO A POINT WHICH IS THE TRUE POINT OF BEGINNING; THENCE NORTH 45° 16' 50" WEST ALONG SAID PARALLEL LINE A DISTANCE OF 432.81 FEET TO A POINT ON A LINE WHICH IS 30 FEET WEST OF AND PARALLEL TO THE EAST LINE OF SAID SECTION 27. THENCE SOUTH 0° 12' WEST ALONG SAID LINE WHICH IS 30 FEET WEST OF AND PARALLEL TO THE EAST LINE OF SAID SECTION 27, A DISTANCE OF 637.24 FEET TO THE TRUE POINT OF THE BEGINNING.

Parcel Data

APN: 085-110-26
Township, Range, Section: T21 South, R16 East, Section 27
Property Address: 45315 Lost Hills Rd Coalinga, CA 93210-9660
Parcel Area: 637.81
Parcel Area within Site: ±298 acres
Zoning District: (AE-20) Exclusive Twenty Acre - Agricultural

Site Owner Information

Owner: Hewitson Farms, Inc.
Address: 39482 Highway 33, Avenal, CA 93204

Permits

Existing Use Permit: CUP 2461-R

LEGEND

- Property Line
- Access Road
- Parcel Line
- Creek Centerline
- Paved Road
- Dirt Road
- Fence Line
- Fence Line
- 625 Primary Contour Line (25-foot interval)
- 625 Intermediate Contour Line (5-foot interval)
- Sheet Flow
- Existing Berm
- Building
- Vegetation
- Tree Location
- Well Location
- Water Tank
- Utility Post
- Pole

NOTES:
1. The parcel line used to derive the project property boundary (APN 085-110-26) was determined from data collected on-site by a licensed surveyor. All other surrounding parcels were determined using geographical data from the Fresno County website.
2. See Figure 4 for cross sections noted on figure.

Existing Operations Aerial Photograph

HEWITSON GRAVEL MINE OPERATIONAL STATEMENT

Figure 3

100-Foot Offset from Highway to Top of Slope

A1

A2

650

1.5:1 Slope

Access

Existing Creek Crossing

25-Foot Creek Setback from Top of Slope

100-Foot Offset from Highway to Top of Slope

North Reserve
±148 acres
Quarry Floor: 490' msl

Ramp

3:1 Slope

A2'

B1

A1'

B2

25-Foot Offset from Top of Creek

Ephemeral Creek

East Reserve
±45 acres
Quarry Floor: 505' msl

3:1 Slope

3:1 Slope

Ramp

SR 33

B1'

C1

B2'

Abandoned Irrigation Canal

C2

Ramp

Existing Creek Crossing

Zapata Creek

South Reserve
±27 acres
Quarry Floor: 580' msl

3:1 Slope

C1'

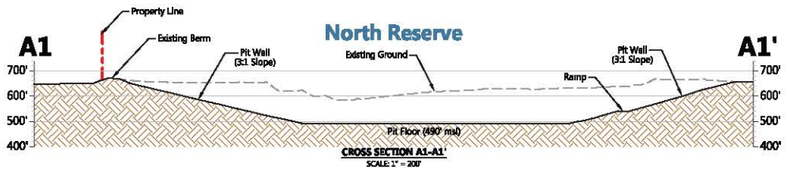
C2'

0 300 600 1,200 Feet

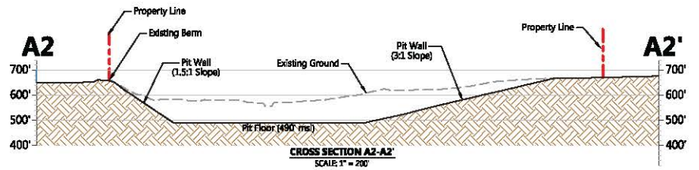
BENCHMARK RESOURCES

SOURCE: TOPOGRAPHY SURVEY & AERIAL: Yamabe and Horn Engineering, Inc., Flown 2016-03-30; compiled by Benchmark Resources in 2016

North Reserve

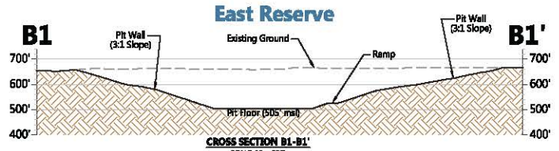


CROSS SECTION A1-A1'
SCALE: 1" = 200'

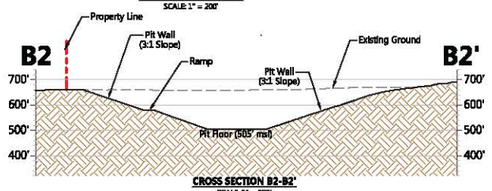


CROSS SECTION A2-A2'
SCALE: 1" = 200'

East Reserve

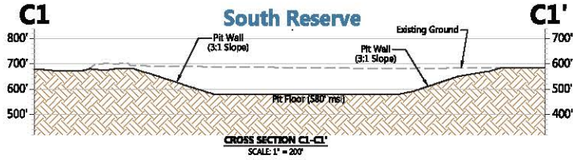


CROSS SECTION B1-B1'
SCALE: 1" = 200'

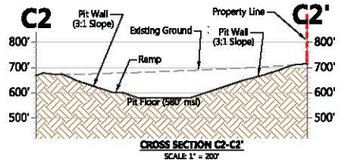


CROSS SECTION B2-B2'
SCALE: 1" = 200'

South Reserve

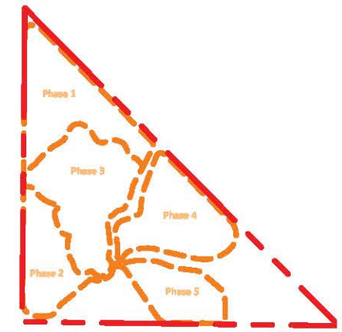


CROSS SECTION C1-C1'
SCALE: 1" = 200'



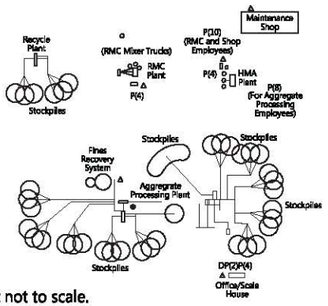
CROSS SECTION C2-C2'
SCALE: 1" = 200'

Mining Phase Map



NOTES:
1. Mining phase map not to scale.

Representative Plant Site Layout



NOTES:
1. Representative plant site layout not to scale.
2. Plant location varies over life of mine.
3. RMC = ready-mix concrete

LEGEND

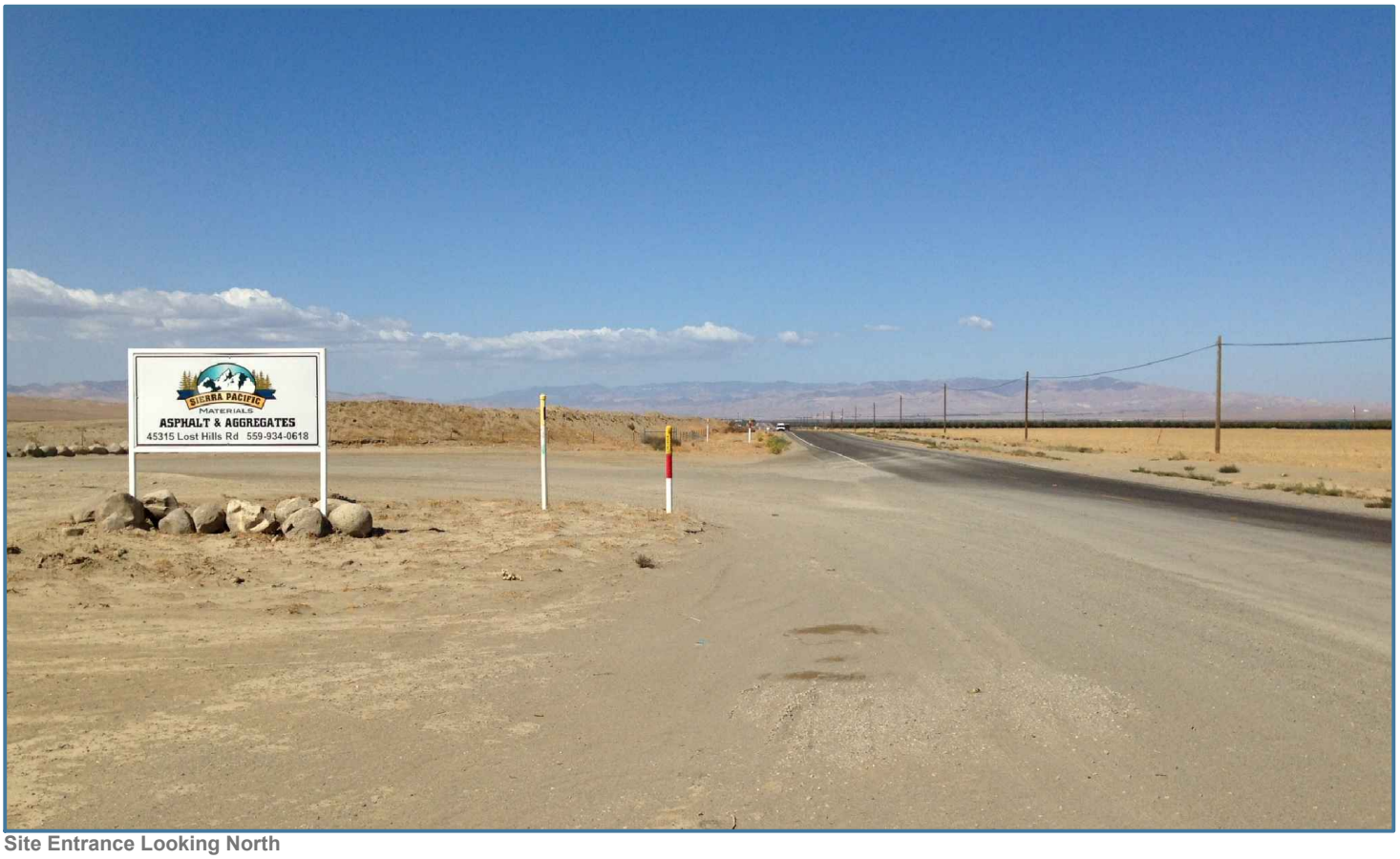
- Property Line
- Phase Boundary
- Surface Disturbace Boundary
- Potential Soil Stockpiles
- Access Road
- Creek Centerline
- Paved Road
- Dirt Road
- Fence Line
- Primary Contour Line (25-foot interval)
- Intermediate Contour Line (5-foot interval)
- Sheet Flow
- Building
- Vegetation
- Tree
- Well
- Water Tank
- Utility Post
- Pole

NOTES:
1. "msl" = mean sea level.
2. Ramp designs are for volume calculations only and do not reflect the final constructed ramp designs.
3. Phase boundaries are subject to change.

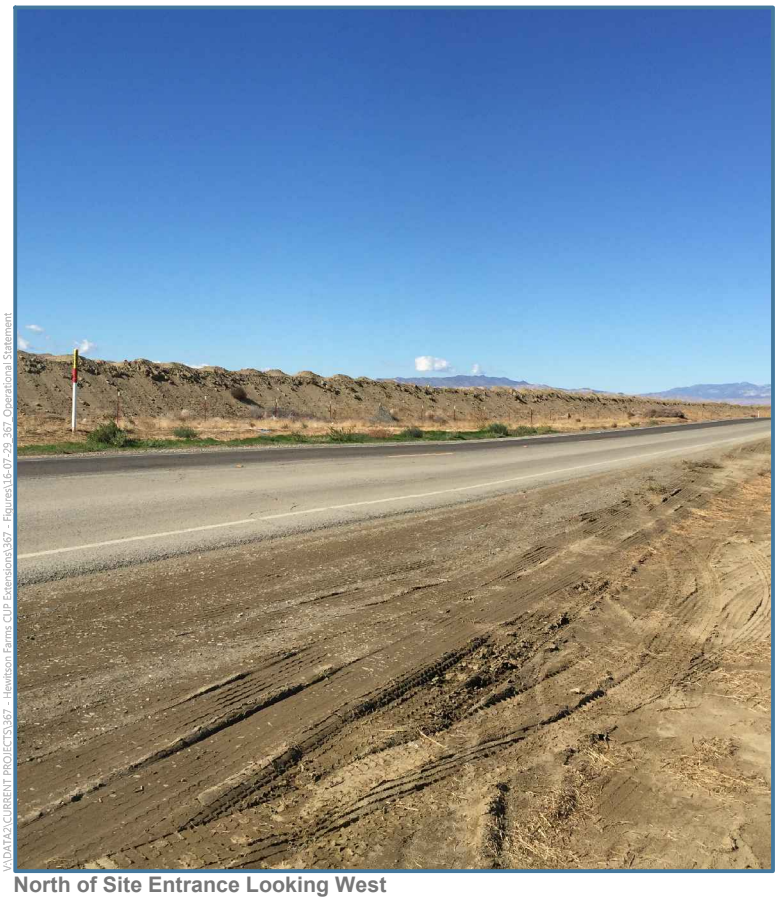
Site Plan

HEWITSON GRAVEL MINE OPERATIONAL STATEMENT

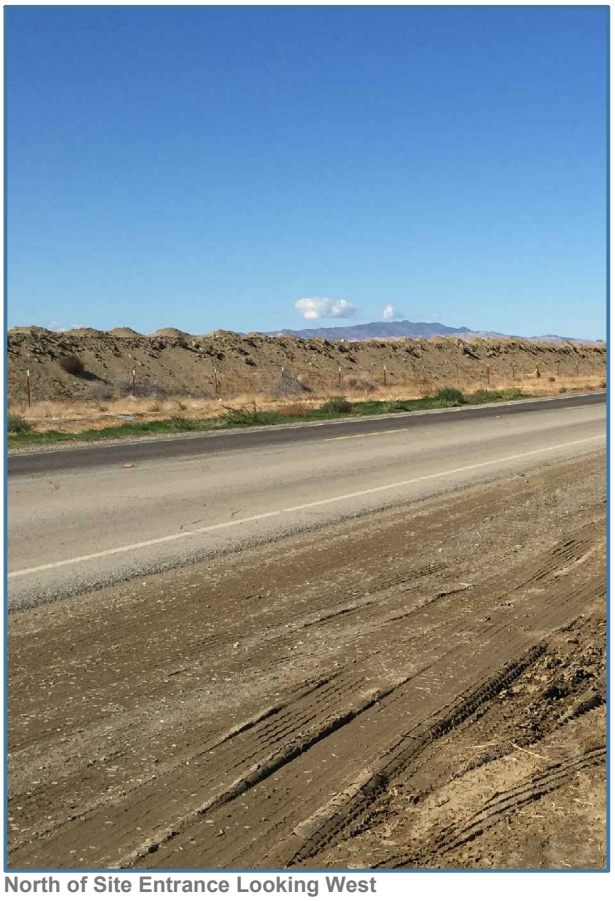
Figure 4



Site Entrance Looking North



North of Site Entrance Looking West



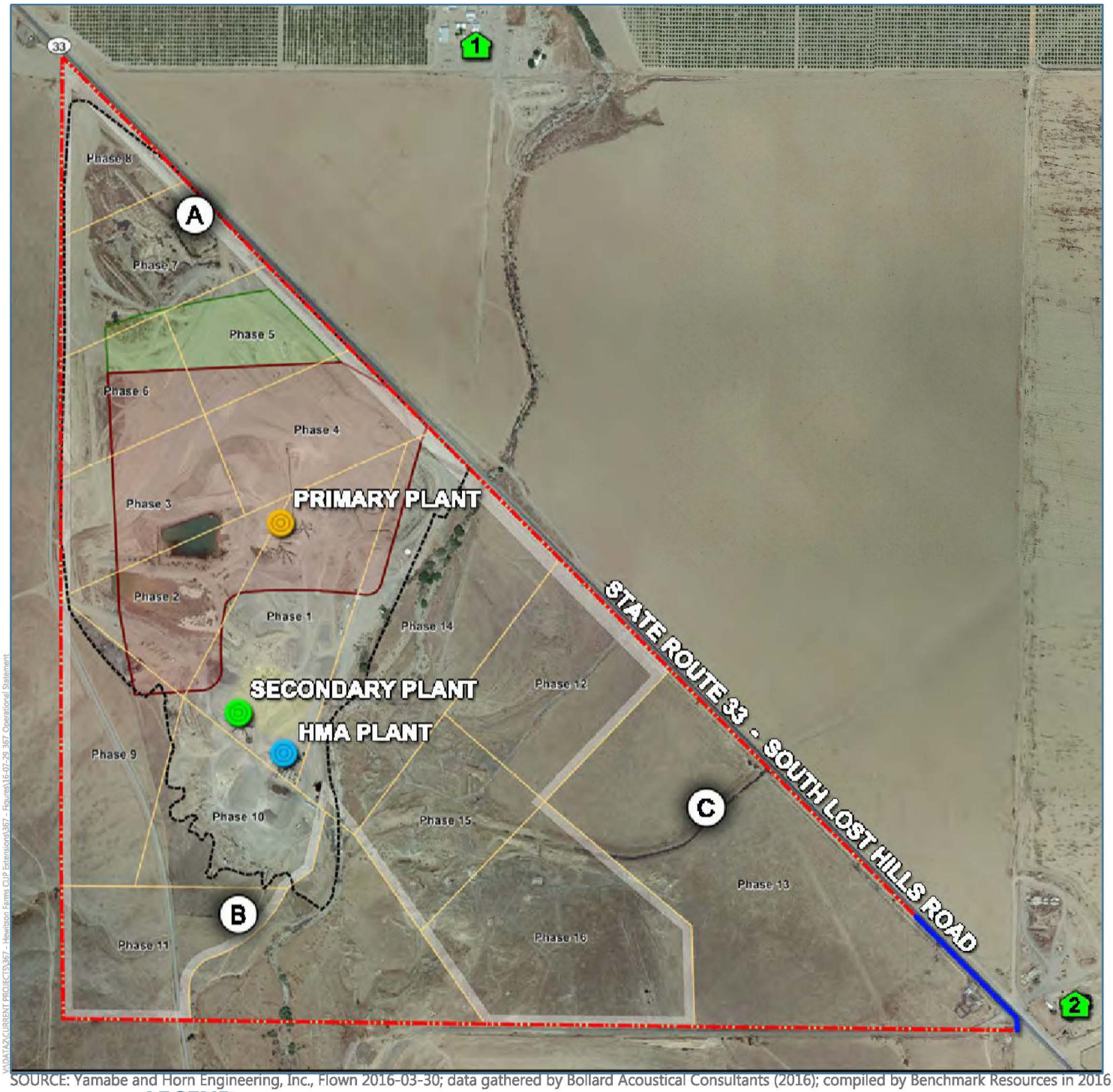
North of Site Entrance Looking West

Earthen Berm Photographs

HEWITSON GRAVEL MINE OPERATIONAL STATEMENT

Figure 5

BENCHMARK RESOURCES



SOURCE: Yamabe and Horn Engineering, Inc., Flown 2016-03-30; data gathered by Bollard Acoustical Consultants (2016); compiled by Benchmark Resources in 2016

LEGEND

- A — Long-term Noise Measurement Locations
- 1 — Nearest Noise-Sensative Receptors
- Permit Boundary
- Current Surface Disturbance Area
- Recommended 10-Foot Berm Location
- Partially Mined (9.3 ac)
- Previously Mined (52.3 ac)

N

0 400 800 1,600 Feet

BENCHMARK RESOURCES

Surrounding Residences

HEWITSON GRAVEL MINE OPERATIONAL STATEMENT

Figure 6

APPENDICES

APPENDIX A
FRESNO COUNTY OPERATIONAL STATEMENT CHECKLIST FORM

Development Services Division

Operational Statement Checklist

Department of Public Works and Planning

It is important that the operational statement provides for a complete understanding of your proposal. The operational statement that you submit **must** address all of the following that apply to your proposal. **Your operational statement must be typed or written in a legible manner on a separate sheet(s) of paper. Do not submit this checklist as your operational statement**. It should serve only as a guide for preparing a complete statement.

____ 1. **Nature of the operation--what do you propose to do? Describe in detail.**

____ 2. **Operational time limits:**
Months (if seasonal): Days per week:
Hours (from _____ to _____) Total hours per day:
Special activities: Frequency: Hours: Are these indoors or outdoors?

____ 3. **Number of customers or visitors:**
Average no. per day: Maximum no. per day: Hours (when they will be there):

____ 4. **Number of employees**:
Current: Future: Hours they work: Do any live on-site as a caretaker?

____ 5. **Service and delivery vehicles:**
Number: Type: Frequency:

____ 6. **Access to the site:**
Public Road: Private Road: Surface: Unpaved (dirt / gravel) / Paved:

____ 7. **Number of parking spaces for employees, customers, and service/delivery vehicles**.
Type of surfacing on parking area.

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

____ 9. **What equipment is used?** If appropriate, provide pictures or brochure.

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

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

____ 12. **List any solid or liquid wastes to be produced.**
Estimated volume of wastes: How and where is it stored?
How is it hauled, and where is it disposed? How often?

____ 13. **Estimated volume of water to be used (gallons per day).** Source of water?

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

____ 15. **Will existing buildings be used or will new buildings be constructed?**
Describe type of construction materials, height, color, etc. Provide floor plan & elevations, if appropriate.

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

____ 17. **Will any outdoor lighting or an outdoor sound amplification system be used?**
Describe and indicate when used.

____ 18. **Landscaping or fencing proposed?** Describe type and location.

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

APPENDIX B
SAN JOAQUIN AIR QUALITY PERMITS

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

Facility # C-3798
PAPICH CONST CO, INC DBA SIERRA PACIFIC
PO BOX 2210
PISMO BEACH, CA 93448-2210

Notice of Permit Issuance

The enclosed permit unit requirements authorize the operation of the equipment as described. These permit unit requirements supersede any and all previous permits for the specified equipment.* Please insert these documents into the Facility Permit to Operate, and post copies on or near the equipment as required by District Rule 2010.

Please contact any of our Small Business Assistance (SBA) staff at the numbers below if you have any questions:

Modesto:	(209) 557-6446
Fresno:	(559) 230-5888
Bakersfield:	(661) 392-5665

*Failure to comply with the permit unit requirements may result in enforcement action.

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

www.valleyair.org www.healthyairliving.com

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

Permit to Operate

FACILITY: C-3798 **EXPIRATION DATE:** 04/30/2021

LEGAL OWNER OR OPERATOR: PAPICH CONST CO, INC DBA SIERRA PACIFIC
MAILING ADDRESS: PO BOX 2210
PISMO BEACH, CA 93448-2210

FACILITY LOCATION: 45315 LOST HILLS RD
COALINGA, CA 93210-9660

FACILITY DESCRIPTION: ASPHALT PAVING MIXTURES

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

Central Regional Office • 1990 E. Gettysburg Ave. • Fresno, CA 93726 • (559) 230-5900 • Fax (559) 230-6061

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-3798-1-1 **EXPIRATION DATE:** 04/30/2021

EQUIPMENT DESCRIPTION:
AGGREGATE HANDLING OPERATION CONSISTING OF A RECLAIMED ASPHALT PAVEMENT FEEDBIN, FEED BELT, FOUR COLD AGGREGATE FEED BINS, FOUR BELT FEEDERS WITH WATER SPRAY BARS, ASSOCIATED BELT CONVEYOR, AND SCALPING SCREEN PROVIDING RAW MATERIAL FOR A HOT MIX/ WARM MIX ASPHALT OPERATION (C-3798-2)

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
5. All haul roads and other roadways traversed by mobile equipment and/or motor vehicles shall be adequately moistened with water at such a frequency as required to prevent visible emissions equal to or in excess of 20% opacity from such roads. [District Rule 2201]
6. All stockpiled sand, aggregate, and other materials shall be maintained adequately moist to minimize emissions of fugitive particulate matter. [District Rule 2201]
7. Total aggregate materials process throughput shall not exceed 6,000 tons per day. [District Rule 2201]
8. Particulate matter (PM10) emissions from the aggregate handling operation shall not exceed 0.00042 lbs/ton of aggregate handled. [District Rule 2201]
9. When handling bulk materials outside an enclosed structure or building, water or chemical/organic stabilizers/suppressants shall be applied as required to limit Visible Dust Emissions to a maximum of 20% opacity. When necessary to achieve this opacity limitation, wind barriers with less than 50% porosity shall also be used. [District Rules 8011 and 8031]
10. When storing bulk materials outside an enclosed structure or building, water or chemical/organic stabilizers/suppressants shall be applied as required to limit Visible Dust Emissions to a maximum of 20% opacity. When necessary to achieve this opacity limitation, all bulk material piles shall also be either maintained with a stabilized surface as defined in Section 3.58 of District Rule 8011, or shall be protected with suitable covers or barriers as prescribed in Table 8031-1, Section B, of District Rule 8031. [District Rules 8011 and 8031]
11. When transporting bulk materials outside an enclosed structure or building, all bulk material transport vehicles shall limit Visible Dust Emissions to 20% opacity by either limiting vehicular speed, maintaining sufficient freeboard on the load, applying water to the top of the load, or covering the load with a tarp or other suitable cover. [District Rules 8011 and 8031]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. All outdoor chutes and conveyors shall be controlled by any of the following options: 1) full enclosure, 2) operation with water spray equipment that sufficiently wets materials to limit VDE to 20% opacity, or 3) the concentration of particles having an aerodynamic diameter of 10 microns or less in the conveyed material shall be sufficiently small to limit VDE to 20% opacity. [District Rules 8011 and 8031]
13. All empty transport trucks leaving the facility shall be sufficiently clean to limit Visible Dust Emissions to 20% opacity or the cargo compartment shall be covered. [District Rules 8011 and 8031]
14. All transport trucks shall be designed and maintained to prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and/or tailgate [District Rules 8011 and 8031]
15. Off-site bulk material transport vehicles shall be loaded with not less than 6 inches freeboard space and either water shall be applied or the load shall be covered with a tarp or other suitable cover, sufficient to limit Visible Dust Emissions to 20% opacity. [District Rules 8011 and 8031]
16. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/04) or Rule 8011(8/19/04). [District Rules 8011 and 8041]
17. Where dusting materials are allowed to accumulate on paved surfaces, the accumulation shall be removed daily or water and/or chemical/organic dust stabilizers/suppressants shall be applied to the paved surface as required to maintain continuous compliance with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011 and limit Visible Dust Emissions (VDE) to 20% opacity. [District Rules 8011 and 8071]
18. On each day that 50 or more Vehicle Daily Trips or 25 or more Vehicle Daily Trips with 3 axles or more will occur on an unpaved vehicle/equipment traffic area, permittee shall apply water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rules 8011 and 8071]
19. Whenever any portion of the site becomes inactive, permittee shall restrict access and periodically stabilize any disturbed surface to comply with the conditions for a stabilized surface as defined in Section 3.58 of District Rule 8011. [District Rules 8011 and 8071]
20. Records and other supporting documentation shall be maintained as required to demonstrate compliance with the requirements of the rules under Regulation VIII only for those days that a control measure was implemented. Such records shall include the type of control measure(s) used, the location and extent of coverage, and the date, amount, and frequency of application of dust suppressant, manufacturer's dust suppressant product information sheet that identifies the name of the dust suppressant and application instructions. Records shall be kept for one year following project completion that results in the termination of all dust generating activities. [District Rules 8011, 8031, and 8071]
21. Records of daily aggregate process rate shall be maintained, retained on the premises for at least five years and made available for District inspection upon request. [District Rule 1070]
22. All records required by this permit shall be retained on-site for a period of at least five years and shall be made available for District inspection upon request. [District Rules 4621 and 4622]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-3798-2-2 **EXPIRATION DATE:** 04/30/2021

EQUIPMENT DESCRIPTION:
HOT MIX/ WARM MIX ASPHALT PLANT INCLUDING A TEREX MODEL E3-400-S COUNTER FLOW DRUM DRYER WITH A 125 MMBTU/HR HAUCK NOVASTAR PROPANE-FIRED LOW-NOX BURNER AND A TEREX MODEL SZ40/542 BAGHOUSE WITH A PRIMARY COLLECTOR/HEAVY FINES KNOCKOUT BOX AND COVERED DRAG SLAT CONVEYOR

PERMIT UNIT REQUIREMENTS

1. The exhaust stack of the baghouse shall vent vertically upward. The vertical exhaust flow shall not be impeded by a fixed rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. Visible emissions from the baghouse shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rules 2201 and 4101]
5. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
6. For all emission points other than the baghouse exhaust, no air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
7. The baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201]
8. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201]
9. Material removed from the dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201]
10. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201]
11. Replacement bags numbering at least 10% of the total number of bags in the baghouse shall be maintained on the premises. [District Rule 2201]
12. The differential pressure gauge reading range shall be maintained between 0.1" and 5" WC. [District Rule 2201]
13. The electric motors powering the baghouse exhaust fan(s), the drum, and the burner blower shall be meet or exceed National Electrical Manufacturers Association (NEMA) Premium (TM) efficiency electric motor standards. [California Environmental Quality Act]
14. The baghouse exhaust fans shall be capable of variable frequency speed control. [California Environmental Quality Act]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

15. The heat input per ton of asphalt produced shall not exceed 0.20 MMBtu/ton. Compliance with this limit shall be determined by dividing the cumulative annual heat input to the dryer by the tons of asphaltic concrete produced over a calendar year. [California Environmental Quality Act]
16. The drum dryer burner shall be fired only on propane. [District Rule 2201]
17. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted by the drum dryer burner shall be installed, utilized, and properly maintained. [District Rule 2201]
18. The quantity of asphaltic concrete produced shall not exceed 6,000 tons in any one day or the daily production/loadout limit on Permit to Operate C-3798-3, whichever is less. [District Rule 2201]
19. The quantity of asphaltic concrete produced shall not exceed 522,000 tons in a calendar year or the annual production/loadout limit on Permit to Operate C-3798-3, whichever is less. [District Rule 2201]
20. Emission rates from asphaltic concrete drum mix operation served by a baghouse shall not exceed any of the following limits: NOx (as NO2): 0.0094 lb/ton; VOC: 0.0128 lb/ton; CO: 0.057 lb/ton; PM10: 0.021 lb/ton; or SOx (as SO2): 0.0033 lb/ton. [District Rule 2201]
21. Emissions from the propane-fired drum dryer shall not exceed any of the following limits: 4.3 ppmvd NOx @ 19% O2 or 0.049 lb-NOx/MMBtu or 42 ppmvd CO @ 19% O2. [District Rules 2201 and 4309]
22. Visible emissions from the baghouse serving the asphaltic concrete drum dryer/mixer shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201]
23. This unit is subject to the requirements of 40 CFR Part 60, Subpart I: Standards of Performance for Asphalt Concrete Plants. [District Rule 4001 and 40 CFR §60.90]
24. Particulate matter emissions from the baghouse exhaust shall not exceed 0.04 grains/dscf. [District Rules 4001 and 4201 and 40 CFR §60.92(a)(1)]
25. Compliance with opacity limits shall be determined according to EPA Method 9. [District Rule 4001 and 40 CFR §60.93(b)(2)]
26. Source testing to measure NOx and CO emissions from this unit shall be conducted at lease once every 24 months thereafter. An equipment operating day is any day in which the drum dryer/mixer is operated where material is introduced into the drum dryer/mixer or processed by the drum dryer/mixer, or where fuel is combusted in the drum dryer. [District Rules 2201 and 4309]
27. All test results for NOx and CO shall be reported in ppmv @ 19% O2 (or no correction if measured above 19% O2), corrected to dry stack conditions. [District Rule 4309]
28. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
29. Source testing to measure NOx and CO emissions from the asphaltic concrete batch plant shall be conducted utilizing one of the following options: (a) Test the unit using locally mined aggregate in the dryer. If the source test using locally minded aggregate fails, the operator may re-run the source test using aggregate from a different source; (b) Test the unit using aggregate from a source different form the source used during normal operations; (c) Test the unit using a heat-absorbing material in the dryer, but no aggregate; (d) Test the unit with no material in the dryer. [District Rule 4309]
30. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
31. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rule 4309]
32. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4309]
33. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4309]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4309. [District Rule 4309]

35. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4309]

36. The operator shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month in which asphalt is produced on at least five days or for at least 32 hours, whichever comes first (and in which a source test is not performed), using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 production days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4309]

37. If either the NOx or CO concentrations corrected to 19% O2 (or no correction if measured above 19% O2), as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4309]

38. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4309]

39. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 19% O2 (or no correction if measured above 19% O2), (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4309]

40. The operator shall not manufacture for sale nor use within the District any of the following for penetrating prime coat, tack coat, dust palliative, or other paving and maintenance operations: (1) rapid cure cutback asphalt; (2) medium cure cutback asphalt (unless the National Weather Service official forecast of the high temperature for the 24 hour period following application is below 50øF); (3) slow cure asphalt which as produced for application, contains more than one-half (0.5) percent of organic compounds which evaporate at 500 degrees Fahrenheit or lower; (4) emulsified asphalt containing organic compounds, in excess of three (3) percent by volume, which evaporate at 500 degrees Fahrenheit or lower. [District Rule 4641]

41. The manufacturer of cutback and slow cure asphalt shall maintain records showing the types and amounts of cutback asphalt and slow cure asphalt which contain organic compounds produced and the destination of these products. Such records shall be maintained daily and retained and available for inspection by District personnel for a period of 5 years. [District Rule 4641]

42. Records of all maintenance of the baghouse, including all change outs of filter media, shall be maintained. [District Rule 2201]

43. Differential operating pressure shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

44. A daily record shall be maintained of the tons of asphaltic concrete produced. [District Rules 1070 and 2201]
45. An annual record shall be maintained of the tons of asphaltic concrete produced and the quantity (e.g. gallons) of fuel used by the drum dryer for the year. [District Rules 1070 and 2201]
46. The permittee shall maintain a record of the cumulative annual heat input to the drum dryer. The fuel heat input is calculated by multiplying the quantity of propane fuel used (e.g. gallons) by its heating value (e.g. Btu/gallon). If the fuel supplier does not provide a heating value, a value of 91,547 Btu/gallon (at 60 degrees F) may be used. [District Rules 1070 and 2201]
47. All records required by this permit shall be retained on-site for a period of at least five years and shall be made available for District inspection upon request. [District Rules 4621 and 4622]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-3798-3-0 **EXPIRATION DATE:** 04/30/2021

EQUIPMENT DESCRIPTION:
75 TON ASPHALTIC CONCRETE MIX STORAGE SILO/LOADOUT OPERATION

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
5. The equipment shall not be operated within 1000 feet of any k-12 school unless a public notice is performed in accordance with the California Health & Safety Code Section 42301.6. [California Health and Safety Code]
6. Permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no longer than 48 hours after starting operation at the location. [District Rule 1070]
7. Hot Mix Asphalt (asphaltic concrete) production shall not exceed 3,300 tons per day or 175,000 tons per year. [District Rule 2201]
8. Particulate matter (PM10) emissions from the storage silo/loadout operation shall not exceed 0.000186 lbs/ton asphaltic concrete product loaded. [District Rule 2201]
9. The VOC emission concentration from the storage silo/loadout operation shall not exceed 0.004 lb/ton asphaltic concrete product loaded. [District Rule 2201]
10. The permittee shall maintain records of the locations at which the equipment was operated, and the dates operated at each location. [District Rule 1070]
11. A summary report of the records shall be submitted to the District within 30 days after the end of each calendar quarter. [District Rule 1070]
12. Daily and annual records of Hot Mix Asphalt (asphaltic concrete) production shall be maintained and retained on the premises for at least five years and shall be made available for District inspection upon request [District Rule 2201 & 1070]
13. All records required by this permit shall be retained on-site for a period of at least five years and shall be made available for District inspection upon request. [District Rules 4621 and 4622]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-3798-7-5 **EXPIRATION DATE:** 04/30/2021

EQUIPMENT DESCRIPTION:
PRIMARY ROCK CRUSHING AND SCREENING OPERATION CONSISTING OF ONE EL RUSS FEEDER, ONE CEDARAPIDS JAW CRUSHER, ONE EL JAY 6 X 16 TRIPLE DECK SCREEN, ONE NORDBERG SYMONS 4' CONE CRUSHER, ONE NORDBERG BHP 300 CONE CRUSHER, ONE SPLITTER BOX, ONE BLADE MILL, ONE WET SCREEN, ONE TWIN SAND SCREW, ONE SINGLE SAND SCREW AND ASSOCIATED CONVEYERS CONTROLLED BY WET SUPPRESSION

PERMIT UNIT REQUIREMENTS

1. This permit unit shall only be operated at 45315 Lost Hills Road - Highway 33 in Coalinga, CA. [District Rule 2201]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
5. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
6. Belt feeders, crushers, screens, all conveyor transfer points, and stockpile areas shall be equipped and utilize water spray equipment to limit visible dust emissions, and maintain moisture content requirements of this permit. [District Rule 2201]
7. All spray nozzles serving belt feeders, crushers, screens, conveyor transfer points, and stockpile areas shall be turned on prior to operation and shall remain on through the process to limit visible dust emissions, and maintain moisture content requirements of this permit. [District Rule 2201]
8. All unpaved areas and haul roads traversed by mobile equipment and/or motor vehicles shall be adequately moistened with water or chemically stabilized at such a frequency as required to prevent visible emissions equal to or in excess of 20% opacity from such roads. [District Rules 8011 and 8061]
9. Visible emissions from the crushers shall not exceed 15% opacity as measured per Code of Federal Regulations, Part 60, Chapter 1, Title 40, Subpart OOO. [District Rules 4001 and 4101]
10. Visible emissions from any transfer point on belt conveyors or from any other affected facility shall not exceed 10% opacity as measured per Code of Federal Regulation, Part 60, Chapter 1, Title 40, Subpart OOO. [District Rules 4001 and 4101]
11. Compliance with particulate matter and opacity standards shall be determined in accordance with Title 40, Code of Federal Regulations, Part 60, Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants). [District Rules 4001 and 4101]
12. All material processed through the crushing, screening and associated conveying operations shall have a moisture content of 4% or greater, by weight. [District Rule 2201]
13. All material processed through the blade mill, triple deck wet screen, twin sand, screw, single sand screw, and associated conveying operations shall have a moisture content of 6% or greater, by weight. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. All stockpiles shall be maintained at 4% moisture content unless visible emissions from the stockpiles are not present. [District Rule 2201]
15. PM10 emissions from the feeder shall not exceed 0.0001 lb/ton-material-processed. [District Rule 2201]
16. PM10 emissions from each crusher shall not exceed 0.00054 lb/ton-material-processed. [District Rule 2201]
17. PM10 emissions from each conveyor transfer point shall not exceed 0.000046 lb/ton-material-processed. [District Rule 2201]
18. PM10 emissions from each screen shall not exceed 0.00074 lb/ton-material-processed. [District Rule 2201]
19. PM10 emissions from blade mill, triple deck wet screen, twin sand, screw, single sand screw, and associated conveying operations shall not exceed 0.0 lb/ton-material-processed. [District Rule 2201]
20. PM10 emissions from the stockpiles shall not exceed 0.05 lb/acre-day. [District Rule 2201]
21. The maximum throughput of aggregate processed by the El Russ Feeder shall not exceed 600 ton/hr. [District Rule 2201]
22. The maximum throughput of aggregate processed by the Cedarapids Jaw Crusher shall not exceed 600 ton/hr or 7,300 ton/day. [District Rule 2201]
23. The maximum throughput of aggregate processed by the El Jay 6 x 16 Screen Deck shall not exceed 600 ton/hr or 7,300 ton/day. [District Rule 2201]
24. The maximum throughput of aggregate processed by the Nordberg Symons 4' Cone Crusher shall not exceed 50 ton/hr. [District Rule 2201]
25. The maximum throughput of aggregate processed by the Nordberg HP 300 Cone Crusher shall not exceed 200 ton/hr. [District Rule 2201]
26. The footprint area of each stockpile associated with this operation shall not exceed 0.27 acres. [District Rule 2201]
27. The percent moisture of the aggregate processed by the crushing, screening and conveying operations shall be determined by weighing an approximately 2-lb sample of aggregate from any point of the operation, bringing the sample to dryness in a drying oven, then weighing the dried sample; the weight difference divided by the initial weigh of the sample; all multiply by 100% is the moisture content (% moisture = ((initial weight - dry weight)/initial weight) x 100%). [District Rule 2201]
28. The moisture content of the aggregate processed by the crushing, screening and conveying operations shall be measured on a monthly basis and when requested by the District. [District Rule 2201]
29. The permittee shall maintain a monthly record of the moisture content of the aggregate processed by the crushing, screening and conveying operations. [District Rules 1070 and 2201]
30. Daily records of the amount of throughput in tons at each process point shall be kept. Daily and annual records of the time and duration of operation shall be kept. These records shall be maintained and kept onsite for at least five years, and shall be made readily available for District inspection upon request. [District Rules 1070 and 2201]
31. All records required by this permit shall be retained on-site for a period of at least five years and shall be made available for District inspection upon request. [District Rules 4621 and 4622]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-3798-11-1 **EXPIRATION DATE:** 04/30/2021

EQUIPMENT DESCRIPTION:
SECONDARY ROCK CRUSHING AND SCREENING OPERATION CONSISTING OF ONE DRIVE OVER FEEDER, ONE JCI 6 X 20 TRIPLE DECK SCREEN, ONE 5½ NORDBERG CONE CRUSHER AND ASSOCIATED CONVEYORS CONTROLLED BY WET SUPPRESSION

PERMIT UNIT REQUIREMENTS

1. This permit unit shall only be operated at 45315 Lost Hills Road - Highway 33 in Coalinga, CA. [District Rule 2201]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
5. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
6. Belt feeders, crushers, screens, all conveyor transfer points, and stockpile areas shall be equipped and utilize water spray equipment to limit visible dust emissions, and maintain moisture content requirements of this permit. [District Rule 2201]
7. All spray nozzles serving belt feeders, crushers, screens, conveyor transfer points, and stockpile areas shall be turned on prior to operation and shall remain on through the process to limit visible dust emissions, and maintain moisture content requirements of this permit. [District Rule 2201]
8. All unpaved areas and haul roads traversed by mobile equipment and/or motor vehicles shall be adequately moistened with water or chemically stabilized at such a frequency as required to prevent visible emissions equal to or in excess of 20% opacity from such roads. [District Rules 8011 and 8061]
9. Visible emissions from the crushers shall not exceed 15% opacity as measured per Code of Federal Regulations, Part 60, Chapter 1, Title 40, Subpart OOO. [District Rules 4001 and 4101]
10. Visible emissions from any transfer point on belt conveyors or from any other affected facility shall not exceed 10% opacity as measured per Code of Federal Regulation, Part 60, Chapter 1, Title 40, Subpart OOO. [District Rules 4001 and 4101]
11. Compliance with particulate matter and opacity standards shall be determined in accordance with Title 40, Code of Federal Regulations, Part 60, Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants). [District Rules 4001 and 4101]
12. All material processed through the crushing, screening and associated conveying operations shall have a moisture content of 4% or greater, by weight. [District Rule 2201]
13. All stockpiles shall be maintained at 4% moisture content unless visible emissions from the stockpiles are not present. [District Rule 2201]
14. PM10 emissions from drive over feeder shall not exceed 0.000046 lb/ton-material-processed. [District Rule 2201]
15. PM10 emissions from each crusher shall not exceed 0.00054 lb/ton-material-processed. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

16. PM10 emissions from each conveyor shall not exceed 0.000046 lb/ton-material-processed. [District Rule 2201]
17. PM10 emissions from each screen shall not exceed 0.00074 lb/ton-material-processed. [District Rule 2201]
18. PM10 emissions from the stockpiles shall not exceed 0.05 lb/acre-day. [District Rule 2201]
19. The maximum throughput of aggregate processed by the Drive Over Feeder shall not exceed 300 tons/hr. [District Rule 2201]
20. The maximum throughput of aggregate processed by the JCI 6' x 20' Triple Deck Screen shall not exceed 400 ton/hr or 5,600 ton/day. [District Rule 2201]
21. The maximum throughput of aggregate processed by the 5½' Nordberg Cone Crusher shall not exceed 100 ton/hr. [District Rule 2201]
22. The footprint area of each stockpile associated with this operation shall not exceed 0.27 acres. [District Rule 2201]
23. The percent moisture of the aggregate processed by the crushing, screening and conveying operations shall be determined by weighing an approximately 2-lb sample of aggregate from any point of the operation, bringing the sample to dryness in a drying oven, then weighing the dried sample; the weight difference divided by the initial weigh of the sample; all multiply by 100% is the moisture content (% moisture = ((initial weight - dry weight)/initial weight) x 100%). [District Rule 2201]
24. The moisture content of the aggregate processed by the crushing, screening and conveying operations shall be measured on a monthly basis and when requested by the District. [District Rule 2201]
25. The permittee shall maintain a daily record of the amount of aggregate processed by the crushing, screening and conveying operations. [District Rule 1070]
26. The permittee shall maintain a monthly record of the moisture content of the aggregate processed by the crushing, screening and conveying operations. [District Rules 1070 and 2201]
27. Daily records of the amount of throughput in tons at each process point shall be kept. Daily and annual records of the time and duration of operation shall be kept. These records shall be maintained and kept onsite for at least five years, and shall be made readily available for District inspection upon request. [District Rules 1070 and 2201]
28. All records required by this permit shall be retained on-site for a period of at least five years and shall be made available for District inspection upon request. [District Rules 4621 and 4622]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-3798-12-0 **EXPIRATION DATE:** 04/30/2021

EQUIPMENT DESCRIPTION:
TRANSPORTABLE AGGREGATE PROCESSING OPERATION INCLUDING FEEDER BIN, PUGMILL AND TWO CONVEYORS - VARIOUS SPECIFIED LOCATIONS, SJVUAPCD

PERMIT UNIT REQUIREMENTS

1. Approved storage location for this equipment: 45315 Lost Hills Road, Coalinga (C-3798). [District Rule 2201]
2. Approved operational locations for this equipment: 3000 White Rock Road, Le Grand (N-4013); 45315 Lost Hills Road, Coalinga (C-3798); and 27671 Avenue 120, Porterville (S-4136). [District Rule 2201]
3. This transportable aggregate processing operation shall not be operated within 1,000 feet of the outer boundary of any K-12 school unless a public notice is performed in accordance with California Health and Safety Code 42301.6. [CH&SC 42301.6]
4. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070]
5. For Facility N-4013, the transportable aggregate operation shall not operate within 850 meters of the nearest receptor. [District Rule 4102]
6. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
7. Visible emissions from the "pugmill" shall not exceed 5%. [District Rules 2201 and 4101 and 40 CFR 60.672(h)(1)]
8. Visible emissions from the aggregate processing operation shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101, 40 CFR 60.672(b)]
9. Water spray equipment which sufficiently wets materials to limit visible dust emissions shall be installed on all conveyor transfer points. [District Rule 2201]
10. Dust emissions from transfer points and storage piles shall be minimized when needed with water sprays or water sprays containing wetting agents. [District Rules 2201 and 4101]
11. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
12. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
13. This unit shall comply with all applicable provisions of the Code of Federal Regulations (CFR) Part 60, Subpart OOO. [40 CFR 60.672]
14. The quantity of aggregate processed through the aggregate processing operation shall not exceed 5,000 tons in any one day and 1,100,000 tons in any one calendar year. [District Rule 2201]
15. PM10 emissions rate from the transportable aggregate processing operation shall not exceed 0.00018 lb-PM10/ton-aggregate. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

16. Records of daily amount of aggregate processed by the transportable aggregate operation shall be maintained, retained on-site and with the transportable equipment for a period of at least five (5) years and made available for District inspection upon request. [District Rules 1070 and 2201]

17. All records required by this permit shall be retained on-site for a period of at least five years and shall be made available for District inspection upon request. [District Rules 4621 and 4622]

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING

MAY 2 5 2016

Facility # C-3798
PAPICH CONST CO, INC DBA SIERRA PACIFIC
PO BOX 2210
PISMO BEACH, CA 93448-2210

AUTHORITY TO CONSTRUCT (ATC)

QUICK START GUIDE

1. **Pay Invoice**: Please pay enclosed invoice before due date.
2. **Fully Understand ATC**: Make sure you understand ALL conditions in the ATC prior to construction, modification and/or operation.
3. **Follow ATC**: You must construct, modify and/or operate your equipment as specified on the ATC. Any unspecified changes may require a new ATC.
4. **Notify District**: You must notify the District's Compliance Department, at the telephone numbers below, upon start-up and/or operation under the ATC. Please record the date construction or modification commenced and the date the equipment began operation under the ATC. You may NOT operate your equipment until you have notified the District's Compliance Department. A startup inspection may be required prior to receiving your Permit to Operate.
5. **Source Test**: Schedule and perform any required source testing. See http://www.valleyair.org/busind/comply/source_testing.htm for source testing resources.
6. **Maintain Records**: Maintain all records required by ATC. Records are reviewed during every inspection (or upon request) and must be retained for at least 5 years.

By operating in compliance, you are doing your part to improve air quality for all Valley residents.

For assistance, please contact District Compliance staff at any of the telephone numbers listed below.

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

www.valleyair.org www.healthyairliving.com

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

AUTHORITY TO CONSTRUCT

PERMIT NO: C-3798-1-2 **ISSUANCE DATE:** 05/24/2016

LEGAL OWNER OR OPERATOR: PAPICH CONST CO, INC DBA SIERRA PACIFIC
MAILING ADDRESS: PO BOX 2210
PISMO BEACH, CA 93448-2210

LOCATION: 45315 LOST HILLS RD
COALINGA, CA 93210-9660

EQUIPMENT DESCRIPTION:
MODIFICATION OF AGGREGATE HANDLING OPERATION CONSISTING OF A RECLAIMED ASPHALT PAVEMENT FEED BIN, FEED BELT, FOUR COLD AGGREGATE FEED BINS, FOUR BELT FEEDERS WITH WATER SPRAY BARS, ASSOCIATED BELT CONVEYOR, AND SCALPING SCREEN PROVIDING RAW MATERIAL FOR A HOT MIX/WARM MIX ASPHALT OPERATION (C-3798-2): ADD TWO COLD AGGREGATE FEED BINS AND TWO BELT FEEDERS WITH WATER SPRAY BARS

CONDITIONS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. All haul roads and other roadways traversed by mobile equipment and/or motor vehicles shall be adequately moistened with water at such a frequency as required to prevent visible emissions equal to or in excess of 20% opacity from such roads. [District Rule 2201]
5. All stockpiled sand, aggregate, and other materials shall be maintained adequately moist to minimize emissions of fugitive particulate matter. [District Rule 2201]
6. Total aggregate materials process throughput shall not exceed 6,000 tons per day. [District Rule 2201]
7. The aggregate materials throughput for each feed bin shall not exceed 4,760 tons per day. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

for

Arnaud Marjollet, Director of Permit Services
C-3798-1-2 May 24 2016 8:19AM -- FUKUDEY Joint Inspection NOT Required

8. Particulate matter (PM10) emissions from the aggregate handling operation shall not exceed 0.00042 lb/ton of aggregate handled. [District Rule 2201]

9. When handling bulk materials outside an enclosed structure or building, water or chemical/organic stabilizers/suppressants shall be applied as required to limit Visible Dust Emissions to a maximum of 20% opacity. When necessary to achieve this opacity limitation, wind barriers with less than 50% porosity shall also be used. [District Rules 8011 and 8031]

10. When storing bulk materials outside an enclosed structure or building, water or chemical/organic stabilizers/suppressants shall be applied as required to limit Visible Dust Emissions to a maximum of 20% opacity. When necessary to achieve this opacity limitation, all bulk material piles shall also be either maintained with a stabilized surface as defined in Section 3.58 of District Rule 8011, or shall be protected with suitable covers or barriers as prescribed in Table 8031-1, Section B, of District Rule 8031. [District Rules 8011 and 8031]

11. When transporting bulk materials outside an enclosed structure or building, all bulk material transport vehicles shall limit Visible Dust Emissions to 20% opacity by either limiting vehicular speed, maintaining sufficient freeboard on the load, applying water to the top of the load, or covering the load with a tarp or other suitable cover. [District Rules 8011 and 8031]

12. All outdoor chutes and conveyors shall be controlled by any of the following options: 1) full enclosure, 2) operation with water spray equipment that sufficiently wets materials to limit VDE to 20% opacity, or 3) the concentration of particles having an aerodynamic diameter of 10 microns or less in the conveyed material shall be sufficiently small to limit VDE to 20% opacity. [District Rules 8011 and 8031]

13. All empty transport trucks leaving the facility shall be sufficiently clean to limit Visible Dust Emissions to 20% opacity or the cargo compartment shall be covered. [District Rules 8011 and 8031]

14. All transport trucks shall be designed and maintained to prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and/or tailgate. [District Rules 8011 and 8031]

15. Off-site bulk material transport vehicles shall be loaded with not less than 6 inches freeboard space and either water shall be applied or the load shall be covered with a tarp or other suitable cover, sufficient to limit Visible Dust Emissions to 20% opacity. [District Rules 8011 and 8031]

16. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/04) or Rule 8011(8/19/04). [District Rules 8011 and 8041]

17. Where dusting materials are allowed to accumulate on paved surfaces, the accumulation shall be removed daily or water and/or chemical/organic dust stabilizers/suppressants shall be applied to the paved surface as required to maintain continuous compliance with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011 and limit Visible Dust Emissions (VDE) to 20% opacity. [District Rules 8011 and 8071]

18. On each day that 50 or more Vehicle Daily Trips or 25 or more Vehicle Daily Trips with 3 axles or more will occur on an unpaved vehicle/equipment traffic area, permittee shall apply water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rules 8011 and 8071]

19. Whenever any portion of the site becomes inactive, permittee shall restrict access and periodically stabilize any disturbed surface to comply with the conditions for a stabilized surface as defined in Section 3.58 of District Rule 8011. [District Rules 8011 and 8071]

20. Records and other supporting documentation shall be maintained as required to demonstrate compliance with the requirements of the rules under Regulation VIII only for those days that a control measure was implemented. Such records shall include the type of control measure(s) used, the location and extent of coverage, and the date, amount, and frequency of application of dust suppressant, manufacturer's dust suppressant product information sheet that identifies the name of the dust suppressant and application instructions. Records shall be kept for one year following project completion that results in the termination of all dust generating activities. [District Rules 8011, 8031, and 8071]

21. Records of daily amount of aggregate material processed at the aggregate handling operation shall be maintained. [District Rules 1070 and 2201]

CONDITIONS CONTINUE ON NEXT PAGE

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

Facility # C-3798
PAPICH CONST CO, INC DBA SIERRA PACIFIC
PO BOX 2210
PISMO BEACH, CA 93448-2210

Notice of Permit Issuance

The enclosed permit unit requirements authorize the operation of the equipment as described. These permit unit requirements supersede any and all previous permits for the specified equipment.* Please insert these documents into the Facility Permit to Operate, and post copies on or near the equipment as required by District Rule 2010.

Please contact any of our Small Business Assistance (SBA) staff at the numbers below if you have any questions:

Modesto:	(209) 557-6446
Fresno:	(559) 230-5888
Bakersfield:	(661) 392-5665

*Failure to comply with the permit unit requirements may result in enforcement action.

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

www.valleyair.org www.healthyairliving.com

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING

AUTHORITY TO CONSTRUCT

PERMIT NO: C-3798-3-2 **ISSUANCE DATE:** 05/24/2016

LEGAL OWNER OR OPERATOR: PAPICH CONST CO, INC DBA SIERRA PACIFIC
MAILING ADDRESS: PO BOX 2210
PISMO BEACH, CA 93448-2210

LOCATION: 45315 LOST HILLS RD
COALINGA, CA 93210-9660

EQUIPMENT DESCRIPTION:
MODIFICATION OF SILO FILLING AND LOADOUT OPERATION CONSISTING OF ONE 200 TON ASPHALT STORAGE CONCRETE SILO WITH SILO FILLING AND TRUCK LOADOUT OPERATION VENTED TO A HOT MIX DRUM BURNER (UNDER PERMIT UNIT C-3798-2) (VARIOUS UNSPECIFIED LOCATIONS): ADD 300 TON ASPHALT STORAGE CONCRETE SILO WITH SILO FILLING AND TRUCK LOADOUT OPERATION VENTED TO A HOT MIX DRUM BURNER (UNDER PERMIT UNIT C-3798-2)

CONDITIONS

1. Authority to Construct (ATC) C-3798-3-1 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this ATC. [District Rule 2201]
2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
5. All haul roads and other roadways traversed by mobile equipment and/or motor vehicles shall be adequately moistened with water at such a frequency as required to prevent visible emissions equal to or in excess of 20% opacity from such roads. [District Rule 2201]
6. The equipment shall not be operated within 1000 feet of any K-12 school unless a public notice is performed in accordance with the California Health & Safety Code Section 42301.6. [California Health and Safety Code]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

For

Arnaud Marjollet, Director of Permit Services
C-3798-3-2 May 24 2016 8:19AM -- FUKUDAD Joint Inspection NOT Required

7. Permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no longer than 48 hours after starting operation at the location. [District Rule 1070]

8. The maximum quantity of asphaltic concrete transferred into the storage silos and loaded out shall not exceed 6,000 tons per day and 522,000 tons in a calendar year. [District Rule 2201]

9. Particulate matter (PM10) emissions from the storage silos and loadout operation shall not exceed 0.00013 lb/ton asphaltic concrete product loaded. [District Rule 2201]

10. The CO emissions from the storage silos and loadout operation shall not exceed 0.00253 lb/ton asphaltic concrete product loaded. [District Rule 2201]

11. The VOC emissions from the storage silos and loadout operation shall not exceed 0.0028 lb/ton asphaltic concrete product loaded. [District Rule 2201]

12. This unit is subject to the requirements of 40 CFR Part 60, Subpart I: Standards of Performance for Asphalt Concrete Plants. [District Rule 4001 and 40 CFR §60.90]

13. Particulate matter emissions from the exhaust stack of the baghouse under permit unit C-3798-2-2 that serves this permit unit shall not exceed 0.04 grains/dscf. [District Rules 4001 and 4201, and 40 CFR §60.92(a)(1)]

14. Visible emissions from the exhaust stack of the baghouse under permit unit C-3798-2-2 that serves this permit unit shall be less than 20% opacity. [District Rules 4001 and 4101, and 40 CFR §60.92(a)(2)]

15. Compliance with the requirements of 40 CFR Part 60, Subpart I shall be verified by the test methods given in the Subpart. [District Rule 4001 and 40 CFR §60.93]

16. Source testing to determine the particulate matter concentration from the baghouse as required by 40 CFR Part 60, Subpart I: Standards of Performance for Asphalt Concrete Plants shall be conducted using EPA method 5. [District Rule 4001 and 40 CFR §60.93(b)(1)]

17. Source testing to determine opacity as required by 40 CFR Part 60, Subpart I: Standards of Performance for Asphalt Concrete Plants shall be conducted using EPA method 9. [District Rule 4001 and 40 CFR §60.93(b)(2)]

18. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/04) or Rule 8011(8/19/04). [District Rules 8011 and 8041]

19. Where dusting materials are allowed to accumulate on paved surfaces, the accumulation shall be removed daily or water and/or chemical/organic dust stabilizers/suppressants shall be applied to the paved surface as required to maintain continuous compliance with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011 and limit Visible Dust Emissions (VDE) to 20% opacity. [District Rules 8011 and 8071]

20. On each day that 50 or more Vehicle Daily Trips or 25 or more Vehicle Daily Trips with 3 axles or more will occur on an unpaved vehicle/equipment traffic area, permittee shall apply water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rules 8011 and 8071]

21. Whenever any portion of the site becomes inactive, permittee shall restrict access and periodically stabilize any disturbed surface to comply with the conditions for a stabilized surface as defined in Section 3.58 of District Rule 8011. [District Rules 8011 and 8071]

22. Records and other supporting documentation shall be maintained as required to demonstrate compliance with the requirements of the rules under Regulation VIII only for those days that a control measure was implemented. Such records shall include the type of control measure(s) used, the location and extent of coverage, and the date, amount, and frequency of application of dust suppressant, manufacturer's dust suppressant product information sheet that identifies the name of the dust suppressant and application instructions. Records shall be kept for one year following project completion that results in the termination of all dust generating activities. [District Rules 8011, 8031, and 8071]

23. The permittee shall maintain records of the locations at which the equipment was operated, and the dates operated at each location. [District Rules 1070 and 2201]

CONDITIONS CONTINUE ON NEXT PAGE

24. The permittee shall maintain a daily record of the quantity of asphalt concrete transferred into the storage silos (in tons) and loaded out (in tons). [District Rules 1070 and 2201]

25. The permittee shall maintain a record of the cumulative annual amount of asphalt concrete transferred into the storage silos (in tons) and loaded out (in tons). The cumulative totals shall be updated at least monthly. [District Rules 1070 and 2201]

26. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 1070 and 2201]

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

Permit to Operate

FACILITY: C-3798 **EXPIRATION DATE:** 04/30/2016

LEGAL OWNER OR OPERATOR: PAPICH CONST CO, INC DBA SIERRA PACIFIC
MAILING ADDRESS: PO BOX 2210
PISMO BEACH, CA 93448-2210

FACILITY LOCATION: 45315 LOST HILLS RD
COALINGA, CA 93210-9660

FACILITY DESCRIPTION: ASPHALT PAVING MIXTURES

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

Mar 13 2015 6:22PM -- DAVILAE

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-3798-1-1 **EXPIRATION DATE:** 04/30/2016

EQUIPMENT DESCRIPTION:
AGGREGATE HANDLING OPERATION CONSISTING OF A RECLAIMED ASPHALT PAVEMENT FEEDBIN, FEED BELT, FOUR COLD AGGREGATE FEED BINS, FOUR BELT FEEDERS WITH WATER SPRAY BARS, ASSOCIATED BELT CONVEYOR, AND SCALPING SCREEN PROVIDING RAW MATERIAL FOR A HOT MIX/ WARM MIX ASPHALT OPERATION (C-3798-2)

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. All haul roads and other roadways traversed by mobile equipment and/or motor vehicles shall be adequately moistened with water at such a frequency as required to prevent visible emissions equal to or in excess of 20% opacity from such roads. [District Rule 2201]
5. All stockpiled sand, aggregate, and other materials shall be maintained adequately moist to minimize emissions of fugitive particulate matter. [District Rule 2201]
6. Total aggregate materials process throughput shall not exceed 6,000 tons per day. [District Rule 2201]
7. Particulate matter (PM10) emissions from the aggregate handling operation shall not exceed 0.00042 lbs/ton of aggregate handled. [District Rule 2201]
8. When handling bulk materials outside an enclosed structure or building, water or chemical/organic stabilizers/suppressants shall be applied as required to limit Visible Dust Emissions to a maximum of 20% opacity. When necessary to achieve this opacity limitation, wind barriers with less than 50% porosity shall also be used. [District Rules 8011 and 8031]
9. When storing bulk materials outside an enclosed structure or building, water or chemical/organic stabilizers/suppressants shall be applied as required to limit Visible Dust Emissions to a maximum of 20% opacity. When necessary to achieve this opacity limitation, all bulk material piles shall also be either maintained with a stabilized surface as defined in Section 3.58 of District Rule 8011, or shall be protected with suitable covers or barriers as prescribed in Table 8031-1, Section B, of District Rule 8031. [District Rules 8011 and 8031]
10. When transporting bulk materials outside an enclosed structure or building, all bulk material transport vehicles shall limit Visible Dust Emissions to 20% opacity by either limiting vehicular speed, maintaining sufficient freeboard on the load, applying water to the top of the load, or covering the load with a tarp or other suitable cover. [District Rules 8011 and 8031]
11. All outdoor chutes and conveyors shall be controlled by any of the following options: 1) full enclosure, 2) operation with water spray equipment that sufficiently wets materials to limit VDE to 20% opacity, or 3) the concentration of particles having an aerodynamic diameter of 10 microns or less in the conveyed material shall be sufficiently small to limit VDE to 20% opacity. [District Rules 8011 and 8031]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. All empty transport trucks leaving the facility shall be sufficiently clean to limit Visible Dust Emissions to 20% opacity or the cargo compartment shall be covered. [District Rules 8011 and 8031]
13. All transport trucks shall be designed and maintained to prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and/or tailgate [District Rules 8011 and 8031]
14. Off-site bulk material transport vehicles shall be loaded with not less than 6 inches freeboard space and either water shall be applied or the load shall be covered with a tarp or other suitable cover, sufficient to limit Visible Dust Emissions to 20% opacity. [District Rules 8011 and 8031]
15. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/04) or Rule 8011(8/19/04). [District Rules 8011 and 8041]
16. Where dusting materials are allowed to accumulate on paved surfaces, the accumulation shall be removed daily or water and/or chemical/organic dust stabilizers/suppressants shall be applied to the paved surface as required to maintain continuous compliance with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011 and limit Visible Dust Emissions (VDE) to 20% opacity. [District Rule 8011 and 8071]
17. On each day that 50 or more Vehicle Daily Trips or 25 or more Vehicle Daily Trips with 3 axles or more will occur on an unpaved vehicle/equipment traffic area, permittee shall apply water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rule 8011 and 8071]
18. Whenever any portion of the site becomes inactive, permittee shall restrict access and periodically stabilize any disturbed surface to comply with the conditions for a stabilized surface as defined in Section 3.58 of District Rule 8011. [District Rules 8011 and 8071]
19. Records and other supporting documentation shall be maintained as required to demonstrate compliance with the requirements of the rules under Regulation VIII only for those days that a control measure was implemented. Such records shall include the type of control measure(s) used, the location and extent of coverage, and the date, amount, and frequency of application of dust suppressant, manufacturer's dust suppressant product information sheet that identifies the name of the dust suppressant and application instructions. Records shall be kept for one year following project completion that results in the termination of all dust generating activities. [District Rules 8011, 8031, and 8071]
20. Records of daily aggregate process rate shall be maintained, retained on the premises for at least five years and made available for District inspection upon request. [District Rule 1070]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-3798-2-2 **EXPIRATION DATE:** 04/30/2016

EQUIPMENT DESCRIPTION:
HOT MIX/ WARM MIX ASPHALT PLANT INCLUDING A TEREX MODEL E3-400-S COUNTER FLOW DRUM DRYER WITH A 125 MMBTU/HR HAUCK NOVASTAR PROPANE-FIRED LOW-NOX BURNER AND A TEREX MODEL SZ40/542 BAGHOUSE WITH A PRIMARY COLLECTOR/HEAVY FINES KNOCKOUT BOX AND COVERED DRAG SLAT CONVEYOR

PERMIT UNIT REQUIREMENTS

1. The exhaust stack of the baghouse shall vent vertically upward. The vertical exhaust flow shall not be impeded by a fixed rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. Visible emissions from the baghouse shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rules 2201 and 4101]
5. For all emission points other than the baghouse exhaust, no air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
6. The baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201]
7. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201]
8. Material removed from the dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201]
9. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201]
10. Replacement bags numbering at least 10% of the total number of bags in the baghouse shall be maintained on the premises. [District Rule 2201]
11. The differential pressure gauge reading range shall be maintained between 0.1" and 5" WC. [District Rule 2201]
12. The electric motors powering the baghouse exhaust fan(s), the drum, and the burner blower shall be meet or exceed National Electrical Manufacturers Association (NEMA) Premium (TM) efficiency electric motor standards. [California Environmental Quality Act]
13. The baghouse exhaust fans shall be capable of variable frequency speed control. [California Environmental Quality Act]
14. The heat input per ton of asphalt produced shall not exceed 0.20 MMBtu/ton. Compliance with this limit shall be determined by dividing the cumulative annual heat input to the dryer by the tons of asphaltic concrete produced over a calendar year. [California Environmental Quality Act]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

15. The drum dryer burner shall be fired only on propane. [District Rule 2201]
16. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted by the drum dryer burner shall be installed, utilized, and properly maintained. [District Rule 2201]
17. The quantity of asphaltic concrete produced shall not exceed 6,000 tons in any one day or the daily production/loadout limit on Permit to Operate C-3798-3, whichever is less. [District Rule 2201]
18. The quantity of asphaltic concrete produced shall not exceed 522,000 tons in a calendar year or the annual production/loadout limit on Permit to Operate C-3798-3, whichever is less. [District Rule 2201]
19. Emission rates from asphaltic concrete drum mix operation served by a baghouse shall not exceed any of the following limits: NOx (as NO2): 0.0094 lb/ton; VOC: 0.0128 lb/ton; CO: 0.057 lb/ton; PM10: 0.021 lb/ton; or SOx (as SO2): 0.0033 lb/ton. [District Rule 2201]
20. Emissions from the propane-fired drum dryer shall not exceed any of the following limits: 4.3 ppmvd NOx @ 19% O2 or 0.049 lb-NOx/MMBtu or 42 ppmvd CO @ 19% O2. [District Rules 2201 and 4309]
21. Visible emissions from the baghouse serving the asphaltic concrete drum dryer/mixer shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201]
22. This unit is subject to the requirements of 40 CFR Part 60, Subpart I: Standards of Performance for Asphalt Concrete Plants. [District Rule 4001 and 40 CFR §60.90]
23. Particulate matter emissions from the baghouse exhaust shall not exceed 0.04 grains/dscf. [District Rules 4001 and 4201 and 40 CFR §60.92(a)(1)]
24. Compliance with opacity limits shall be determined according to EPA Method 9. [District Rule 4001 and 40 CFR §60.93(b)(2)]
25. Source testing to measure NOx and CO emissions from this unit shall be conducted at lease once every 24 months thereafter. An equipment operating day is any day in which the drum dryer/mixer is operated where material is introduced into the drum dryer/mixer or processed by the drum dryer/mixer, or where fuel is combusted in the drum dryer. [District Rules 2201 and 4309]
26. All test results for NOx and CO shall be reported in ppmv @ 19% O2 (or no correction if measured above 19% O2), corrected to dry stack conditions. [District Rule 4309]
27. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
28. Source testing to measure NOx and CO emissions from the asphaltic concrete batch plant shall be conducted utilizing one of the following options: (a) Test the unit using locally mined aggregate in the dryer. If the source test using locally minded aggregate fails, the operator may re-run the source test using aggregate from a different source; (b) Test the unit using aggregate from a source different form the source used during normal operations; (c) Test the unit using a heat-absorbing material in the dryer, but no aggregate; (d) Test the unit with no material in the dryer. [District Rule 4309]
29. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
30. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rule 4309]
31. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4309]
32. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4309]
33. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4309. [District Rule 4309]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4309]

35. The operator shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month in which asphalt is produced on at least five days or for at least 32 hours, whichever comes first (and in which a source test is not performed), using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 production days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4309]

36. If either the NOx or CO concentrations corrected to 19% O2 (or no correction if measured above 19% O2), as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4309]

37. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4309]

38. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 19% O2 (or no correction if measured above 19% O2), (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4309]

39. The operator shall not manufacture for sale nor use within the District any of the following for penetrating prime coat, tack coat, dust palliative, or other paving and maintenance operations: (1) rapid cure cutback asphalt; (2) medium cure cutback asphalt (unless the National Weather Service official forecast of the high temperature for the 24 hour period following application is below 50øF); (3) slow cure asphalt which as produced for application, contains more than one-half (0.5) percent of organic compounds which evaporate at 500 degrees Fahrenheit or lower; (4) emulsified asphalt containing organic compounds, in excess of three (3) percent by volume, which evaporate at 500 degrees Fahrenheit or lower. [District Rule 4641]

40. The manufacturer of cutback and slow cure asphalt shall maintain records showing the types and amounts of cutback asphalt and slow cure asphalt which contain organic compounds produced and the destination of these products. Such records shall be maintained daily and retained and available for inspection by District personnel for a period of 5 years. [District Rule 4641]

41. Records of all maintenance of the baghouse, including all change outs of filter media, shall be maintained. [District Rule 2201]

42. Differential operating pressure shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201]

43. A daily record shall be maintained of the tons of asphaltic concrete produced. [District Rules 1070 and 2201]

44. An annual record shall be maintained of the tons of asphaltic concrete produced and the quantity (e.g. gallons) of fuel used by the drum dryer for the year. [District Rules 1070 and 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

45. The permittee shall maintain a record of the cumulative annual heat input to the drum dryer. The fuel heat input is calculated by multiplying the quantity of propane fuel used (e.g. gallons) by its heating value (e.g. Btu/gallon). If the fuel supplier does not provide a heating value, a value of 91,547 Btu/gallon (at 60 degrees F) may be used. [District Rules 1070 and 2201]

46. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-3798-3-0 **EXPIRATION DATE:** 04/30/2016

EQUIPMENT DESCRIPTION:
75 TON ASPHALTIC CONCRETE MIX STORAGE SILO/LOADOUT OPERATION

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. The equipment shall not be operated within 1000 feet of any k-12 school unless a public notice is performed in accordance with the California Health & Safety Code Section 42301.6. [California Health and Safety Code]
5. Permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no longer than 48 hours after starting operation at the location. [District Rule 1070]
6. Hot Mix Asphalt (asphaltic concrete) production shall not exceed 3,300 tons per day or 175,000 tons per year. [District Rule 2201]
7. Particulate matter (PM10) emissions from the storage silo/loadout operation shall not exceed 0.000186 lbs/ton asphaltic concrete product loaded. [District Rule 2201]
8. The VOC emission concentration from the storage silo/loadout operation shall not exceed 0.004 lb/ton asphaltic concrete product loaded. [District Rule 2201]
9. The permittee shall maintain records of the locations at which the equipment was operated, and the dates operated at each location. [District Rule 1070]
10. A summary report of the records shall be submitted to the District within 30 days after the end of each calendar quarter. [District Rule 1070]
11. Daily and annual records of Hot Mix Asphalt (asphaltic concrete) production shall be maintained and retained on the premises for at least five years and shall be made available for District inspection upon request [District Rule 2201 & 1070]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-3798-7-5 **EXPIRATION DATE:** 04/30/2016

EQUIPMENT DESCRIPTION:
PRIMARY ROCK CRUSHING AND SCREENING OPERATION CONSISTING OF ONE EL RUSS FEEDER, ONE CEDARAPIDS JAW CRUSHER, ONE EL JAY 6 X 16 TRIPLE DECK SCREEN, ONE NORDBERG SYMONS 4' CONE CRUSHER, ONE NORDBERG BHP 300 CONE CRUSHER, ONE SPLITTER BOX, ONE BLADE MILL, ONE WET SCREEN, ONE TWIN SAND SCREW, ONE SINGLE SAND SCREW AND ASSOCIATED CONVEYERS CONTROLLED BY WET SUPPRESSION

PERMIT UNIT REQUIREMENTS

1. This permit unit shall only be operated at 45315 Lost Hills Road - Highway 33 in Coalinga, CA. [District Rule 2201]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
5. Belt feeders, crushers, screens, all conveyor transfer points, and stockpile areas shall be equipped and utilize water spray equipment to limit visible dust emissions, and maintain moisture content requirements of this permit. [District Rule 2201]
6. All spray nozzles serving belt feeders, crushers, screens, conveyor transfer points, and stockpile areas shall be turned on prior to operation and shall remain on through the process to limit visible dust emissions, and maintain moisture content requirements of this permit. [District Rule 2201]
7. All unpaved areas and haul roads traversed by mobile equipment and/or motor vehicles shall be adequately moistened with water or chemically stabilized at such a frequency as required to prevent visible emissions equal to or in excess of 20% opacity from such roads. [District Rules 8011 and 8061]
8. Visible emissions from the crushers shall not exceed 15% opacity as measured per Code of Federal Regulations, Part 60, Chapter 1, Title 40, Subpart OOO. [District Rules 4001 and 4101]
9. Visible emissions from any transfer point on belt conveyors or from any other affected facility shall not exceed 10% opacity as measured per Code of Federal Regulation, Part 60, Chapter 1, Title 40, Subpart OOO. [District Rules 4001 and 4101]
10. Compliance with particulate matter and opacity standards shall be determined in accordance with Title 40, Code of Federal Regulations, Part 60, Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants). [District Rules 4001 and 4101]
11. All material processed through the crushing, screening and associated conveying operations shall have a moisture content of 4% or greater, by weight. [District Rule 2201]
12. All material processed through the blade mill, triple deck wet screen, twin sand, screw, single sand screw, and associated conveying operations shall have a moisture content of 6% or greater, by weight. [District Rule 2201]
13. All stockpiles shall be maintained at 4% moisture content unless visible emissions from the stockpiles are not present. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. PM10 emissions from the feeder shall not exceed 0.0001 lb/ton-material-processed. [District Rule 2201]
15. PM10 emissions from each crusher shall not exceed 0.00054 lb/ton-material-processed. [District Rule 2201]
16. PM10 emissions from each conveyor transfer point shall not exceed 0.000046 lb/ton-material-processed. [District Rule 2201]
17. PM10 emissions from each screen shall not exceed 0.00074 lb/ton-material-processed. [District Rule 2201]
18. PM10 emissions from blade mill, triple deck wet screen, twin sand, screw, single sand screw, and associated conveying operations shall not exceed 0.0 lb/ton-material-processed. [District Rule 2201]
19. PM10 emissions from the stockpiles shall not exceed 0.05 lb/acre-day. [District Rule 2201]
20. The maximum throughput of aggregate processed by the El Russ Feeder shall not exceed 600 ton/hr. [District Rule 2201]
21. The maximum throughput of aggregate processed by the Cedarapids Jaw Crusher shall not exceed 600 ton/hr or 7,300 ton/day. [District Rule 2201]
22. The maximum throughput of aggregate processed by the El Jay 6 x 16 Screen Deck shall not exceed 600 ton/hr or 7,300 ton/day. [District Rule 2201]
23. The maximum throughput of aggregate processed by the Nordberg Symons 4' Cone Crusher shall not exceed 50 ton/hr. [District Rule 2201]
24. The maximum throughput of aggregate processed by the Nordberg HP 300 Cone Crusher shall not exceed 200 ton/hr. [District Rule 2201]
25. The footprint area of each stockpile associated with this operation shall not exceed 0.27 acres. [District Rule 2201]
26. The percent moisture of the aggregate processed by the crushing, screening and conveying operations shall be determined by weighing an approximately 2-lb sample of aggregate from any point of the operation, bringing the sample to dryness in a drying oven, then weighing the dried sample; the weight difference divided by the initial weigh of the sample; all multiply by 100% is the moisture content (% moisture = ((initial weight - dry weight)/initial weight) x 100%). [District Rule 2201]
27. The moisture content of the aggregate processed by the crushing, screening and conveying operations shall be measured on a monthly basis and when requested by the District. [District Rule 2201]
28. The permittee shall maintain a monthly record of the moisture content of the aggregate processed by the crushing, screening and conveying operations. [District Rules 1070 and 2201]
29. Daily records of the amount of throughput in tons at each process point shall be kept. Daily and annual records of the time and duration of operation shall be kept. These records shall be maintained and kept onsite for at least five years, and shall be made readily available for District inspection upon request. [District Rules 1070 and 2201]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-3798-11-1 **EXPIRATION DATE:** 04/30/2016

EQUIPMENT DESCRIPTION:
SECONDARY ROCK CRUSHING AND SCREENING OPERATION CONSISTING OF ONE DRIVE OVER FEEDER, ONE JCI 6 X 20 TRIPLE DECK SCREEN, ONE 5½ NORDBERG CONE CRUSHER AND ASSOCIATED CONVEYORS CONTROLLED BY WET SUPPRESSION

PERMIT UNIT REQUIREMENTS

1. This permit unit shall only be operated at 45315 Lost Hills Road - Highway 33 in Coalinga, CA. [District Rule 2201]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
5. Belt feeders, crushers, screens, all conveyor transfer points, and stockpile areas shall be equipped and utilize water spray equipment to limit visible dust emissions, and maintain moisture content requirements of this permit. [District Rule 2201]
6. All spray nozzles serving belt feeders, crushers, screens, conveyor transfer points, and stockpile areas shall be turned on prior to operation and shall remain on through the process to limit visible dust emissions, and maintain moisture content requirements of this permit. [District Rule 2201]
7. All unpaved areas and haul roads traversed by mobile equipment and/or motor vehicles shall be adequately moistened with water or chemically stabilized at such a frequency as required to prevent visible emissions equal to or in excess of 20% opacity from such roads. [District Rules 8011 and 8061]
8. Visible emissions from the crushers shall not exceed 15% opacity as measured per Code of Federal Regulations, Part 60, Chapter 1, Title 40, Subpart OOO. [District Rules 4001 and 4101]
9. Visible emissions from any transfer point on belt conveyors or from any other affected facility shall not exceed 10% opacity as measured per Code of Federal Regulation, Part 60, Chapter 1, Title 40, Subpart OOO. [District Rules 4001 and 4101]
10. Compliance with particulate matter and opacity standards shall be determined in accordance with Title 40, Code of Federal Regulations, Part 60, Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants). [District Rules 4001 and 4101]
11. All material processed through the crushing, screening and associated conveying operations shall have a moisture content of 4% or greater, by weight. [District Rule 2201]
12. All stockpiles shall be maintained at 4% moisture content unless visible emissions from the stockpiles are not present. [District Rule 2201]
13. PM10 emissions from drive over feeder shall not exceed 0.000046 lb/ton-material-processed. [District Rule 2201]
14. PM10 emissions from each crusher shall not exceed 0.00054 lb/ton-material-processed. [District Rule 2201]
15. PM10 emissions from each conveyor shall not exceed 0.000046 lb/ton-material-processed. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

16. PM10 emissions from each screen shall not exceed 0.00074 lb/ton-material-processed. [District Rule 2201]
17. PM10 emissions from the stockpiles shall not exceed 0.05 lb/acre-day. [District Rule 2201]
18. The maximum throughput of aggregate processed by the Drive Over Feeder shall not exceed 300 tons/hr. [District Rule 2201]
19. The maximum throughput of aggregate processed by the JCI 6' x 20' Triple Deck Screen shall not exceed 400 ton/hr or 5,600 ton/day. [District Rule 2201]
20. The maximum throughput of aggregate processed by the 5½' Nordberg Cone Crusher shall not exceed 100 ton/hr. [District Rule 2201]
21. The footprint area of each stockpile associated with this operation shall not exceed 0.27 acres. [District Rule 2201]
22. The percent moisture of the aggregate processed by the crushing, screening and conveying operations shall be determined by weighing an approximately 2-lb sample of aggregate from any point of the operation, bringing the sample to dryness in a drying oven, then weighing the dried sample; the weight difference divided by the initial weigh of the sample; all multiply by 100% is the moisture content (% moisture = ((initial weight - dry weight)/initial weight) x 100%). [District Rule 2201]
23. The moisture content of the aggregate processed by the crushing, screening and conveying operations shall be measured on a monthly basis and when requested by the District. [District Rule 2201]
24. The permittee shall maintain a daily record of the amount of aggregate processed by the crushing, screening and conveying operations. [District Rule 1070]
25. The permittee shall maintain a monthly record of the moisture content of the aggregate processed by the crushing, screening and conveying operations. [District Rules 1070 and 2201]
26. Daily records of the amount of throughput in tons at each process point shall be kept. Daily and annual records of the time and duration of operation shall be kept. These records shall be maintained and kept onsite for at least five years, and shall be made readily available for District inspection upon request. [District Rules 1070 and 2201]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-3798-12-0 **EXPIRATION DATE:** 04/30/2016

EQUIPMENT DESCRIPTION:
TRANSPORTABLE AGGREGATE PROCESSING OPERATION INCLUDING FEEDER BIN, PUGMILL AND TWO CONVEYORS - VARIOUS SPECIFIED LOCATIONS, SJVUAPCD

PERMIT UNIT REQUIREMENTS

1. Approved storage location for this equipment: 45315 Lost Hills Road, Coalinga (C-3798). [District Rule 2201]
2. Approved operational locations for this equipment: 3000 White Rock Road, Le Grand (N-4013); 45315 Lost Hills Road, Coalinga (C-3798); and 27671 Avenue 120, Porterville (S-4136). [District Rule 2201]
3. This transportable aggregate processing operation shall not be operated within 1,000 feet of the outer boundary of any K-12 school unless a public notice is performed in accordance with California Health and Safety Code 42301.6. [CH&SC 42301.6]
4. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070]
5. For Facility N-4013, the transportable aggregate operation shall not operate within 850 meters of the nearest receptor. [District Rule 4102]
6. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
7. Visible emissions from the "pugmill" shall not exceed 5%. [District Rules 2201 and 4101 and 40 CFR 60.672(h)(1)]
8. Visible emissions from the aggregate processing operation shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101, 40 CFR 60.672(b)]
9. Water spray equipment which sufficiently wets materials to limit visible dust emissions shall be installed on all conveyor transfer points. [District Rule 2201]
10. Dust emissions from transfer points and storage piles shall be minimized when needed with water sprays or water sprays containing wetting agents. [District Rules 2201 and 4101]
11. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
12. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
13. This unit shall comply with all applicable provisions of the Code of Federal Regulations (CFR) Part 60, Subpart OOO. [40 CFR 60.672]
14. The quantity of aggregate processed through the aggregate processing operation shall not exceed 5,000 tons in any one day and 1,100,000 tons in any one calendar year. [District Rule 2201]
15. PM10 emissions rate from the transportable aggregate processing operation shall not exceed 0.00018 lb-PM10/ton-aggregate. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

16. Records of daily amount of aggregate processed by the transportable aggregate operation shall be maintained, retained on-site and with the transportable equipment for a period of at least five (5) years and made available for District inspection upon request. [District Rules 1070 and 2201]

San Joaquin Valley Air Pollution Control District

www.valleyair.org

HEALTHY AIR LIVING

TRANSFER OF OWNERSHIP/OPERATOR OR NAME CHANGE APPLICATION

[ ] **TRANSFER OF OWNERSHIP/OPERATOR:** *if yes please answer the following:*

- [X] **Transfer All Permit Units**
- [ ] **Partial Transfer (Transfer some but not all permit units)**
- [ ] **Sale includes the Transfer of Ownership of existing Emission Reduction Credits (ERCs).** *If yes, please submit a separate ERC Transfer of Ownership Application Form located on the District website at: http://www.valleyair.org/busind/pto/ptoforms/1ptoformidx.htm*

[ ] **NAME CHANGE ONLY: No change in facility ownership has occurred.**

1. PERMIT(S) TO BE ISSUED TO: PAPICH CONST CO., INC. dba Sierra Pacific Materials

2. MAILING ADDRESS:
   STREET/P O BOX: P.O. BOX 2210
   CITY: PISMO BEACH STATE: CA ZIP CODE (9 digits): 93448-2210

3. LOCATION WHERE THE EQUIPMENT IS CURRENTLY OPERATED:
   STREET: 45315 LOST HILLS ROAD
   CITY: COALINGA, CA 93210

4. PERMIT NUMBER(s) TO BE TRANSFERED:
   (Use additional sheets if necessary)
   C-3798
   C-3798-1-1
   C-3798-2-2
   C-3798-3-1
   C-3798-7-6
   C-3798-11-2
   C-3798-12-0

5. In case late fee penalties have accrued on unpaid existing invoice(s), do you request a new owner penalty fee waiver (1-time) ?
   Yes [X] No [ ]

6. SIGNATURE OF APPLICANT (Acquiring Owner or Representative):	TYPE OR PRINT TITLE OF APPLICANT: PRESIDENT	
7. TYPE OR PRINT NAME OF APPLICANT: JASON PAPICH	DATE: 1-21-15	PHONE #: (805) 473-3016 CELL PHONE #: (805) 431-8952 FAX #: (805) 481-5966 E-MAIL: jpapich@papichco.com

8. PERMIT(S) CURRENTLY ISSUED TO: JAXON ENTERPRISES

9. MAILING ADDRESS:
   STREET/P O BOX: P.O. BOX 994248
   CITY: REDDING STATE: CA ZIP CODE (9 digits): 96099-4248

FOR APCD USE ONLY:

DATE STAMP	FILING FEE RECEIVED: $ _____ / DATE PAID: PROJECT NO.: _____ FACILITY ID.: _____

Facility Number _____

9. STATUS OF AUTHORITY(S) TO CONSTRUCT ON DATE OWNERSHIP WAS TRANSFERED

ATC NO.	UNDER CONSTRUCTION	IN OPERATION	OTHER STATUS*
C3798-7-6	☐	☒	☐ _____
C3798-11-2	☐	☒	☐ _____
C3798-3-1	☐	☒	☐ _____
_____	☐	☐	☐ _____
_____	☐	☐	☐ _____
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_____	☐	☐	☐ _____
_____	☐	☐	☐ _____

* If OTHER STATUS, please explain.

Signature of New Owner/Operator _____

TRANSFER OF OWNERSHIP/OPERATOR
LETTER OF RELEASE

CURRENT PERMIT HOLDER

JAXON ENTERPRISES , as current permit holder
(PRINT BUSINESS NAME AS CURRENTLY LISTED ON PERMITS)

of Permits to Operate (as listed below) issued by the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD), hereby releases all rights of ownership of the listed Permits to Operate to:

PAPICH CONST DBA - SIERRA PACIFIC as of 1-1-15
(PRINT NAME OF BUSINESS TRANSFERRING TO) MATERIALS *(EFFECTIVE DATE OF TRANSFER)*

PERMIT NUMBER(s) TO BE TRANSFERED
(PLEASE LIST)

C-3798 C-3798-11-2
C-3798-1-1 C-3798-12-0
C-3798-2-2
C-3798-3-1
C-3798-7-6

(USE ADDITIONAL SHEETS IF NECESSARY)

SIGNED: [signature] V.P. **DATE:** 1/21/2015
(CURRENT OR RELEASING PERMIT HOLDER)

NAME: LEONARD BANDELL **TITLE:** VICE PRESIDENT
(PRINT NAME)

ACQUIRING COMPANY/CONTACT

COMPANY:
NAME: PAPICH CONSTRUCTION CO. INC DBA: SIERRA PACIFIC MATERIALS
(PRINT BUSINESS NAME TO BE LISTED ON PERMITS)

ADDRESS: P.O. BOX 2210 PISMO BEACH, CA 93448

TELEPHONE: (805) 473-3016

CONTACT PERSON:
NAME: JASON PAPICH
(PRINT NAME)

TELEPHONE: (805) 473-3016

APPLICATION FOR
TRANSFER OF OWNERSHIP OR NAME CHANGE

-INSTRUCTIONS-

A. Initial whether the application is for Transfer of Ownership or Name Change of Permit(s) to Operate (PTO) in the appropriate box. By initialing the Name Change Only box, the owner/ operator is certifying that no change in ownership has occurred.

B. A nonrefundable filing fee of $24 is required for each currently permitted emissions unit which is transferring ownership. A nonrefundable filing fee of $24 is required for each stationary source (facility) for name change only. Checks or money orders shall be made payable to the SJVUAPCD.

C. **Line 1.** Indicate the name of the business exactly as it should appear on each PTO.

D. **Line 2.** List the mailing address where correspondence regarding the application and billing for the PTO annual fee may be sent.

E. **Line 3.** List the physical location where the emissions unit(s) are currently operated. If a street address is not applicable, then provide the Township, Section, and Range or the Universal Transverse Meridian (UTM) Coordinates.

F. **Line 4.** List the permit number of each PTO for which ownership is being transferred or name changed.

G. **Line 5.** Signature of Applicant should be the acquiring owner or representative's signature. Sign the application in ink. Type or print the title of the person signing as the applicant.

H. **Line 6.** Type or print the name of the applicant. The applicant must be an officer of the business who will be responsible for complying with all conditions of each PTO. Indicate the date and the daytime telephone number of the applicant.

I. **Line 7.** Indicate the name of the business as it currently appears on the PTO(s) for which ownership is being transferred or name changed.

J. **Line 8.** List the mailing address of the current permit holder of record.

K. **Supplemental Information Required With Each Application.** The following information must be submitted with each application for Transfer of Ownership of PTO:

1. **Stationary Source** - Indicate whether the applicant and any of the businesses on the contiguous or adjacent properties are under the same or common ownership, or are owned or operated by entities which are under common control. If yes, indicate the name, the location, and the general nature of the adjacent business(es).

2. **Consent to Release Permit(s)** - The current permit holder of record must prepare a document acknowledging release of ownership of the current permit(s). The document must be signed in ink and must include the following information:

   a. The name of the business to whom ownership is being transferred.
   b. The permit number of each permit for which ownership is being transferred.
   c. The signature of the previous owner releasing ownership of permit(s).

3. **Modification of Emissions Unit(s)** - Indicate whether any emissions unit(s) being transferred will be modified in any manner which would necessitate a change in existing permit conditions. If yes, then an Application for ATC and PTO must also be submitted. Further information on what changes constitute a modification is contained in Rule 2201 New and Modified Stationary Source Review.

L. Applications may be submitted either by mail or in person at the following locations:

M. Please note than if Emissions Reduction Credit Certificates (ERCS) are also being transferred a separate ERC Transfer of Ownership application is required. The application form and instructions are available at the District Website www.valleyair.org.

1. **Northern Regional Office** (San Joaquin, Stanislaus, and Merced Counties):

   4800 Enterprise Way
   Modesto, CA 95356
   (209) 557-6400 FAX (209) 557-6475

2. **Central Regional Office** (Madera, Fresno, and Kings Counties):

   1990 East Gettysburg Avenue
   Fresno, CA 93726
   (559) 230-5900 FAX (559) 230-6061

3. **Southern Regional Office** (Tulare and Kern Counties):

   34946 Flyover Court
   Bakersfield, CA 93308
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EVALUATION OF ENVIRONMENTAL IMPACTS

APPLICANT: Hewitson Farms

APPLICATION NOS.: Initial Study Application No. 7011 and Unclassified Conditional Use Permit Application No. 3509

DESCRIPTION: Allow continued aggregate (rock, sand, gravel) mining operations with incidental facilities approved under CUP No. 2461R beyond the current expiration date of 2018 on a 323.93-acre portion of a 637.81-acre parcel in the AE-20 (Exclusive Agricultural, 20-acre minimum parcel size) Zone District.

LOCATION: The project site is located on the West side of State Highway 33 between Lost Hills Road and Sutter Avenue, approximately 6.9 miles southeast of the nearest city limits of the City of Coalinga (45315 Lost Hills Road, Coalinga, CA) (Sup. Dist. 5) (APN: 085-110-26).

I. AESTHETICS

A. Would the project have a substantial adverse effect on a scenic vista; or

B. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

FINDING: NO IMPACT:

The project site is located in an area of limited agricultural activities with low residential density. Field crops on agricultural land border the site to the north and east and upland grazing borders the site to the south and west. State Route (SR) 33 runs through the property in a northwest and southeast direction and is not designated as a scenic highway in the County General Plan. No scenic vistas or scenic resources including trees, rock outcroppings, or historic buildings exist on or near the site that could be impacted by this proposal. The project will have no impact on scenic resources.

C. Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The subject proposal would extend the life of mining and reclamation activities that were authorized by Unclassified Conditional Use Permit (CUP) No. 2461–R by allowing rock, sand, and gravel to continue to be extracted from a 323.93-acre portion of a 637.81-acre project site. CUP 2461-R was approved to allow aggregate mining operation for 20 years until December 3, 2018. This proposal will allow for an additional 50 years for aggregate mining within the same boundaries and the same operational characteristics as approved for CUP 2461-R. No changes in intensity, hours of operation, volume, site extraction boundaries, including excavation depth (linear or vertical), will occur from this proposal.

The site is located in a sparsely populated agricultural area of Fresno County with the nearest neighboring single-family residence located approximately 1,600 feet northeast of the project's property line. The project would not substantially change the visual character of the project area as established by the current mining operations. State Route (SR) 33 is an existing feature of the landscape, and continued operation of the mine would not introduce new contrasting elements to the landscape. In accordance with the previously-approved Condition No. 8 for CUP No. 2461-R, a 6-foot-tall berm rehabilitated with specific planting seed mix has been constructed within the 100-foot-setback area adjacent to SR 33 and north of the property entrance. The existing berm that is located within the 100-foot-setback area adjacent to SR 33 south of the property entrance blocks the view of future mining activities from the highway and surrounding properties. The berm is constructed from overburden and topsoil from the mine site. Based on a recommendation from the Department of Mine Reclamation related to revegetation, the material in the berm will be re-spread over mine surfaces at reclamation.

D. Would the project 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:

According to the Applicant's Operational Statement, all exterior lighting in the active mine area are hooded and mounted on poles and the exterior of the office, scale house, scale house trailer, and control building. To minimize light and glare impacts resulting from mining activities related to future phases a mitigation measure would require that all lighting be hooded and directed as to not shine toward adjacent properties and public streets.

*** *Mitigation Measure***

1. *All outdoor lighting shall be hooded and directed downward so as to not shine toward adjacent properties and public streets.*

All mining operations will be from 7 am to 5 pm (Monday thru Friday) and on weekends only as needed as previously approved by CUP 2461-R.

II. AGRICULTURAL AND FORESTRY RESOURCES

A. Would the project convert prime or unique farmlands or farmland of state-wide importance to non-agricultural use; or

B. Would the project conflict with existing agricultural zoning or Williamson Act Contracts?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project is not in conflict with agricultural zoning and is an allowed use on land designated for agriculture with discretionary land use approval and adherence to the applicable General Plan Policies. The subject property is classified as Farmland of Local Importance, Grazing Land, and Vacant or Disturbed Land on the 2014 Fresno County Important Farmland Map.

The Policy Planning Section of the Fresno County Department of Public Works and Planning reviewed the proposal and stated that entire area subject to mining operations, including the acreage that has already been mined, is enrolled in a Williamson Act Land Conservation Contract (AP3217). While the Owner has shown a commitment to compatible uses on the project site, the Owner has elected to file for nonrenewal of the Williamson Act contract on the project site to ensure that continuing operational and reclamation activities need not comply with currently applicable compatibility requirements. The applicant filed a Notice of Non-Renewal on August 30, 2017.

C. Would the project conflict with existing zoning for or cause rezoning of forest land, timberland, or timberland zoned Timberland Production; or

D. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

FINDING: NO IMPACT:

The project site is located between the coastal foothills and the San Joaquin Valley and is not covered with forestland or dense tree vegetation. The site has limited trees located along Zapato Creek that traverses the property. The proposed project would not conflict with existing zoning for, or cause rezoning of, forestland, timberland or timberland zoned Timberland Production. The project would also not result in the loss of forestland or conversion of forestland to non-forest use utilizing the existing approved site footprint.

E. Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural uses or conversion of forest land to non-forest use?

FINDING: NO IMPACT:

The proposed project would not include activities that could, because of their location or nature, result in conversion of farmland to nonagricultural use. Contrarily, the reclaimed site would be converted to a condition that will be readily acceptable and compatible for agricultural use. Therefore, no impact would occur.

The Fresno County Agricultural Commissioners' Office reviewed the proposal and expressed no concerns with the project.

III. AIR QUALITY

A. Would the project conflict with or obstruct implementation of the applicable Air Quality Plan; or

B. Would the project violate any air quality standard or contribute to an existing or projected air quality violation?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Hewitson Mine Site Air Quality Impact Analysis and Greenhouse Gas Study was prepared for the project by Taylor Environmental Services and dated April 2017. According to the Study, emissions from the project are consistent with San Joaquin Valley Air Pollution Control District (SJVAPCD) air quality attainment and maintenance plans, based on the Guide for Assessing and Mitigating Air Quality (GAMAQI) criteria, by demonstrating emissions are below the significance thresholds except for NO_X for non-permitted emissions. NOx for non-permitted sources will be reduced below the significance threshold by 2023 as current on-road regulations are implemented. Additionally, the Study shows no emission increase between the existing mining operation and the future mining operations. In fact, emissions would decrease because of the improved emissions from on-road mobile equipment.

San Joaquin Valley Air Pollution Control District (Air District) reviewed the project and stated that all uses and operations are to remain as permitted under CUP No. 2461-R. As such, the subject proposal would not increase operational emission, and therefore will not have a significant impact on air quality. The Air District also stated that if facility operations change, the project proponent would be required to contact the Air District for an Authority to Construct (ATC) permit. Staff notes that any change in use of the property would require a new land use application.

Further, the proposed project will not conflict with or obstruct implementation of applicable air quality plans and will be required to comply with the following to help reduce air pollutant emissions: Regulation VIII (Fugitive PM10 Prohibitions); Rule 4102 (Nuisance); 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. These rules will be included as Project Notes.

C. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under a Federal or State ambient air quality standard?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Through the current air quality permits with the San Joaquin Valley Air Pollution Control District (Air District), the project demonstrated its ability to meet the Air District's current policies and plans for maintaining emissions such that it allows attainment of State and Federal ambient air quality standards. Additionally, future mining operations will also be required to meet these same standards.

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

FINDING: LESS THAN SIGNIFICANT IMPACT:

The *Hewitson Mine Site Air Quality Impact Analysis and Greenhouse Gas Study* prepared for the project contains a Health Risk Assessment (HRA) that evaluates potential exposure to nearby receptors to substantial pollutions concentrations.

The closest existing residence receptors are located approximately 1,600 feet to the northeast and 4,200 feet to the southeast from the active mine area on the property.

Given the San Joaquin Valley Air Pollution Control District (Air District) adopted thresholds of significance to identify the environmental impact of a project and the Air District adopted APR-1906 which established the threshold of significance for health risk assessments for CEQA purposes, the proposed project's impacts regarding exposure of receptors to pollutants concentrations are less than significant.

E. Would the project create objectionable odors affecting a substantial number of people?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The San Joaquin Valley Air Pollution Control District review of the proposal identified no concerns related to odor.

No change to the generation of odors will occur. The previously approved CUP No. 2461-R included an evaluation of potential odor impacts and distance to receptors and it was determined that the project improvements, equipment, and operation related to odor would be less than significant. Since the approval of CUP 2461-R in 1998, construction equipment and air quality emissions limits have become more stringent, thereby reducing potential odor impacts. The mine operations would continue to comply with all San Joaquin Valley Air Pollution Control District standards.

IV. BIOLOGICAL RESOURCES

A. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any candidate, sensitive, or special-status species?

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

The project was routed to the U.S Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife Service (CDFW) for review and comments. The information provided for agencies' review included the *Hewistson Mine CUP 2641-R Habitat Survey* prepared by ESR, Inc. and dated March 25, 2016 and an Environmental

Assessment (EA) prepared by Benchmark Resources and dated September 2016, which was updated in April of 2017.

USFWS reviewed the information and in a letter provided on Dec 20, 2016, stated that the site surveys conducted in February 2016 for the project lacked the following: 1) kit fox den surveys did not identify the 200-foot buffer radius criteria outlined in the 2011 *Standard Recommendations for protection of the Endangered San Joaquin kit fox prior to ground disturbance*; 2) blunt-nosed leopard lizard (BNLL) occurred outside of the April-September survey period recommended in the *Approved Survey Methodology for the Blunt-nosed Leopard lizard;* and 3) no rare plant surveys were conducted. USFWS also stated that trapping and relocating of kit foxes would be considered Take under the Endangered Species Act and would require a permit prior to implementation.

In response, the Applicant provided an updated project description, operational statement and Environmental Assessment (EA) for the agency's review. USFWS reviewed the information and in a letter dated May 17, 2017 stating that the concerns raised in the agency's December 20, 2016 letter still stand and have not been adequately addressed.

Biological information in the EA was further updated by the Applicant and the Applicant worked with USFWS staff to obtain their concurrence on the information provided. The updated information indicated that the Applicant's biologist (ESR, Inc.) has completed protocol level surveys required by the USFWS during the 2017 April-September surveying season for rare plant including the California Jewelflower, San Joaquin kit fox, and Blunt-nosed leopard lizard to minimize potential take of a listed species or adverse impacts to rare plant species as part of continued mine operations at the existing permitted mine site, and survey reports will be provided to USFWS. As discussed above, these letter report summarizing the results of the protocol level surveys was provided to USFWS and CDFW on August 28, 2017. The update also offered new mitigation measures to mitigate impact on San Joaquin kit fox and blunt-nosed leopard lizard and stated that with the mitigation measures, completion of protocol surveys and adherence to Conditions of Approval No. 17 & 18 from CUP No. 2461-R, Conditions of Approval No. 10, 14, 15 &16 and modification to Condition of Approval No. 9 from CUP No. 2126, the project impact on wildlife species and sensitive plants would be less than significant. The said mitigation measures are listed below.

* ***Mitigation Measures***

1. *Security fences installed on the perimeter of the project site shall be designed to enable passage of San Joaquin kit foxes and their prey, while impeding the passage of larger predators of kit foxes, such as coyotes and larger domestic dogs. All fencing shall leave a 4- to 8-inch opening between the fence mesh and the ground. The bottom of the fence fabric shall be knuckled (wrapped back to form a smooth edge) to protect wildlife that pass under the fence. Fences shall be monitored regularly to ensure that any damage or vandalism is quickly repaired.*

2. *Areas of the project site between the active quarrying locations shall be left fallow and managed (e.g., mowed, ~~disced~~ **disked**, weed-whacked) to allow annual grassland*

species and prey species to recolonize the project site and to maintain a wildlife corridor through the action area in a generally north south direction.

3. *The grassland areas within the project site not disturbed by ~~construction~~* ***mining*** *activities shall be left in their existing condition.*

4. ***To avoid impacts to wetlands and waterways, the following no-disturbance buffers shall be delineated before ground-disturbing activities begin:***

   (1) for areas with riparian vegetation, a minimum 25-foot no-disturbance buffer from the top of bank of Zapata Chino Creek, or from the outside edge of its surrounding riparian vegetation*;*

   (2) for areas with no riparian vegetation, a minimum 25-foot no-disturbance buffer around the top of bank of Zapata Chino Creek.

   To prevent mining-related erosion and deposition, soil stockpiles shall be protected to prevent erosion and placed where soil will not pass into waters of the state, in accordance with California Fish and Game Code Section 5650. To accomplish this, disturbed soils on the project site near the appropriate no-disturbance buffer described above shall be stabilized to reduce erosion potential, both during and following project activity. To stabilize stockpiles and prevent siltation of the stream, temporary erosion control devices such as straw bales, silt fencing, and sand bags, shall be used as appropriate. To minimize the risk of ensnaring and strangling wildlife, coir rolls, erosion control mats or blankets, straw or fiber wattles, or similar erosion control products shall comprise only natural fiber or biodegradable materials. "Photodegradable" or other plastic erosion control materials shall not be used. Per California Fish and Game Code Section 1600 et seq., the Operator shall notify CDFW before beginning any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake (including the removal of riparian vegetation); or (c) deposit debris, waste or other materials that could pass into any river, stream, or lake. "Any river, stream, or lake" includes those that are ephemeral or intermittent and those that are perennial. CDFW must comply with CEQA in the issuance of a Lake and Streambed Alteration Agreement. For additional information on notification requirements, contact Lake and Streambed Alteration Program staff at (559) 243-4593.

4. *~~Wetland areas (Zapato Chino Creek) outside the project site shall not be affected by construction activities and shall be left in their existing condition~~.*

5. *All employees, consultants, and contractors shall receive environmental training by a qualified biologist before ~~construction~~* ***mining*** *activities begin. The avoidance and minimization measures shall be outlined in the training. All personnel on the quarry site shall follow these measures to avoid or reduce effects on covered species. The training shall include a printed handout that*

shall be handed to all personnel. All employees and contractors shall be required to sign a register indicating that they attended the training and understand the material presented. The handout shall contain the following information:

a) *descriptions of the covered species (including photographs) and their habitat needs;*
b) *a current report of the occurrences of the covered species* ***at the project site*** ~~*in the Action Area*~~*;*
c) *an explanation of the protected status of each covered species under the federal and state endangered species acts and legal obligations;*
d) *avoidance and minimization measures followed to reduce impacts on the covered species during all project activities:* ~~*construction*~~ ***mining****, operation & maintenance, and site closure, and the penalties for not following the avoidance and mitigation measures; and*
e) *instructions on the procedures implemented if a covered species is found on site, including contact information of a biological monitor and U.S. Fish and Wildlife Service and California Department of Fish and Wildlife personnel.*

An electronic copy of the signed register shall be provided to the Public Works and Planning before mining activities begin within a new mining phase.

6. *At least 30 days before the onset of ground-disturbing activities,* ***within a new mine phase,*** *the name(s) and credentials of a supervisory project biologists responsible for approving and overseeing all project biological monitors and other site-trained monitors performing biological work shall be submitted to the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife for approval. If no response is given by agencies within the 30 days, it is implicit that the use of the supervisory project biologist is approved.*

7. *Biological monitor(s) approved by the supervisory project biologist shall be required on site as long as quarrying crews and vehicles are accessing and affecting the undisturbed areas of the site. Monitoring shall cease once development* ~~*construction*~~ ***mining*** *traffic and activity has ceased and the expanded quarrying area is operable.*

An electronic copy of a signed and dated log of visits to the site by the biological monitor shall be provided to the Public Works and Planning upon determination that mining traffic and activities have ceased and the new mining phase is operable.

8. *Biological monitors shall have the authority to order a halt to* ~~*construction*~~ ***mining*** *activities, and shall order halts to* ~~*construction*~~ ***mining*** *activities in the following instances: (1) the monitor observes activities that may result in mortality or harm to covered species; (2) the monitor observes any of the avoidance and minimization measures not being implemented; or (3) if at any time a covered species is in danger of experiencing mortality or harm. Work shall not resume until the situation has been rectified to the satisfaction of the supervisory project*

*biologist. If a biological monitor orders a halt to ~~construction~~ **mining** activities, he or she shall immediately contact the supervisory project biologist for further instructions.* ***Consultation with CDFW is advised if the potential for take exists (as defined by Fish and Game Code Section 86) of species listed pursuant to California Endangered Species Act or the Native Plant Protection Act (Fish and Game Code Section 1908).***

9. *All ~~construction~~ **mining**-related activities shall occur within designated work areas.*

10. *All ~~construction~~ **mining** activities shall terminate 30 minutes before sunset and shall not resume until 30 minutes after sunrise, except as described below. Sunrise and sunset times are established by the U.S. Naval Observatory Astronomical Applications Department for the geographic area where the project is located. Some discrete maintenance activities must occur when the facility is not actively mining. Those activities shall be conducted under the guidance of a qualified biologist. Some operation ~~&~~ **and** maintenance activities must occur when materials are not being produced, which may also occur at night. Those activities that must occur at night are to be authorized by the supervisory project biologist.*

11. *~~To prevent inadvertent entrapment of San Joaquin kit foxes or other animals during the construction phase of the project, all excavated, steep walled holes or trenches more than two feet deep shall be covered at the close of each working day by plywood or similar materials. Any covers that are installed shall be able to be removed quickly by construction staff should the need arise. If covers require heavy equipment to lift them, some means of inspecting the inside of the hole shall be installed (e.g., Plexiglas windows, screening) so that biological monitors can ensure no animals are trapped inside. Holes and trenches less than two feet deep may either be covered or be provided with escape ramps at a rate of one ramp every 100 feet. Escape ramps may be constructed of earth fill or wooden planks with a slope no steeper than 45 degrees. If wooden planks are used, perpendicular groves or rungs shall be provided to aid in traction. All holes and trenches, whether covered or uncovered, more than two feet deep shall be inspected before the start of the construction day, around midday, and at the end of each construction day as they are being covered for the night. These inspections shall occur whether or not work is occurring in that area. Before holes or trenches are filled, they shall be thoroughly inspected for trapped animals. Work shall not continue until trapped animals have moved out of or are removed from the open trench and relocated to a location approved by the lead regulatory agency~~.*

12. *Speed limits within the project site shall be limited to 15 miles per hour (mph) during the day and 10 mph at night. All project-related vehicles and equipment shall be restricted to established roads, ~~construction~~ **mining** areas, and designated staging areas.*

13. *Food-related trash shall be disposed of in closed containers and removed from the project site at least once daily.*

14. *No pets or firearms shall be permitted on the project site.*

15. *Within one working day of finding a dead, sick, or injured covered species on the project site, the biologist shall notify USFWS and CDFW orally and within three working days in writing. Notification in writing shall include the date, time, and location where the specimen was found and information about the conditions under which it was found.*

16. *A map of the location of all observations of covered species observed during preconstruction surveys and during monitoring shall be prepared and submitted to USFWS and CDFW before any ground-disturbing activities begin. This information shall also be submitted to the California Natural Diversity Database (CNDDB).*

17. *A reclamation plan shall be prepared for the project. Upon completion of the project, all areas temporarily subject to ground disturbance, including staging areas, shall be revegetated according to the project reclamation plan.*

The following avoidance and minimization measures would be implemented during construction, operation and management, reclamation, and closure to minimize potential incidental take of San Joaquin Kit Fox:

18. *The guidelines described in San Joaquin Kit Fox from U.S. Fish and Wildlife Service, Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance, prepared by the Sacramento Fish and Wildlife Office, January 2011 (2011 standardized recommendations), or the most recent version of these guidelines, shall be implemented. The ~~applicant~~* ***Operator*** *shall inquire with the USFWS yearly to obtain the most recent guidelines.*

19. *As described in the 2011 recommendations, the preconstruction survey shall be conducted no less than 14 days and no more than 30 days before the beginning of ground disturbance, or any activity likely to affect San Joaquin kit fox.* ***The results of the survey shall be submitted to USFWS, CDFW, and PWP before ground disturbance begins.*** *The biologists shall conduct den searches by systematically walking transects through the project site and a buffer area 200 hundred feet from the project boundary as required by USFWS. Transect distance shall be based on the height of vegetation such that 100 percent visual coverage of the project site is achieved. If a potential or known den is found during the survey, the biologist shall measure the size of the den and evaluate the shape of the den entrances, taking note of tracks, scat, prey remains, and recent excavations at the den site. Dens shall be classified into the den status categories defined by the 2011 standardized recommendations.*

20. *~~A report of the preconstruction survey shall be submitted to USFWS and CDFW.~~*

21. *~~If potential den sites are located they shall be monitored by a biologist approved by the USFWS or CDFW. The biologist shall use an infrared beam camera, track plates and/or powder, to determine if the den is currently being used. The camera and/or track plates shall be placed at the burrow for a minimum of five~~*

~~*consecutive days. Other signs of occupancy (e.g., scat, fur) shall be searched for in and around the burrow and, if found, documented with photographs.*~~

22. ***If San Joaquin kit fox are found within the project area either during preconstruction surveys or during mining activities, the Operator shall consult with CDFW to discuss how to implement the project and avoid take or if avoidance is not feasible, to acquire an Incidental Take Permit prior to any ground-disturbing activities***. ~~*San Joaquin kit fox are attracted to den-like structures such as stored pipes. All construction pipes, culverts, or similar structures with a 4-inch or greater diameter that are stored at the construction site for one or more overnight periods shall be closed off at both ends and thoroughly inspected before they are buried, capped, or otherwise used or moved in any way. If a kit fox is discovered in a pipe, that section of pipe shall not be moved until the kit fox is allowed to leave unimpeded or the USFWS or CDFW has provided alternative guidance.*~~ ***If San Joaquin kit fox are found occupying a typical (i.e., manmade structure) den sites, a 50-foot no-disturbance buffer shall be used around the occupied den structure, in accordance with the USFWS (2011) Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance****.*

23. *All materials staged on the project site, and especially in staging areas, shall be stored so as to not provide areas suitable for covered species to seek shelter. At no time shall materials be haphazardly piled on the project sites. All materials shall be inspected thoroughly by the biological monitor prior to being moved.*

~~24. *Construction activities shall be prohibited within exclusion zones around suitable burrows, based on their type. If any San Joaquin kit fox dens or potential dens are found during preconstruction surveys, the status of the dens shall be evaluated prior to project ground disturbance. The configuration of exclusion zones around San Joaquin kit fox dens should have the radius measured outward from the entrance or cluster of entrances, as follows:*~~

   ~~a. *Potential den: a 50-foot avoidance buffer shall be used when kit fox occupation is expected but not confirmed.*~~
   ~~b. *Known den: a 200-foot avoidance buffer shall be used if kit fox activity is observed.*~~
   ~~c. *Natal/pupping den: the USFWS and CDFW must be contacted.*~~

25. *Rodenticide and pesticide use is prohibited. Herbicide application shall be limited to areas where mowing, ~~discing~~* ***disking****, weed-whacking, etc. is not possible (e.g., around buildings and against poles and other infrastructure).*

The following measures shall be incorporated during construction, operation and maintenance, reclamation and closure of the mining facilities to avoid effects on Blunt-nosed leopard lizards.

26. *During the active season for Blunt-nosed leopard lizards (generally starting April 15, but any time of year with temperatures of 77 degrees Fahrenheit as*

*measured two centimeters above the ground), prior to any planned ground-disturbing ~~construction~~ **mining**, ~~O&M~~, reclamation, or closure activities, a biologist with experience in surveying for Blunt-nosed leopard lizard shall assess site conditions for supporting the species.*

27. ***To evaluate presence/absence of project work areas by Blunt-nosed leopard lizard, survey methods described in the Approved Survey Methodology for the Blunt-nosed Leopard Lizard (CDFG 2004) shall be implemented. Note that protocol-level surveys must be conducted on multiple dates during late spring, summer, and fall. Within these time periods, specific protocol-level date, temperature, and time parameters must be met. Blunt-nosed leopard lizard surveys must be completed no more than one year before ground or vegetation disturbance begins, if mining activities will affect potential habitat. If Blunt-nosed leopard lizard is detected during protocol-level surveys or mining activities, the Operator shall consult with CDFW to discuss how to implement the project and avoid take. Burrows shall be avoided by a minimum of 50-feet to avoid take and potentially significant impacts of burrow collapse. The results of the surveys shall be submitted to USFWS, CDFW, and PWP before ground disturbance begins and after completion of each subsequent survey.*** *~~If site conditions are determined to be suitable for Blunt-nosed leopard lizard at that time, then presence/absence surveys for the species shall be conducted within and adjacent to the proposed area of ground disturbance. A biologist shall search the work area for ground squirrel or gopher burrows and mark any burrows within the work area with visible pin flags. A buffer distance of at least 50 feet shall be maintained around burrows to avoid collapsing them. If burrows cannot be avoided and it is determined that the activities will destroy the burrows, the burrows shall be excavated by hand. If it is determined that the burrow is occupied by a Blunt-nosed leopard lizard, the lizard shall be allowed to leave the burrow and move to an area that will not be disturbed.~~*

28. *If a Blunt-nosed leopard lizard is encountered during these surveys, the location of the observation shall be marked and USFWS and CDFW shall be contacted. No ground-disturbing activities shall occur until the lizard has been allowed to passively disperse. ~~or is relocated with the approval of USFWS or CDFW to a location that has been pre-approved by the agency. A report of the preconstruction survey shall be submitted to USFWS and CDFW for their records.~~*

29. *~~No ground-disturbing maintenance activities shall occur in or adjacent to areas where Blunt-nosed leopard lizard has been detected until a USFWS or CDFW approved avoidance and monitoring plan is in place.~~*

30. *No monofilament plastic or soil strengthening agents, geo fabrics, or dust suppression products that would adversely affect these species shall be used for erosion control. Only natural fiber, biodegradable meshes shall be used in erosion control mats, blankets, and straw or fiber wattles, and these features shall be installed in such a way as to prevent entrapment of special status reptiles or amphibians while maintaining access to potential breeding habitat.*

31. ~~*No rodenticides or pesticides shall be used within the project site. Herbicide application shall be limited to areas where mowing or other control mechanism is not possible (e.g., around buildings and against poles and infrastructure).*~~

32. *Optimal activity temperatures for Blunt-nosed leopard lizards are between 77**F-and** 95F measured 1-2 **centimeters (**cm**)** above the ground over the surface of a project site (CDFW 2004). The period between April 1 and September 30 (i.e. October-March) would be preferentially used to control vegetative growth to coincide with the animals being underground and temperatures below 75F, measured 1 cm above the ground in the sun.*

~~33. *Prior to closure activities, an approved biologist experienced in surveying for Blunt-nosed leopard lizard shall assess site conditions for supporting the species.*~~

   ~~a) *Presence/absence surveys for the species shall be conducted in those areas where ground-disturbing activities will occur. Surveys shall be conducted according to the most recent agency approved survey protocol. The surveying biologist shall notify USFWS and CDFW if Blunt-nosed leopard lizard is detected within the project site.*~~

   ~~b) *If a Blunt-nosed leopard lizard is encountered during these surveys, USFWS and CDFW shall be contacted. No ground disturbing activities shall occur until the lizard has been allowed to passively disperse or is relocated with the approval of USFWS or CDFW to a location that has been preapproved by USFWS or CDFW. A report of the site closure survey shall be submitted to USFWS and CDFW for their records.*~~

   ~~c) *If burrows within 50 feet of where a Blunt-nosed leopard lizard was observed cannot be avoided and it is determined that the closure activities will destroy the burrows, those burrows shall be hand dug. If it is determined that the burrow is occupied by a Blunt-nosed leopard lizard, the lizard shall be allowed to leave the burrow and move to an area that will not be disturbed, or the lizards will be captured and relocated to a location that has been preapproved by USFWS or CDFW.*~~

34. ***Before project implementation, a qualified botanist shall survey the project site for special-status plants by following the Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFG 2009). The results of this survey shall be submitted to USFWS, CDFW, and PWP before ground disturbance begins. This protocol, which is intended to maximize detectability, includes identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period. If protocol-level surveys are not performed, additional surveys may be necessary. Special-status plant species shall be avoided whenever possible by delineation and observation of a no-disturbance buffer·of at least 50 feet from the outer edge of the plant population(s) or specific habitat type(s) required by special-status plant species. If buffers cannot be maintained, then the Operator shall consult with CDFW to determine appropriate***

minimization and mitigation measures for impacts to special-status plant species. If a state-listed or federally listed plant species is identified during botanical surveys, the Operator shall consult with CDFW and/or USFWS to determine permitting needs*.*

35. ***To evaluate presence/absence of San Joaquin antelope squirrel in the project area, a qualified wildlife biologist shall visit the site before project implementation to determine whether suitable habitat for San Joaquin antelope squirrel is present within or adjacent to the project area. If habitat is present, the qualified biologist shall conduct daytime visual surveys using line transects with 10- to 30-meter spacing when temperatures are between 68–86° F. If suitable habitat is present and surveys or trapping are not feasible, CDFW advises maintenance of a 50-foot minimum no-disturbance buffer around all small mammal burrows of suitable size for San Joaquin antelope squirrel. If full avoidance is not feasible and project implementation could result in take, the Operator shall acquire an Incidental Take Permit, pursuant to California Fish and Game Code Section 2081(b), before initiating ground-disturbing activities. The results of this survey shall be submitted to USFWS, CDFW, and PWP before ground disturbance begins.***

36. ***Presence/absence of burrowing owl shall be assessed before project implementation by conducting surveys following the California Burrowing Owl Consortium's Burrowing Owl Survey Protocol and Mitigation Guidelines (CBOC 1993). The Staff Report on Burrowing Owl Mitigation (Staff Report) (CDFG 2012) shall be followed before and during ground-disturbing activities associated with project implementation. CDFW's Staff Report recommends avoiding impacts to occupied burrows in accordance with the information in the following table unless a CDFW-approved qualified biologist verifies through noninvasive methods that either (1) the birds have not begun egg laying and incubation or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival****.***

Distance of Buffer for Avoidance of Burrows

	Level of Disturbance		
Time of Year	Low	Medium	High
April 1–August 15	200 m	500 m	500 m
August 15–October 15	200 m	200 m	500 m
October 16–March 31	50 m	100 m	500 m
Note: m = meters.			

If burrowing owl is found to occupy a project site and avoidance is not possible, according to the Staff Report, exclusion in and of itself is not a take avoidance, minimization, or mitigation method. However, if necessary, burrow exclusion may be conducted by qualified biologists during the nonbreeding season only, before breeding behavior is exhibited and after the burrow is confirmed empty through noninvasive methods, such as

surveillance. Occupied burrows shall be replaced with artificial burrows at a ratio of one burrow collapsed to one artificial burrow constructed (1:1) to mitigate eviction of burrowing owl. In addition, burrow closure shall be employed only where adjacent natural burrows exist and sufficient habitat that is unaffected by the project exists for burrowing owl to occupy with permanent protection mechanisms in place. In addition, burrowing owl may attempt to colonize or recolonize an area that the project will disturb; thus, ongoing surveillance of the project site during project activities shall occur at a rate sufficient to detect burrowing owl if they return.

37. ***Qualified biologists shall conduct focused surveys for special-status species before project implementation to determine whether impacts to these species could occur. Avoidance of all state species of special concern whenever possible is encouraged via delineation and observation of appropriate no-disturbance buffers for each species. The results of this survey shall be submitted to USFWS, CDFW, and PWP before ground disturbance begins.***

The California Department of Fish and Wildlife (CDFW) also reviewed the proposal and declined to provide any comments on the project by stating that comments on San Joaquin kit fox and Blunt-nosed leopard lizard will be provided at the time environmental document is circulated to public agencies for review. **Upon reviewing the environmental document (Initial Study), comments provided by the CDFW included revision to several Mitigation Measures. Those revisions/additions are noted above as <u>underline</u> items.**

As noted above the USFWS required a protocol survey for San Joaquin kit fox, blunt-nosed leopard lizard, and rare plants. Protocol surveys were conducted by ESR, Inc. between May 1, 2017 - August 11, 2017 and a copy of survey report was provided to the USFWS and CDFW. No special status species were found during the surveys. According to the report, the Phase 9 & 10 Action Area locations and relevant 200-foot buffer areas were deemed by the surveying biologist not to be currently utilized or have enough suitable characteristics for any of the species of interest. No indications of site use by the Blunt-nosed leopard lizard, San Joaquin kit fox, or the California Jewelflower (rare plant) were identified at the Phase 9 or Phase 10 Action Area locations or within the 200-foot buffer surrounding Phases 9 and Phase 10. The survey report concludes that no “take” of the species of concern (i.e. Blunt-nosed leopard lizard, San Joaquin kit fox, or California Jewelflower) would likely occur during the advancement of the mining operations into Phases 9 & 10 Action Area.

B. Would the project 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 (CDFW) or U.S. Fish and Wildlife Service (USFWS)?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Per the site survey conducted as part of *Hewitson Mine CUP No. 2461-R Habitat Survey* in February 2016 and updated in August 2017, no sensitive biological

communities were found to be located within or adjacent to the project site. Therefore, this impact is less than significant.

C. Would the project have a substantial adverse effect on federally-protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption or other means?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The property survey has identified no areas that may potentially qualify as wetlands. Zapato Creek that traverses through the site is an ephemeral drainage that may qualify as waters of the United States. A Condition of Approval approved for CUP No. 2461-R requires that a 25-foot setback from the top of bank shall be maintained to avoid impacts to the streambed. This condition will remain in full force and applicable to this proposal.

The Army Corps of Engineers (ACOE) reviewed the proposal and stated that a Corp Section 404 permit would not be required if a 25-foot setback from the top of the Chino Zapato Creek is made to avoid the impact on the Creek. The ACOE stated that an aquatic resources delineation could be conducted on the site to have the corps confirm if the Creek is the only water of United States on the site, if so desired by the Applicant.

D. Would the project 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:

The survey of the project site indicates that the project will not 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 a native wildlife nursery site. The Habitat survey conducted for the site has not identified that the site provides a migratory corridor. Therefore, this impact is less than significant.

E. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

FINDING: NO IMPACT:

No applicable local policies or ordinances that protect biological resources, such as tree preservation or policy ordinances, would apply to the biological resources that exist or have the potential to use the project site. Therefore, no impact would occur.

F. Would the project 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:

No habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan applies to the project. Therefore, no impact would occur.

V. CULTURAL RESOURCES

A. Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5; or

B. Would the project cause of substantial adverse change in the significance of an archeological resource pursuant to Section 15064.5; or

C. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or

D. Would the project disturb any human remains, including those interred outside of formal cemeteries?

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

The subject property is located in an area of moderate archeological sensitivity. The project was referred to the California Historical Resources Information system for record search, and information was provided to the Applicant's archeologist, Applied EarthWorks, Inc. According to the Applied EarthWorks, Inc. letter dated December 15, 2015, the record search has identified four previous studies within the project area and two additional studies within a 0.5-mile radius. One study recorded one archeological resource within the project area. Described as two portable sandstone morters located 1.4 miles northwest of the Starkey and Erwin Ranch, these sites were also recorded by Donald G. Wren who conducted an archeological survey of the site for CUP 2461-R in December 1990. That survey concluded that two mortars were assumed to be isolated artifacts and displaced from their original context and therefore required no mitigation measures provided no additional archeological deposits were uncovered during future mining activity. According to Applied EarthWorks, Inc., the site conditions have not appreciably changed and no additional archeological material has been discovered. However, in accordance with the suggestion made in the Wren Report, if archeological resources are uncovered, all work must be stopped until a qualified archeologist evaluates the findings, Applied EarthWorks, Inc. requires that if human remains are discovered, the Fresno County Sheriffs Coroner shall be notified. However, if the remains are of Native Americans, the Sheriff Corner shall also notify to the Native American Commission (NAHC) within 24 hours of discovery in accordance with California Health and Safety Code 7050.5 and Public Resource Code 5097.98. The following mitigation measure encompasses these requirements, and with adherence to it, impact on cultural and paleontological resources will be reduced to less than significant.

***** ***Mitigation Measure***

1. *In the event that cultural resources are unearthed during ground-disturbing activities, all work shall be halted in the area of the find. An archeologist should 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 should 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.*

E. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074?

FINDING: LESS THAN SIGNIFICANT IMPACT:

With adherence to the above-noted mitigation measure, the project will have less than significant impact on tribal cultural resources as defined in Public Resources Code Section 21074. The project was routed to the Santa Rosa and Dumna Wo Wah Tribal Governments.

VI. GEOLOGY AND SOILS

A. Would the project expose people or structures to potential substantial adverse effects, including risk of loss, injury or death involving:

1. Rupture of a known earthquake; or

2. Strong seismic ground shaking; or

3. Seismic-related ground failure, including liquefaction?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project site is not located within a fault zone.

4. Landslides?

FINDING: NO IMPACT:

The project site contains naturally flat relief which precludes the possibility of landslides on site.

B. Would the project result in substantial erosion or loss of topsoil?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project will not result in the loss of topsoil. According to the Reclamation Plan prepared for the project by Benchmark Resources and dated September 2016: 1) Prior to excavation, topsoil materials will be harvested and placed toward the perimeter of the mining footprint in any given excavated area; 2) Erosion control is not necessary due to the site's arid location, but where erosion loss is evident, topsoil will be seeded or straw mulched; 3) Topsoil stockpiles will be protected from inadvertent destruction or use by flagged staking or other identification and/or will be of sufficient distance from areas under active mining or surface disturbance; and 4) Stockpiles will not be compacted stripped or replaced during the rainy season or when soil is saturated.

In addition, the project will comply with a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the California National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Industrial Activities, administered through the Central Valley Regional Water Quality Control Board (RWQCB) and State Water Resources Control Board. The SWPPP contains best management practices (BMPs) to reduce or prevent pollutants associated with industrial activities in storm water discharges and authorized non-storm water discharges. The SWPPP contains measures to redirect storm water runoff away from areas where sedimentation and topsoil loss could occur and required actions to revegetate disturbed areas. The SWPPP is required to be implemented and updated over time and includes monitoring and reporting provisions to ensure its efficacy. The SWPPP would be updated to include areas subject to this proposal and would, therefore, provide BMPs for controlling erosion and topsoil loss from those areas. With implementation of reclamation plan actions and compliance with the required SWPPP, project impacts associated with erosion would be less than significant.

C. Would the project result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project does not include permanent buildings or structures except for portable aggregate equipment and associated administration offices needed for the current mining operation. All additional facilities would be related to future mining operations. Appropriate measures to reduce the effects of earthquakes are identified in the Uniform Building Code (UBC), including specific provisions for seismic design of structures. Design of structures in accordance with the UBC and current professional engineering practices would reduce the effects of seismic ground shaking to less than significant.

D. Would the project be located on expansive soils, creating substantial risks to life or property?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Expansive soils increase in volume when wet and shrink when dry. 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. No expansive soils exist on the project site; therefore, impacts from expansive soils are expected to be less than significant.

E. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative disposal systems where sewers are not available for wastewater disposal?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project does not include the construction of new or modified septic or other wastewater disposal facilities. No concerns related to wastewater disposal were expressed by the Fresno County Health Department, Environmental Health Division.

VII. GREENHOUSE GAS EMISSIONS

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

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

FINDING: LESS THAN SIGNIFICANT IMPACT:

The proposed project would extend the life of existing mining operations at the site. Mining and reclamation activities under the proposed project would use the same types of equipment at the same level of use as the equipment currently used for the approved mining operations under CUP No. 2461-R. Accordingly, the proposed project would not result in any changes in the level of Greenhouse Gas Emissions (GHG) emissions from the site.

According to the *Hewitson Mine Site Air Quality Impact Analysis and Greenhouse Gas Study* prepared for the project by Taylor Environmental Services Inc. and dated April 3, 2017, the project is compliant with the San Joaquin Valley Air Pollution Control District greenhouse gas (GHG) reduction plans, and toxic air contaminant emissions from facility operations do not create a potential impact on public health. Therefore, the proposed project would have a less-than-significant impact resulting from GHG emissions.

The San Joaquin Valley Air Pollution Control District (Air District) reviewed the proposal and expressed no concerns related to the GHS. The project will adhere to Air District rules discussed in Section III A. B. C. D. (Air Quality) of this report.

VIII. HAZARDS AND HAZARDOUS MATERIALS

A. Would the project create a significant public hazard through routine transport, use or disposal of hazardous materials; or

B. Would the project create a significant public hazard involving accidental release of hazardous materials into the environment; or

C. Would the project create hazardous emissions or utilize hazardous materials, substances or waste within one quarter-mile of a school?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, nor would it 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. The project does not involve the transportation or use of a large volume of hazardous materials. As currently operated, petroleum-based fuels and oils are used at the mine site for fueling and maintenance of trucks and heavy equipment. Mobile-service trucks conduct on-site maintenance operations, with major repair and equipment rebuilds occurring offsite. Petroleum products are disposed of offsite in a state-licensed facility. The project would not change the manner in which these products are used, transported, and disposed of as compared baseline conditions.

The Fresno County Department of Public Health, Environmental Health Division reviewed the proposal and requires that: 1) 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.; 2) Any business that handles a hazardous material or hazardous waste may be required to submit a Hazardous Materials Business Plan pursuant to the HSC, Division 20, Chapter 6.95; and 3) All hazardous waste shall be handled in accordance with requirements set forth in the California Code of Regulations (CCR), Title 22, Division 4.5. These requirements will be included as Project Notes.

No school is located within one-quarter mile of the project area.

D. Would the project be located on a hazardous materials site?

FINDING: NO IMPACT:

The mineral extraction site is not a hazardous materials site pursuant to Government Code Section 65962.5.

E. Would a project located within an airport land use plan or, absent such a plan, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area; or

F. Would a project located within the vicinity of a private airstrip result in a safety hazard for people residing or working in the project area?

FINDING: NO IMPACT:

The project site is not within an airport land use plan, two miles of a public use airport, or in the vicinity of a private airstrip. The nearest airport, Avenal Airport in the City of Avenal, is approximately 5.6 miles southeast of the site.

G. Would the project impair implementation of or physically interfere with an adopted Emergency Response Plan or Emergency Evacuation Plan?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The proposed project is located in a remote, unpopulated area. Accordingly, it would not interfere with an emergency plan or emergency evacuation plan. The impact would be less than significant.

H. Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project site is outside of any wildland fire area. The native vegetation of the area is not of the density that typically supports wildfire. Further, the project would not add vegetation that would support wildfires. As such, the project will not expose persons or structures to wildfire.

IX. HYDROLOGY AND WATER QUALITY

A. Would the project violate any water quality standards or waste discharge requirements or otherwise degrade water quality?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Mining and reclamation activities under the proposed project would be similar to those activities currently ongoing at the mine site and previously analyzed for the existing project. All wastewater is treated onsite in accordance with California Code of Regulations (CCR) Title 27 and water discharge requirements (WDRs) as approved by the Central Valley Regional Water Quality Control Board. Further, facilities will be constructed in accordance with the existing California National Pollutant Discharge Elimination System General Permit for Storm Water. The project site maintains a SWPPP and a spill prevention, control, and countermeasures plan (SPCCP) that controls on-site handling of potentially hazardous materials. In addition to these requirements, adherence to hydrology and water quality Condition No. 14 from CUP2461-R and modified Condition No. 9 from CUP No. 2126 would further mitigate potential hydrology and water quality impacts to a less-than-significant level. Consequently, the proposed project would not violate any water quality standards or WDRs.

B. Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge so that there would be a net deficit in aquifer volume or a lowering of the local groundwater table?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The subject property is within a low-water area of Fresno County. All water is supplied from on-site wells conveyed from the northeasterly portion of the site to the southwesterly potion of the site via a pipeline extending under State Route (SR) 33.

According to the Applicant's Operational Statement, no change in the estimated volume of water to be used or its source is proposed, including production of aggregate, washing truck tires, and operating the asphalt ready mix plant. In addition to well water, recycled processing water and water pumped from excavated mine cells are used to reduce water demand. The total annual net consumptive water use for these activities will remain the same as exists under current operations. Therefore, the proposed project would not deplete groundwater supplies or interfere with groundwater recharge. The impact would be less than significant.

The Water-Geology-Natural Resources Section of the Fresno County Department of Public Works and Planning reviewed the project and did not identify any impact on groundwater resources.

C. Would the project substantially alter existing drainage patterns, including alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on or off site?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on or offsite. Although the drainage pattern of the site would vary under the project as compared to the approved reclamation plan, these changes would result in lower runoff volumes, increased retention of storm water onsite, and increased groundwater recharge. New excavation would be subject to the current Storm Water Pollution Prevention Program (SWPPP) and water discharge requirements (WDRs), which contain best management practices (BMPs) that are protective to water quality. Therefore, the project would reduce the potential for erosion and siltation compared to the approved plan. Compliance with the site-specific SWPPP and WDRs, and implementation of BMPs would ensure that potential water quality impacts associated with erosion and sedimentation is minimized and less than significant.

D. Would the project substantially alter existing drainage patterns, including alteration of the course of a stream or river, in a manner which would result in flooding on or off site?

FINDING: LESS THAN SIGNIFICANT IMPACT:

For the reasons described above in IX. C., the project would not substantially alter the existing drainage patterns of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite. Impact would be further reduced due to the Conditions of Approval noted above in IX.A.

E. Would the project create or contribute run-off which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted run-off?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project would not create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. Adherence to Conditions of Approval as noted in IX. A. C., would further reduce impact.

The Development Engineering section of the Fresno County Department of Public Works and Planning reviewed the project and requires that any additional runoff generated by the subject proposal (mining operation) shall be retained on-site. This requirement will be included as a Project Note.

F. Would the project otherwise substantially degrade water quality?

FINDING: LESS THAN SIGNIFICANT IMPACT:

See discussion above in IX. B.

G. Would the project place housing within a 100-year floodplain?

FINDING: NO IMPACT:

The proposed project does not include any housing. Therefore, no housing would be located within a 100-year flood hazard area.

H. Would the project place structures within a 100-year flood hazard area that would impede or redirect flood flows?

FINDING: NO IMPACT:

According to the FEMA Panel 3425H, a portion of the subject property is subject to flooding from the one-percent (1%) chance rain. The Development Engineering Section of the Fresno County Department of Public Works and Planning review of the subject proposal requires that 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. This will be included as a Project Note.

The proposed project does not include structures located within a 100-year flood hazard area.

I. Would the project expose persons or structures to levee or dam failure; or

FINDING: LESS THAN SIGNIFICANT IMPACT:

The proposed project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam. No habitable structures are located on or adjacent to the site that would be subject to flooding.

J. Would the project cause inundation by seiche, tsunami or mudflow?

FINDING: NO IMPACT:

The proposed project would not be inundated by seiche, tsunami, or mudflow because the site does not contain nor is it close to water features that could create seiche, tsunami, or mudflow conditions. No impact would occur.

X. LAND USE AND PLANNING

A. Will the project physically divide an established community?

FINDING: NO IMPACT:

The proposed project is located in a remote, unpopulated area with no communities. Therefore, the proposed project would not physically divide an established community and no impact would occur.

B. Will the project conflict with any Land Use Plan, policy or regulation of an agency with jurisdiction over the project?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project site is designated as Agriculture within the Coalinga Regional Plan and outside of the Sphere of Influence (SOI) of any incorporated community. As such, the project will not conflict with any land use plan, policy, or regulation of an agency (other than County) with jurisdiction over the project.

Provisions for mineral extraction operations such as the proposed use have been provided for in the Fresno County General Plan. Policy OS-C.3 of the General Plan requires that the operation and reclamation of surface mines be consistent with the State Surface Mining and Reclamation Act (SMARA) and applicable Zoning Ordinance provisions. Policy OS-C.4 of the General Plan requires the County to impose conditions to minimize or eliminate potential adverse impacts of mining operations upon surrounding properties. Policy OS-C.5 of the General Plan requires reclamation of all surface mines in a manner consistent with SMARA.

Benchmark Resources prepared a Reclamation Plan for the project dated September 2016. The State Division of Mine Reclamation (DMR) reviewed the Plan and required that specific items related to geology and geotechnical, top soil and revegetation, including administrative requirements and post-approval procedures shall be addressed or be included in the Plan. The Applicant is working on additional information required by the DMR. The project will conform to the approved Reclamation Plan.

With adherence to the Plan requirements and mitigation measures and conditions of approval included in this report, impact on the surrounding properties would be less than significant.

C. Will the project conflict with any applicable Habitat Conservation Plan or Natural Community Conservation Plan?

FINDING: NO IMPACT:

No habitat conservation plans or natural community conservation plans apply to the mine site. No impact would occur.

XI. MINERAL RESOURCES

A. Would the project result in the loss of availability of a known mineral resource?

FINDING: NO IMPACT:

No geothermal or other leaseable mineral resources occur at or near the project site. The project would result in excavation of aggregate resources that would no longer be available. However, the economic and societal value and benefits derived from the mining, processing, and selling of the aggregate resources would outweigh the loss of these resources. Accordingly, the proposed project would result in no impact related to the loss of availability of a known mineral resource of value to the region and residents of the state. In fact, the development of the balance of the mine site would more fully utilize existing mineral resources that would not otherwise be developed as part of the existing mine.

B. Would the project result in the loss of availability of a locally-important mineral resource recovery site designated on a General Plan?

FINDING: NO IMPACT:

As noted above, the proposed project would result in a beneficial impact or no adverse impact related to the loss of availability of a locally-important mineral resource recovery site delineated on the County General Plan, specific plan, or other land use plan. Approval of the proposed project would facilitate the development of the balance of the mine site and would more fully utilize existing mineral resources that would not be developed as part of the existing mine. This would allow the mine to continue to be an important contribution to the County's overall economy. Thus, the project would result in recovery of additional aggregate resources that would no longer be available if mining ceased at the site. However, the value and benefits derived from the mining, processing, and selling of the aggregate resources would outweigh the loss of these resources.

XII. NOISE

A. Would the project result in exposure of people to severe noise levels?

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

The proposed project would operate during the same days and hours as the existing operation (7:00 a.m. to 5:00 p.m. Monday through Friday and on weekends only as needed).

As noted previously, the project proposes no changes in plant equipment or production levels. As a result, the noise generation of the existing aggregate processing equipment, asphalt plant, and off-site heavy truck traffic noise levels would all remain at existing levels. However, changes in off-site noise levels will occur during future operations due to the shifting of aggregate excavation operations into new phases upon completion of the current phase (Phase 5) of the project. Future excavation operations would extend north into Phases 7 and 8 before moving south into Phases 9 through16.

Bollard Acoustical Consultants, Inc., conducted a noise study for the project dated March 30, 2016. According to the study, the nearest noise-sensitive receptors residences are located approximately 1,600 feet northeast and 300 feet southeast of the project's property line along State Route (SR) 33. The Study finds that noise levels resulting from the existing mining operations comply with Fresno County General Plan Noise Element and Noise Ordinance standards at the two nearest residences to the site. Therefore, noise impacts associated with the current mining operations are considered less than significant. However, future mining activities at Phase13 of the project will have noise impact on the southeasterly residence. The noise study recommended the following mitigation measures to be incorporated into the project and been accepted by the Fresno County Department of Public Health, Environmental Health Division. With adherence to these mitigation measures, the noise impact would be less than significant.

* ***Mitigation Measures***

1. *As required by Noise Study by Bollard Acoustical Consultants, Inc., March 30, 2016, before daytime excavation operations begin within 1,000 feet of a single-family residence located 300 feet southeast of the property, a 10-foot-tall earthen berm shall be constructed adjacent to the State Route (SR) 33 right-of-way and near the southeast corner of the property.*

2. *Excavation activities within 1,000 feet of the single-family residence located 300 feet southeast of the property shall be limited to daytime hours until the excavation equipment has recessed at least 10 feet below existing ground elevation.*

B. Would the project result in exposure of people to or generate excessive ground-borne vibration or ground-borne noise levels; or

C. Would the project cause a substantial permanent increase in ambient noise levels in the project vicinity?

D. Would the project result in a substantial temporary or periodic increase in ambient noise levels?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The proposed project would extend existing mining operations to the balance of the property. However, the project does not involve new activities that would expose persons to excessive groundborne vibration or groundborne noise levels above existing conditions, or result in a substantial temporary, periodic, or permanent increase in ambient noise levels in the project vicinity above levels existing without the project. These impacts would further reduced with the mitigation measures included in XII. A.

E. Would the project expose people to excessive noise levels associated with a location near an airport or a private airstrip?

FINDING: NO IMPACT:

The project site is not located within an airport land use plan or within two-miles of a public airport.

F. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

FINDING: NO IMPACT:

The project site is not located near an airport. The project does not expose people residing or working in the project area to excessive noise levels. The nearest airport, Avenal Airport in City of Avenal is approximately 5.6 miles to the southeast and New Coalinga Airport, east of the City of Coalinga, is approximately 6.2 miles northwest of the site.

XIII. POPULATION AND HOUSING

A. Would the project induce substantial population growth either directly or indirectly?

FINDING: NO IMPACT:

Mining is unrelated to population growth. The project would not induce population growth, displace housing, or displace a substantial numbers of people, necessitating the construction of replacement housing elsewhere.

B. Would the project displace substantial numbers of existing housing; or

C. Would the project displace substantial numbers of people, necessitating the construction of housing elsewhere?

FINDING: NO IMPACT:

The project site contains no residential dwelling and none proposed by this application. Accordingly, the proposed project would not displace housing or a substantial number of people necessitating the construction of replacement housing elsewhere.

XIV. PUBLIC SERVICES

A. Would the project result in substantial adverse physical impacts associated with the provision of new or physically-altered public facilities in the following areas:

1. Fire protection?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The Fresno County Fire Protection District reviewed the proposal and expressed no concerns with the project except that future development shall require the property to annex to Community Facilities District No. 20010-01 of the District and be subject to current Fire code and Building Code prior to issuance of building permit or certificate of occupancy. This will be included as a Project Note.

2. Police protection; or

3. Schools; or

4. Parks; or

5. Other public facilities?

FINDING: NO IMPACT:

The project will have no impact on police, park, school or other services.

XV. RECREATION

A. Would the project increase the use of existing neighborhood and regional parks; or

B. Would the project require the construction of or expansion of recreational facilities?
FINDING: NO IMPACT:

The proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities. No impact on such facilities would occur.

XVI. TRANSPORTATION/TRAFFIC

A. Would the project conflict with any applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation; or

B. Would the project conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demands measures?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. Likewise, the project would not conflict with an applicable congestion management program, for designated roads or highways.

As compared to the baseline conditions with the existing operation, the project would not change the number of peak-hour, daily, or annual vehicle trips and would not affect vehicle trip distribution or travel patterns associated with the operation.

JLB Traffic Engineering performed an assessment of the site traffic on March 29, 2016 and developed the proposed project trip generation in consultation with the current site operator, Design Division of the Fresno County Department of Public Works and Planning and the California Department of Transportation (Caltrans).

The trip generation estimates provided by the current site operator and those observed by JLB traffic Engineering at the project site were found to be generally consistent with the estimated trip generation totals provided for and evaluated as part of the current Conditional Use Permit No. 2461-R.
The California Department of Transportation (Caltrans) reviewed the project and stated that the mitigation measure No. 9. a. b. approved for CUP 2461-R shall remain in full force and applicable to the subject proposal. This mitigation measure requires the Applicant to monitor traffic on State Route (SR) 33 and install turn lanes when warranted. With continued adherence to this mitigation measure, traffic impact would be less than significant.

This Design Division of the Fresno County Department of Public Works and Planning also reviewed the proposal and expressed no concerns related to traffic.

C. Would the project result in a change in air traffic patterns?

FINDING: NO IMPACT:

The project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. As noted above, the nearest airport, Avenal Airport in City of Avenal is approximately 5.6 miles to the southeast and New Coalinga Airport is approximately 6.2 miles northwest of the project site. Because of the significant distance between the site and airport, the project would not affect air traffic patterns.

D. Would the project substantially increase traffic hazards due to design features?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project would not substantially increase hazards caused by a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). No change to roads and site access would occur. The site gains access off State Route (SR) 33 through an existing ingress and egress point approved by prior land use applications. According to the Applicant's Operational Statement, site visits and observation of the facility in operation by the Applicant's Engineer JLB traffic

Engineering on March 29, 2016 has revealed that adequate sight distance exists, consistent with applicable standards. The project would not create road hazards and no impact associated with increased road hazards or incompatible uses would occur.

Road Maintenance and Operations Division of the Fresno County Department of Public Works and Planning, reviewed the proposal, concurred with the mitigation measure noted above in XVI. A.B., and expressed no concerns with the project.

The Development Engineering section of the Fresno County Department of Public Works and Planning also reviewed the proposal and requires that any work done within the right-of-ways to construct a new driveway or improve an existing driveway off State Route 33 (Lost Hill Road) shall require an encroachment permit from the California Department of transportation (Caltrans). This will be included as a Project Note.

E. Would the project result in inadequate emergency access?

FINDING: NO IMPACT:

The project would not result in inadequate emergency access. The project would not result in on-site or off-site activities that would impair emergency vehicle movement or personnel. The existing site access off State Route (SR) 33 is of sufficient design and construction to accommodate emergency services response to the site and the project would not change the existing site access.

F. Would the project conflict with adopted plans, policies or programs regarding public transit, bicycle or pedestrian facilities or otherwise decrease the performance or safety of such facilities?

FINDING: NO IMPACT:

The project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. This property is located in a rural area that does not have any provisions for alternative transportation. The project would not increase traffic volumes or otherwise affect the use of area roads that may be used by public transit, bicyclists, and pedestrians.

XVII. UTILITIES AND SERVICE SYSTEMS

A. Would the project exceed wastewater treatment requirements?

FINDING: LESS THAN SIGNIFICANT IMPACT:

See discussion in Section VI.E Geology and Soils.

B. Would the project require construction of or the expansion of new water or wastewater treatment facilities?

FINDING: NO IMPACT:

The proposed project would not require the construction of new or expanded water or wastewater treatment facilities.

C. Would the project require or result in the construction or expansion of new storm water drainage facilities?

FINDING: LESS THAN SIGNIFICANT IMPACT:

See discussion in Section IX.E., Hydrology and Water Quality. The proposed project would not require the construction of new or changes to existing stormwater drainage facilities and would comply with Mitigation Measures, Conditions of Approval, and the site Reclamation Plan approved for the project.

D. Would the project have sufficient water supplies available from existing entitlements and resources, or are new or expanded entitlements needed?

FINDING: LESS THAN SIGNIFICANT IMPACT:

See discussion in Section IX. B., Hydrology and Water Quality. .

E. Would the project result in a determination of inadequate wastewater treatment capacity to serve project demand?

FINDING: NO IMPACT:

The project site is not serviced by a wastewater treatment provider and it is not required. All wastewater is treated onsite in accordance with California Code of Regulations (CCR) Title 27 and with waste discharge requirements (WDRs) and County standards. The proposed project would not modify the treatment of wastewater at the mine.

F. Would the project be served by a landfill with sufficient permitted capacity?

FINDING: NO IMPACT:

No change in the production of solid or liquid waste is proposed by this application. Decomposed rock unsuitable as construction aggregate and fines from washing aggregate will be used as a backfill material in site reclamation. Solid wastes resulting from normal office and packaging refuse will continue to be collected onsite and transported to an approved land fill site by the County-designated waste collection hauler. Adequate landfill capacity exists at local landfill site to accommodate solid waste generated by the project.

G. Would the project comply with federal, state and local statutes and regulations related to solid waste?

FINDING: NO IMPACT:

The project would not affect or alter the existing need for solid waste disposal. The project would comply with local, state, and federal statutes and regulations related to solid waste.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

A. Does the project have the potential to 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, 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 prehistory or history?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Impacts to quality of the environment would be similar to the approved project, but would be minimal because the proposed project would only increase mining activities to the balance of the already permitted mine site. The project would not degrade the quality of the environment, substantially reduce habitats or species, or eliminate important examples of the major cultural periods of the state. Impacts to biological and cultural resources as identified in Section IV, Biological Resources and Section V, Cultural Resources will be mitigated to a less than significant level.

B. Does the project have impacts that are individually limited, but cumulatively considerable?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project is to allow continued aggregate mining at the project site. The project will comply with applicable County policies and ordinances, mitigation measures, conditions of approval, operational statement, ministerial permits and approvals, regulatory permits and plans, and reclamation plan. Compliance with these environmental protection measures would ensure that the project's environmental impacts are reduced to a less-than-significant level for each resource issue evaluated in this document. In addition, based on the findings above, there would be no cumulatively considerable impacts as a result of the project. Accordingly, the potential increase in impacts associated with the proposed project is minimal and the cumulative impacts would be less than significant.

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

FINDING: LESS THAN SIGNIFICANT IMPACT:

No substantial adverse impacts on human beings were identified in the project analysis.

Based on continued compliance with regulatory requirements, compliance with applicable permits and plans discussed in this document that address potential

environmental impacts, acquisition of ministerial permits, adherence to conditions of approval, mitigation measures, operational statement, and safe operating practices employed at the mine, no significant impact to health and safety would occur from the existing or proposed project. In addition, the existing mitigation measures associated with public and employee health safety would reduce impacts associated with public and employee health and safety. Mining activities under the proposed project would be consistent with these existing regulatory requirements and safe operating practices.

CONCLUSION/SUMMARY

Based upon the Initial Study (IS) No. 7011 prepared for Unclassified Conditional Use Permit Application No. 3509, 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 population and housing, and recreation.

Potential impacts related to air quality, agricultural and forestry resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, public services, transportation/traffic and utilities and service systems have been determined to be less than significant.
Potential impacts relating to aesthetics, biological resources, cultural resources, and noise have been determined to be less than significant with the identified Mitigation Measures.

A Mitigated Negative Declaration/Negative Declaration is recommended and is subject to approval by the decision-making body. The Initial Study is available for review at 2220 Tulare Street, Suite A, Street Level, located on the southeast corner of Tulare and “M” Street, Fresno, California.

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Conditions of Approval
Unclassified Conditional Use Permit Application No. 2461-R

1. All conditions of approval of Conditional Use Permit No. 2126 (see Exhibit 6), shall remain in full force and effect, except as modified below.

2 Development and operation of the facility shall be in substantial compliance with the site plan, rehabilitation plan and operational statement as approved by the Planning Commission.

3. A Site Plan Review Application shall be submitted for approval by the Director of the Public Works & Development Services Department in accordance with Section 874 of the Fresno County Zoning Ordinance. Conditions of the Site Plan Review may include, but are not limited to, access control, design and improvement of parking and circulation areas, grading and drainage, and fire protection.

4. 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.

5. The rock crushing plant, screening plant, and recycling operation shall cease operation and all equipment shall be removed upon completion of mineral extraction activities on the site, or upon expiration of the Conditional Use Permit, whichever occurs first.

6. 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 in an approved irrevocable escrow or its equivalent and shall be in the 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 for all incomplete work.

7. Unclassified Conditional Use Permit Application No. 2461-R shall expire 20 years from the effective date of approval.

8. A meandering berm no less than eight feet in height shall be constructed behind the required four-foot high fence within the 100-foot setback area along SR 33. The berm shall be planted with the rehabilitation seed mix, and shall have a slope no greater than 2:1 (horizontal to vertical). Breaks shall be provided in the berm to allow storm water conveyance from SR 33, with overlaps at the breaks so as to provide consistent visual screening.

*9. Prior to approval of the site plan review application, the operator shall execute a covenant to run with the land agreeing to:

   a.) Provide the State Department of Transportation (CALTRANS) with a summary list of tonnage of out-going materials and annual traffic counts including peak hour turning movement counts by August 1 of each year to determine if warrants are met.

   b.) Construct a north bound left-turn and south bound right-turn lane on State Route 33 at such time left turn warrants are met per CALTRANS requirements.

*10. Water shall be applied on the processing equipment as necessary to control dust.

*11. In order to control project-related emissions, equipment shall be in tune per manufacturer's specification. Maintenance and repair records shall be maintained at the project site and shall be available for inspection by the Public works & Development Services Department staff.

*12. The project shall encourage employee ride sharing by posting a notice of the Rideshare Program in a place where employees congregate and providing individual notices regarding ride sharing to each employee on a semi-annual basis.

*13. When excavation occurs below 40 feet in depth, a geotechnical report by a licensed geotechnical engineer or certified engineering geologist shall be completed to the satisfaction of the Director of Public Works & Development Services Department certifying that slopes are stable and not impacted by erosion. Thereafter, an annual slope stability report shall be submitted to the Fresno County Development Services Division Engineering Section prior to the County's annual inspection but not later than July 1st of each year. If certification of the proposed slopes cannot be made, the report shall specify the necessary modifications. The report shall be updated if geologic conditions encountered during excavation are significantly different from those identified in the original report.

*14. Mining shall be prohibited in phases 10-16 until such time that a geotechnical report prepared by a licensed geotechnical engineer or certified engineering geologist is completed to the satisfaction of the Director of Public Works & Development Services demonstrating that mining will not adversely impact the floodplain, Zapato Chino Creek and the existing irrigation canal that traverses the subject property. The report shall address appropriate excavation techniques, setbacks, slope stability, and percolation factors of soils. Metal posts shall be placed and maintained along the outer boundary of the appropriate set back area as identified in the geotechnical report. Posts shall be spaced no more than 100 feet apart and painted a bright color for easy identification.

*15. Condition 9 from Conditional Use Permit No. 2126 shall be revised to read:

(9.) Ground disturbance, excavation or the construction of berms shall not occur within 25 feet of the existing bank high point of the Zapato Chino Creek.

*16. Conditions No. 10, 14, 15 and 16 from Conditional Use Permit No. 2126 as stated below shall remain in full force and effect:

(10.) The mature riparian trees now established along Zapato Chino Creek shall be retained.

(14.) If any active Kit Fox dens are found during project operation, the California Department of Fish and Game shall be notified so that the foxes can be trapped and relocated.

(15.) An adequate revegetation plan must be developed for the project and approved by the California Department of Fish and Game. Revegetation of the site shall be done in stages, with not more than 20 percent of the land in disturbed condition at any one time. Native shrub species (e.g., Salix sps, Atriplex polycarpa, Ephedra californica) shall be a key component of the revegetation effort. In addition, to aid the reclamation efforts, all livestock use must be eliminated until shrub cover is well established since seedlings of native shrubs

are very sensitive to grazing pressure.

(16.) Prior to the removal of any material from Zapato Chino Creek or the operation of any equipment within the Creek, a Streambed Alteration Notification must be made pursuant to State Fish and Game Code Section 1600 et seq.

*17. Ground disturbance in the areas identified for phases 9, 10, and 11 shall not occur until:

a. Biological surveys acceptable to the California Department of Fish and Game have been completed for these phases and avoidance measures, if any, have been agreed to by the applicant.

b. Appropriate State and Federal "take" authorizations have been secured, if any are required.

This requirement shall be noted on the site plan approved during the site plan review process.

*18. If regular cultivation of the proposed expansion area is discontinued for more than three months prior to mining, the Department of Fish and Game shall be notified and be allowed to review the area for potential impacts to plant and wildlife resources and request avoidance measures. The applicant shall comply with any request from DFG for additional surveys, avoidance measure or "take" authorizations. This requirement shall be noted on the site plan approved during the site plan review process.

*MITIGATION MEASURE - A measure specifically applied to the project to mitigate potential adverse environmental effects identified in the environmental document. A change in this condition may affect the validity of the current environmental document, and a new or amended environmental document may be required.

NOTE: The proposed use is also subject to the mandatory conditions of Section 858 C and E of the Zoning Ordinance with the exception of Section 858-C.9 as indicated in Condition No. 8.

Conditions of Approval
Unclassified Conditional Use Permit Application No. 2126

1. Unclassified Conditional Use permit No. 2126 shall expire 20 years from the effective date of the approval.

2. Development and operation shall be in accordance with the Site plan and operational statement approved by the Commission, except as modified by other conditions of this permit.

3. Prior to excavation, a Site Plan Review Application shall be submitted to and approved by the Director of Resources and Development Department in accordance with Section 874 of the Fresno County Zoning Ordinance.

4. A detailed rehabilitation plan shall be submitted as part of the Site Plan Review application. The plan shall sow the proposed final slopes and contours of the site. Contouring of the site shall result in an appearance similar to the surrounding area.

5. Each phase must be rehabilitated in accordance with the rehabilitation plan within one year after initiation of the subsequent phase.

Commented [AE1]:

6. A dust palliative shall be 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.

7. The use shall be operated in compliance with the requirements of the Fresno County Air Pollution Control District.

8. The use shall be operated in such a manner as to avoid creating a dust or noise nuisance.

9. Excavation must not occur within 25 feet of the existing nabk-high point of the Zapato Chino Creek.

10. The mature riparian trees now established along Zapato Chino Creek shall be retained.

11. No extraction of material of overburden shall be permitted within 25 feet of any property line or within 100 feet of Highway 33 right-of-way.

12. The first 100 feet of the access roads intersecting with Highway 33 shall be surfaced with asphalt concrete.

13. A berm or other barrier shall be provided adjacent to Highway 33 to preclude unauthorized access to the site.

14. If an active kit fox den are found during project operations, the California Department of Fish and Wildlife shall be notified so that the foxes can be trapped and relocated.

15. An appropriate revegetation plan must be developed for the project and

approved by the California Department of Fish and Wildlife. Revegetation of the site shall be done in stages, with no more that 20 percent of the land in disturbed conditions at any one time. Native shrub species (e.g., Salix sps, Atriplex Polycarpa, Ephedra californica etc) shall be a key component of the revegetation efforts. In addition, to aid the reclamation efforts, all livestock shall be eliminated until shrub cover is well established since seedlings of native shrubs are very sensitive to grading pressure.

HEWITSON GRAVEL MINE

RECLAMATION PLAN

CA MINE ID 91-10-0006

SEPTEMBER | 2016

Lead Agency
Fresno County Department of Public Works & Planning/Development Services
2220 Tulare Street, 6st Floor, Fresno, CA 92731

Operator
Papich Construction Company
PO Box 2210, Pismo Beach, CA 93448

Preparer
Benchmark Resources
2515 East Bidwell Street, Folsom, CA 95630

EXHIBIT 9

HEWITSON GRAVEL MINE

RECLAMATION PLAN

CA MINE ID 91-10-0006

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1. SUMMARY

Table 1, "Reclamation Plan Requirements Summary," provides the key reclamation details in a format that corresponds to the State Mining and Geology Board's form (MRRC-1) for surface mining inspections.

TABLE 1
RECLAMATION PLAN REQUIREMENTS SUMMARY

Requirements	Description	Reclamation Plan Section
GENERAL INFORMATION		
Permitted Mineral Products	Construction aggregates	4.1
Production Amount (Annual/Gross)	Annually: 350,000 cubic yards (cu. yds.); Gross: approximately 455,000 cu. yds. from a 25 million cu. yd. (gross) reserve	4.1
End Date of Operations	December 31, 2066	4.2
Permit Number and End Date	Conditional Use Permit 2461-R	3.7
End Use	A condition adaptable to agricultural uses or support facilities as allowed under Section 816 of the Fresno County Zoning Code, recognizing that slopes and soils will not be suitable to certain types of agricultural production	5.1.1
BOUNDARIES		
Property Acreage	637.81 acres	3.4
Permit Acreage	298 acres	3.4
Reclamation Acreage (Surface Disturbance)	±225 acres	Figure 8
Setbacks	25 feet from property line; 100 feet from State Route 33 right-of-way	3.7.1
SLOPES—GRADING		
Fill Slopes:		
Working	No specification for internal working slopes; based on safety considerations for type of material involved	4.3.2
Reclaimed	3:1 horizontal to vertical (3H:1V), with exception of east slope or North Reserve, which is 1.5H:1V, per geotechnical report	4.3.2
Compaction	None required for reclaimed uses	4.3.3

Requirements	Description	Reclamation Plan Section
Cut Slopes:		
Working	No specification for internal working slopes; based on safety considerations for type of material involved	4.3.2
Reclaimed	3H:1V or flatter	4.3.2
EROSION		
Best Management Practices	Seeding of reclaimed surfaces with annual species for erosion control	5.1.2
Grading	Planned excavations will drain internally	5.2.2
Vegetation	Seeding of reclaimed surfaces for erosion control	5.1.2
PONDS		
Design—Function	Process water pond, settling ponds in plant area	Figure 4, Sheet 1
Capacity (area/depth/volume)	No specifications; not applicable to reclamation uses or stormwater requirements at this site	–
Maintenance	No specifications; for operational needs only	–
STREAM AND WETLAND PROTECTION		
Buffers (distance to channel)	Zapato Chino Creek: 25-foot setback from top of bank	4.6
Berms (distance/length/height)	None for stormwater diversion	–
Best Management Practices	SWPPP specifies BMPs that include good housekeeping, preventative maintenance, spill prevention and response, stormwater management practices, employee training, inspections, and monitoring.	4.7.2
Drainage	Planned quarry will drain internally; drainage off-site complies with the requirements of a site storm water pollution prevention plan (SWPPP)	4.7.2
Grading and Slopes	Slopes drain internally into excavation areas	4.7.2
Stockpiles	Plant area's surface water runoff directed to various locations (e.g., settling ponds) where best management practices are implemented in compliance with the SWPPP	4.7.2
Stream Diversions	No streams to be diverted	–
SENSITIVE WILDLIFE AND PLANT PROTECTION		
Species	San Joaquin kit fox (*Vulpes macrotis*) and blunt-nosed leopard lizard (*Gambelia sila*)	4.5.2
Protection Measures	Preconstruction surveys required for specified phases of development	4.5.2
SOIL/OVERBURDEN STOCKPILE MANAGEMENT		
Topsoil:		
Location	Surrounding perimeter of North Reserve and at locations specified for future mining	4.3.4, Figure 6
Slope Stability	Topsoil loss (erosion) is of limited concern in this arid location; maximum slopes 2H:1V	4.3.4

Requirements	Description	Reclamation Plan Section
Best Management Practices	Topsoil stockpiles will be protected from inadvertent destruction or use by flagged staking or other identification and/or will be of sufficient distance from areas under active mining or surface disturbance. To maintain oxygen availability to soil microorganisms, stockpiles will not be compacted. Topsoil will not be stripped or replaced during the rainy season or when soil is saturated.	4.3.4
Overburden:		
Location	Unusable materials placed back into excavated areas; fill along east side of North Reserve to be placed to rebuild slope to 1.5H:1V	4.3.3
Slope Stability	Backfill will have 3H:1V or flatter slopes; stability of 1.5H:1V slope per geotechnical report	4.3.3, 5.1.2
Best Management Practices	–	–
Topsoil Application:		
Amendments	Native topsoil salvaged as available	5.2.4
Depth	6–12 inches	5.2.4, 5.4.3
Moisture	No irrigation	5.2.5
Application Methods	Rip compacted surfaces (e.g., roads) to 6 inches deep. Distribute available soil.	5.4.3
REVEGETATION		
Test Plots	Test plots will be established in Phase I area	5.2.6
Species Mix	Upland-rangeland seed mix	5.2.5
Density	No specification	5.2.6
Percent Cover	30 percent	5.2.6
Species Richness	3 species	5.2.6
Protection	None necessary	5.2.5
Success Monitoring	After 2 years of revegetation growth, evaluate results.	5.2.6
Invasive Species Control	If weeds greater than 50%, they will be controlled with herbicides, physical removal (mechanical or manual), and/or grazing, preferably before seed propagation	5.2.5
OTHER		
Structures	Plant structures and scale to be removed	5.4.1
Equipment	Mining equipment to be removed	5.4.1
Closure of Adits	None	5.4.2
Other Reclamation Plan Requirements	None necessary	–

1.1 Purpose and Objectives

This 2016 reclamation plan amends and supersedes the previously required "rehabilitation plan" for purposes of compliance with the California Surface Mining and Reclamation Act (SMARA). This reclamation plan includes actions designed to meet physical reclamation treatment objectives for disturbed lands:

- Provide for long-term stability of slopes.
- Prevent wind and water erosion by stabilizing the soil surface through proper grading and drainage.
- Implement a revegetation program that is designed to establish self-sustaining cover.
- Provide a site that is adaptable to agricultural uses following mining.

1.2 Geology and Mine Methods

The site geology is known from the history of mining. The geologic materials to be permitted as a construction aggregates reserves consist of quaternary alluvial deposits, which are high-quality rock suitable for a broad range of construction purposes.

The operation generally involves excavation using conventional mining practices common to the industry, processing by screening, and transport of the aggregate materials off-site. Mining activities are initiated with removal of soil and stockpiling for reclamation. The rock is taken to the on-site plant, where it is crushed, screened, and washed, as needed, and stockpiled for transport to construction sites or facilities that make concrete or asphaltic concrete products.

1.3 Reclamation Second Uses and Approach

The reclaimed land use plan for the quarry following mining is open space suitable for agriculture and related uses as allowed under Section 816 of the Fresno County (County) Zoning Code. The surfaces disturbed by mining will generally be vegetated with grasses and forbs common to the area. The planned grading for the reclaimed topography will be completed in such a manner that mined surfaces and potential sedimentation will be internal to the pit. Revegetation will involve seeding for erosion control. The success of revegetation will be monitored after completion of final reclamation to ensure successful erosion control.

2. INTRODUCTION

This reclamation plan for the quarry has been prepared in accordance with the requirements of SMARA, found in California Public Resources Code (PRC) Section 2710

et seq., Title 14 of California Code of Regulations (CCR) Section 3500 et seq., and the County's (the lead agency) implementing ordinance. This 2016 amended reclamation plan supersedes the 1998 approved rehabilitation plan.

3. SITE DESCRIPTION

3.1 Land Ownership

Owner of Property Name:	Hewitson Farms
Owner of Mineral Rights:	Hewitson Farms
Street Address or PO Box:	39482 State Route (SR) 33
City, State, Zip Code:	Avenal, California 93204
Telephone Number:	(559) 386-5829
Parcels:	085-110-265

3.2 Operator

Mine Operator:	Papich Construction
Street Address or PO Box:	800 Farroll Road
City, State, Zip Code:	Grover Beach, California 93433
Telephone Number:	(805) 431-8952
Contact Person:	Jason Papich

3.3 Reclamation Responsibility

A statement for responsibility to complete reclamation in accordance with this plan is provided by the current operator in Appendix A, "Statement of Responsibility."

3.4 Location, Size, and Legal Description

The quarry is located along SR 33 in an unincorporated area of western Fresno County near the community of Avenal, at 45315 Lost Hills Road, Coalinga, California. The site location is shown on Figure 1,"Regional Location," and Figure 2, "Site Location").

The site is accessed from exit 265 at SR 269. Proceed westerly approximately 6 miles to SR 33, then northerly 7.25 miles to the site entrance. The location is also identified as follows:

- **Fresno County Assessor's Parcel Number's:** 085-110-265.
- **U.S. Geological Survey Township and Range:** West ½ of Section 27, Township 21 South, Range 16 East of the Mount Diablo Base and Meridian.
- **Latitude and Longitude:** 36°04'26"N, 120°13'45"W, at site entrance.

The property includes 637.81 acres; however, the mining permit covers a 298-acre portion of this site, which is roughly one-half of Section 27, bisected from northwest to southeast by SR 33 (see Figure 3, "Site Ownership and Surrounding Parcels"). The legal description of the property under ownership is provided in Appendix B, "Site Legal Description."

The quarry is bordered to the north and east by field crop agricultural lands, and to the south and west by upland grazing, as visible in Figure 3.

3.5 Site Features, Including Utilities and Easements

The following utilities are necessary for operation and are available at the site:

- **Power:** Supplied by the Pacific Gas and Electric Company electrical lines.
- **Water:** Water is supplied from a well and is conveyed from the northeasterly portion of the parcel to the site via a pipeline extending under SR 33.
- **Sewage:** The operation is located in rural Fresno County; therefore, portable toilets are provided for workers.

Mining and reclamation activities will not affect public utilities facilities or service systems. No additional extensions of public utilities or alterations to existing utility service will be necessary to carry out reclamation activities identified in this plan.

3.6 Existing and Allowed Land Uses

3.6.1 Existing Uses

Land use at the property is dominated by mining. Land use on the site is visible in Figure 4, "Existing Operations Aerial Photograph," and Sheet 1, "Existing Operations Aerial Photograph." Mining activity has been an ongoing activity at the site for more than 80 years. The site has been heavily disturbed by the historical mining activities as well as agriculture. A diversion structure in Chino Zapato Creek directed surface flows into a ditch that was used to irrigate farmlands. Use of the ditch has long been abandoned, terminating at SR 33.

The northern portion of the site is extensively developed with surface disturbance and plant facilities for the current mining operations, including roads and various power transmission poles and lines that serve the wells, maintenance and administration buildings, and an aggregate processing plant.

Current topography and nomenclature of the site features referenced in this document are shown in Figure 4.

3.6.3 Allowed Uses

The *Fresno County General Plan* (General Plan) (Fresno County 2000) classifies the site as Agriculture. The site and adjacent parcels are zoned Agricultural Exclusive. Permitted uses in this zone include:

- raising of livestock, other animals and poultry;
- raising of tree, vine, field, forage, and other plant life crops of all kinds;
- harvesting, curing, processing, packaging, packing, shipping, and selling of agricultural products;
- use, storage, repair and maintenance of tractors, scrapers, and land leveling and development equipment in conjunction with an agricultural operation; and
- welding and blacksmith shops and farm equipment and machinery sales, rental storage, and maintenance facilities.

Subject to review and approval of the County Planning Director, uses such as those listed below are permitted:

- churches, parsonages, and other religious institutions;
- public schools, private or parochial schools of an elementary or secondary level, colleges, and day nursery;
- public buildings and yards, fire stations; and
- veterinarian offices and animal hospitals.

A number of uses are permitted subject to approval of a conditional use permit, including mining operations. The agricultural policies accommodate various resource-related uses pursuant to the "Mineral Resources" section of the Open Space Conservation Element. The policies of the "Mineral Resources" section indicate that new mines for the production of rock, sand, or gravel should be located adjacent to river channels or existing or worked-out mining operations so that potential adverse effects that the mining operation may have on surrounding land uses and the environment will be minimized. In this case, the proposed activity is the continuation of an approved and existing operation, which was determined consistent with the General Plan under the prior conditional use permit.

The California Department of Conservation designated this area as Nonprime Agricultural Land. Nonprime land does not meet any of the criteria for classification as Prime Agricultural Land. Nonprime land is defined as Open Space Land of statewide significance under the California Open Space Subvention Act (see California Government Code Section 16143). Most Nonprime Agricultural Land is used for

grazing or unirrigated crops. However, nonprime land may also include other open space uses compatible with agriculture and consistent with local general plans.

3.7 Mining Permits and Approved Reclamation Plans

Mining activity has been a periodic activity at the Hewitson Gravel Mine. Brown Materials of Avenal mined the property beginning in the 1920s, Thompson Material of Avenal mined it during the late 1940s and 1950s, and Fresno Paving Company mined it during the mid-1960s. Those areas of previous extraction were located primarily in the southern portion of the site, south of Chino Zapato Creek, an ephemeral drainage that bisects the site.

Conditional Use Permit No. 800 was approved in 1968 to allow a borrow pit, rock plant, and asphalt concrete batch plant on a 320-acre portion of the site, which is located on the west side of SR 33. County permit records indicate that this use permit was not exercised and therefore lapsed.

In 1985, Conditional Use Permit No. 2126 was approved to allow a rock, sand, and gravel extraction operation and concrete and asphalt batching plant in the same 320-acre area of the previously approved extraction permits, but limited to a 178-acre portion of the 320 acres. Subsequently, Site Plan Review No. 5689 was approved. Conditional Use Permit No. 2126 was exercised and the operation has remained active.

On December 3, 1998, Acme Paving Company, Inc., of Avenal obtained Conditional Use Permit No. 2461-R to allow the continued excavation of rock, sand, and gravel on the site. Under that request, the use expanded operations to include a total of 257 acres and to allow the existing asphalt batching facility to incorporate concrete and asphalt recycling with incidental tire grinding.

Subsequently, over time various site plan review applications have been approved by the County. The facility now operates under Site Plan Review No. 6949, which was approved on August 9, 1999. The current operation is conducted pursuant to a use permit granted in 1998.

3.7.1 Permit and Planning Boundaries

The County has a 25-foot setback requirement for mining from property lines. Planned operations in this reclamation plan meet or exceed this requirement. Additionally, at this site the mining excavation has a 100-foot setback from the SR 33 right-of-way.

3.7.2 Pre-SMARA Surfaces

As described above, mining activity has been ongoing at the site for more than 80 years. The site has been heavily disturbed by the historical activities. The surfaces used by current operations were initially described in the 1982 reclamation plan. Those surfaces and features are incorporated into this updated reclamation plan. However, should current operations not proceed to pre-SMARA mined areas south of Chino Zapato Creek, no surface treatment would be required.

3.8 Geology and Mineral Resources Designations

The project site is located in the San Joaquin Valley within the Great Valley Physiographic province. The Great Valley province is bordered to the north by the Klamath and Cascade Physiographic provinces, to the east by the Cascade and Sierra Nevada Physiographic provinces, to the west by the Klamath and Coast Ranges Physiographic provinces, and to the south by the Transverse Ranges Physiographic province.

The Great Valley Physiographic province is about 80 miles wide and 400 miles long. The San Joaquin Valley, which forms the southern portion of the province, is about 150 miles long and 40 miles wide (CGI Technical Services, Inc. 2015). The Great Valley is a large, elongated, northwest-trending, and asymmetric structural trough that has been filled with a tremendously thick sequence of sediments ranging from Jurassic to recent. Sediment thicknesses of up to 10 miles are reported within the San Joaquin Valley. Sediments within the Great Valley consist of both marine and continental deposits, with most of the sediments underlying the project area consisting of continental deposits.

The project site is underlain by Holocene-age alluvium and Plio-Pleistocene-age older alluvium as shown on Figure 5, "Geology." The alluvial sediments are relatively recent deposits that are present near the ground surface. The older alluvium underlies the alluvium and extends to the quarry bottom without being fully penetrated.

Artificial fill is also present locally on slopes and at other locations within the quarry. Those materials consist of reworked older alluvium excavated at the site.

4. MINING

4.1 Minerals, Quantity, and Depth of Mining

The geologic materials to be permitted as a construction aggregates reserves consist of quaternary alluvial deposits, which are high-quality rock suitable for a broad range of construction purposes.

The current mine plan, shown in Figure 6, "Mine Plan," provides 25 million cubic yards of reserves. Experience at the operation has shown that unusable materials, consisting of soil, overburden, and process fines, comprise up to 30 percent of the total volume. As a result, the saleable product is estimated at 18 million cubic yards.

Although maximum production levels are primarily determined by market demand, approximately 18 million cubic yards (approximately 31 million tons) of construction aggregates materials are anticipated to be produced if the current design is fully completed. The maximum processing rate is estimated at 350,000 cubic yards annually.

The planned quarry depth is 160 feet below ground surface, or approximately 490 feet mean sea level (msl). Mining elevations will be monitored relative to topographic survey elevations shown in this plan.

4.2 Initiation and Termination Dates

Aggregate production at the quarry is ongoing. For purposes of this reclamation plan, foreseeable operations are planned for a 50-year period, until December 31, 2066.

4.3 Mine Plan

4.3.1 Mine Design

The plan for mining is shown in Figure 6. Sheet 2, "Mine Plan and Cross Sections," provides additional data. These designs show the maximum planned envelope of mining. The quarry configuration actually developed will be dictated largely by the geologic conditions encountered and may also vary depending on engineering and operational considerations as development proceeds. However, planned surface disturbance is expected to be limited to the "surface disturbance boundary" shown in Figure 6. Cross sections of the existing surface and anticipated year 2066 mined surfaces are illustrated in Sheet 2.

The plan for mining will ultimately create three basins of internal drainage. On the southern portion of the site, a flat unmined area will remain. Zapato Chino Creek and the abandoned diversion ditch will also remain. Overburden and process fines will be placed back into the depressions.

4.3.2 Active Quarry Slopes

Active cut slopes will be variable throughout the mining process. Variables influencing cut slope angles, bench width, and height include mining excavation equipment,

geologic conditions encountered, and moisture content. No active cut slope specification is required and may be cut based on safety requirements for the material involved.

Perimeter cut slopes must meet the configurations shown on the mine plan (See Figure 6 and Sheet 2): 3:1 horizontal to vertical (3H:1V) walls where a final limit of mining is reached, or if mining ceases and the site is reclaimed.

4.3.3 Overburden and Mine Waste

Permanent fills resulting from aggregate production would be constructed from overburden or process fines from the wash plant and placed on the planned quarry floor at the completion of operations. No fill is proposed for urban uses; therefore, the fill placed requires no specific compaction criteria.

An exception to the above specification is the east wall of the North Reserve. This slope was inadvertently overexcavated by a previous operator. A geotechnical study (see Appendix C, "Slope Stability Evaluation") was prepared and fill constructed to a 1.5H:1V slope was determined to be required to rebuild the slope face.

4.3.4 Soil Resources, Salvage, and Storage

Soil Resources

Much of the site was disturbed by mining activities occurring over the past 80 years, when no reclamation plan was required, and no topsoil was salvaged. The U.S. Natural Resources Conservation Service maps reflect these areas, as depicted on Figure 7, "Soils." The primary remaining areas to be mined comprise two soil types: Guijarral sandy loam and Cernini Sandy loam. These are alluvial fan sediments derived from Calcarious sedimentary rock. They are well drained, nonsaline, and have a profile of up to 60 inches.

The predominant soils are specifically described as follows (NRCS 1998):

> **404—Milham-Guijarral association, 5 to 15 percent slopes**
> ***Map Unit Composition***
> Milham sandy loam—55 percent
> Guijarral sandy loam—30 percent
> Minor components—15 percent
>
> ***Milham sandy loam***
> Geomorphic setting: Erosional fan remnants
> Parent material: Alluvium derived from calcareous sedimentary rock
> Typical vegetation: Annual grasses, forbs, and shrubs; also, irrigated crops

Slope: 5 to 9 percent
Surface runoff class: High
Slowest permeability class: Moderately slow
Salinity: Not saline
Sodicity: Not sodic
Typical profile
A—0 to 6 inches; sandy loam
Bt—6 to 16 inches; sandy clay loam
Btk—16 to 31 inches; sandy clay loam
Bk—31 to 60 inches; sandy loam

Guijarral sandy loam
Geomorphic setting: Erosional fan remnants
Parent material: Alluvium derived from calcareous sedimentary rock
Typical vegetation: Annual grasses, forbs, and shrubs; also, irrigated crops
Slope: 5 to 15 percent
Surface runoff class: Low
Slowest permeability class: Moderately rapid
Salinity: Not saline
Sodicity: Not sodic
Typical profile
Ap1—0 to 3 inches; sandy loam
Ap2—3 to 6 inches; sandy loam
Bw—6 to 12 inches; sandy loam
Bk1—12 to 24 inches; gravelly sandy loam
Bk2—24 to 36 inches; gravelly sandy loam
Bk3—36 to 60 inches; gravelly loamy sand

406—Guijarral sandy loam, 2 to 5 percent slopes
Geomorphic setting: Unburied fan remnants
Parent material: Alluvium derived from calcareous sedimentary rock Typical vegetation: Annual grasses, forbs, and shrubs; also, irrigated crops Slope: 2 to 5 percent
Surface runoff class: Very low
Slowest permeability class: Moderately rapid
Salinity: Not saline
Sodicity: Not sodic
Typical profile
Ap1—0 to 3 inches; sandy loam Ap2—3 to 6 inches; sandy loam Bw—6 to 12 inches; sandy loam

Bk1—12 to 24 inches; gravelly sandy loam
Bk2—24 to 36 inches; gravelly sandy loam
Bk3—36 to 60 inches; gravelly loamy sand

478—Cerini sandy loam, 0 to 2 percent slopes
Geomorphic setting: Alluvial fans
Parent material: Alluvium derived from calcareous sedimentary rock
Typical vegetation: Irrigated crops
Slope: 0 to 2 percent
Surface runoff class: Low
Slowest permeability class: Moderately slow
Salinity: Not saline
Sodicity: Not sodic
Typical profile
Ap—0 to 5 inches; sandy loam
Bw—5 to 25 inches; clay loam
Bk1—25 to 35 inches; stratified sandy loam to clay loam
Bk2—35 to 62 inches; stratified sandy loam to clay loam

Soil Salvage and Storage

An existing topsoil storage area is located along the northwest perimeter of the North Reserve and will be expanded to store soil recovered from the future excavation of this pit and when the plant is moved for excavation. Topsoil at the planned East and South Reserves will be salvaged and stockpiled in designated areas at the planned quarry perimeters, as shown on Figure 6 and Sheet 2.

The A horizon of these soils is thin and not separately recoverable. Generally, the soils will be salvaged for the clay and sandy loams. In the Guijarral sandy loam those are up to 12 inches in depth, and in the Cerini sandy loam, they are up to 60 inches in depth. Initially, vegetation and the topsoil will be removed and placed in a stockpile. The topsoil stockpiles will be managed to prevent spreading noxious weeds. Other specific actions are included below:

- Before excavation, topsoil materials will be harvested and placed toward the perimeter of the mining footprint.
- Erosion control in this arid location is not generally necessary, but where erosion loss is evident, topsoil will be seeded or straw mulched.
- Topsoil stockpiles will be protected from inadvertent destruction or use by flagged staking or other identification and/or will be of sufficient distance from areas under active mining or surface disturbance.

- To maintain oxygen availability to soil microorganisms, stockpiles will not be compacted. Topsoil will not be stripped or replaced during the rainy season or when soil is saturated.

4.3.5 Mine Development Schedule/Phasing

The mine will be developed in phases, as shown on Figure 6. It is expected that the North Reserve will be fully excavated before development of the South Reserve and East Reserve, which would mean the plant site would need to be relocated. Alternatively, the plant site could remain as is during development of the South Reserve and East Reserve, and completion of the North Reserve could be last. Reclamation phasing should generally track mine development phasing.

4.4 Mining Operations

4.4.1 General Description of Mining Methods

The operation generally involves excavation using conventional mining practices common to the industry, processing by screening, and transport of the aggregate materials off-site. Mining activities are initiated with removal of soil and stockpiling for reclamation.

Excavated materials are crushed, screened, and washed as needed and stockpiled. Material is transferred from these stockpiles to roadable trucks for transport to construction sites.

The types of mobile equipment and/or machines employed are typical excavation equipment, such as a dozer, a front-end wheel loader, a portable water pump, a motor grader, conveyers, and haul trucks. A water truck is used to maintain surfaces and control dust. The types of vehicles used vary over time due to availability and the use of new models to suit different on-site conditions and perform specific short-term reclamation tasks.

A maintenance area and parking for aggregate delivery trucks is located at the plant site.

4.4.2 Equipment Storage

Equipment, supplies, and other materials are stored at the plant site. Current storage areas are shown in Figure 4.

4.5 Sensitive Species and Wildlife Protection

ESR, Inc., assessed biological resources for site vegetation, wildlife, and special species in January 2016 and contributed the information that follows for this reclamation plan.

4.5.1 Vegetation and Wildlife

The primary cover is nonnative annual grassland, as described in Holland (1986). This community type typically includes various nonnative grasses and ruderal species such as wild oats (*Avena* spp.), brome (*Bromus* spp.), mustard (*Brassica* spp.), hare barley (*Hordeum murinum* ssp. *leporinum*), Italian ryegrass (*Lolium multiflorum*), wild radish (*Rapahnus sativus*), bedstraw (*Galium* sp.), black mustard (*Brassica nigra*), red stemmed filaree (*Erodium cicutarium*), rattail fescue (*Vulpia myuros*), and barnyard grass (*Echinchloa crusgalli*). Native forbs occur at low density and include fiddleneck (*Amsinckia menziesii*), blow wives (*Achyrachaena mollis*), red maids (*Calandrinia ciliata*), and vinegar weed (*Trichostema lanceolatum*).

Current human disturbances in the evaluated area include moderate levels of vehicle and human vegetation trampling/damage, nonnatural erosion from trail pioneering, and littering associated primarily with activities along SR 33. The area also exhibits impacts from the previous use for mineral extraction, livestock rearing, and agricultural development and includes numerous associated access roads, trails, and paths.

Vegetation in the disturbed areas is typically absent, although sparse cover of weedy species such as English plantain (*Plantago lanceolata*), filaree, prickly lettuce (*Lactuca serriola*), oats, soft brome (*Bromus hordeaceus*), and ryegrass (*Lolium*) may be present. Some native plants may also occur such as tarweed (*Holocarpha* spp.), common gum plant (*Grindelia camporum*), and foothill plantain (*Plantago erecta*).

The area does not contain any wetland habitat, including vernal pools and complexes, beds and banks, seasonal or perennial drainages, or swale features. No wetland features would be directly or indirectly affected by further expansion of mining activities.

No sensitive habitat such as Alkali Seep, Cismontane Alkali Marsh, Great Valley Cottonwood Riparian Forest, Sycamore Alluvial Woodland, Valley Sacaton Grassland, or Valley Sink Scrub exists within areas to be developed.

Creation of wildlife habitat is not an objective of reclamation at this site. The site is historically and currently used for dryland grazing and will be reclaimed to this productive agricultural use. To the degree that wildlife uses the site, the reclaimed condition will be able to support similar species.

4.5.2 Sensitive Species

San Joaquin Kit Fox

The habitat within future mining phases comprises primarily low relief native and nonnative annual grasslands. The survey found very few fossorial mammal burrows in the area and none of the other types of supporting habitat that is typically associated with the occurrence of the sensitive species.

Based on specifics provided by the US Fish and Wildlife Service (1998), each observed potential burrow location was assessed for adequate entrance size for San Joaquin kit fox (SJKF) use. No sign of the target species was detected during these surveys.

Research has also shown that SJKF are unable to maintain long-term occupancy in agricultural or livestock rearing areas, such as those on the valley floor of western Fresno County. Moreover, the habitats between the agricultural fields and the steeper foothills affect prey type and availability and predation and competition with other carnivores. Thus, existing and past agricultural, livestock rearing, and vegetation management activities (i.e., tilling or disking) on or near the existing mining location have contributed to fragmentation of habitat and degradation of habitat conditions for SJKF.

Blunt-Nosed Leopard Lizard

Blunt-nosed leopard lizard (BNLL) inhabit semiarid grasslands, alkali flats, low foothills, canyon floors, large washes, and arroyos, usually on sandy, gravelly, or loamy substrate, and sometimes on hardpan. The species is common where there are abundant rodent burrows, and is rare or absent in dense vegetation or tall grass. This lizard cannot survive on lands under cultivation, although it may use edges adjacent to such lands for suitable habitat; repopulation of an area after tilling ends requires at least 10 years. In general, BNLL are absent from areas that exhibit steep slopes, dense vegetation, or areas subject to seasonal flooding.

BNLL use small rodent burrows for shelter from predators and temperature extremes. Burrows are usually abandoned ground squirrel tunnels, or occupied or abandoned kangaroo rat tunnels. Each lizard uses several burrows without preference, but will avoid those occupied by predators or other BNLL. The species will also seek cover at the base of shrubs or in rock piles. BNLL feed primarily on insects (mostly grasshoppers, crickets, and moths) and other lizards.

Potential predators of BNLL include whip snakes (*Masticophis lateralis*), gopher snakes (*Pituophis catenifer catenifer*), glossy snakes (*Arizona elegans*), western long-nosed snakes (*Rhinocheilus lecontei*), common king snakes (*Lampropeltis getula californiae*), western rattlesnakes (*Crotalus viridis*), loggerhead shrikes (*Lanius ludovicianus*), American kestrels (*Falco sparverius*), burrowing owls (*Athene cunicularia*), greater roadrunners (*Geococcyx californianus*), golden eagles (*Aquila chrysaetos*), hawks (*Buteo* spp.), California ground squirrels (*Spermophilus beecheyi*), spotted skunks (*Spilogale putorius*), striped skunks (*Mephitis mephitis*), American badgers (*Taxidea taxus*), coyotes (*Canis latrans*), and San Joaquin kit foxes.

BNLL inhabit open, sparsely vegetated areas of low relief on the San Joaquin Valley floor and in the surrounding foothills. The following bullet points generally identify the BNLL's preferred habitats in order of decreasing favorability:

- clump grass and saltbush grassland, with sandy soil;
- washes with brush, in grassland, with sandy soil;
- alkali flats, with saltbush in sandy or gravelly soil; and
- grassland with hardpan soil.

Conclusion

On-site surveys were conducted when the air temperature was within the optimal range. No BNLL were observed in the surveyed locations, and no habitat features important for the species such as washes or playas were found.

Surveying personnel also searched for and examined individual burrows; none of the burrows observed during the field survey were found to be used by either SJKF or BNLL. No potential burrows or dens were identified that meet protocol requirements.

Further, County Condition of Approval 17 requires that ground disturbance in future phases shall not occur until the following actions are completed:

- Biological surveys acceptable to the California Department of Fish and Game have been completed for these phases and avoidance measures, if any, have been agreed to by the applicant.
- Appropriate State and Federal "take" authorizations have been secured, if any are required. This requirement shall be noted on the site plan approved during the site plan review process.

4.6 Stream and Wetland Protection

Section 404 of the Clean Water Act (1977, as amended) requires a permit for discharge of dredged or fill material into waters of the United States. Under Section 404, areas such as wetlands, rivers, and streams (including intermittent streams and tributaries) are considered waters of the United States. The extent of wetlands is determined by examining the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. Under normal circumstances, all three of these parameters must be satisfied for an area to be considered a jurisdictional wetland under Section 404 of the Clean Water Act. Fill within wetlands is regulated under the Clean Water Act through a Nationwide Permit Program and an Individual Permit Program.

No areas that may potentially qualify as wetlands have been identified on the site.

Chino Zapato Creek is an ephemeral drainage that may quality as waters of the United States. A County condition of approval on the permitted operation requires a 25-foot setback from the top of bank to avoid impacts to the streambed. The updated mine plan reflected in this reclamation incorporates that requirement by design.

4.7 Water Quality Protection

4.7.1 Tailing and Mine Waste Management

Mine waste disposal is required to be consistent with Article 1 of Chapter 7 of Title 27 of the CCR (formerly codified as Article 7 of Chapter 15 of Title 23 of the CCR).

- **Definition of Mine Waste (CCR Section 22480):** The process fines generated at this quarry are defined as a Group C mining waste because they are mining wastes from which any discharge would comply with the applicable water quality control plan, including water quality objectives other than turbidity. See 27 CCR Section 22480(b)(3).
- **Mining Unit Site and Construction Standards (27 CCR Section 22490):** The placement of process fines within the mined areas are not located on a known Holocene fault (27 CCR Section 22490[a][1]). The fines placement areas would not be subject to flooding (27 CCR Section 22490[b]). No containment structure will be constructed surrounding the fines placement area. Therefore the general containment structure criteria evaluated in 27 CCR Section 22490(c) do not apply.
- **Closure 27 (CCR § 22510):** The fines area within mined depressions will be closed in a manner that minimizes surface erosion that could discharge sedimentation off-site. The second use of the fines placement area will be open

space and grazing land. This second use will not pose a threat to water quality and, therefore, complies with 27 CCR Section 22510(a).

The revegetation plan to control erosion and off-site sediment will be monitored subsequent to human interference to ensure that implementation of the plan effectively controls erosion without continued maintenance (27 CCR Section 22510[b]).

4.7.2 Surface Water

Surface Water Conditions

The site is located in a region that is semiarid, characterized by hot, dry summers and mild winters. Summer temperatures may reach 110°F, while winter temperatures may fall below 25°F. The high summer temperatures and low relative humidity combine for a high rate of surface water evaporation. Coalinga is located approximately 8 miles northwest of the site, at an elevation of 650 feet msl. The average annual rainfall from 1942 to 2016 is 7.6 inches.

The western area of Fresno County between the Coast Range and Fresno Slough is sparsely populated, with land uses primarily consisting of agriculture and grazing land. A complex system of streams drains the eastern slope of the Coast Range toward the Fresno Slough on the valley floor. Due to their large drainage areas, many small creeks are prone to high flows and contribute to flooding in the western area of the valley. Urban areas in western Fresno County that are subject to flooding include the cities of Coalinga, Huron, and Mendota. Major facilities such as the California Aqueduct and Interstate 5 are also subject to flooding during large storm events.

Runoff from the site vicinity flows through the site via Chino Zapato Creek for about 7 miles north through agricultural lands where it drains into Los Gatos Creek downstream of Coalinga. Los Gatos Creek continues northeasterly for another 7 miles to a point north of Huron where it ends.

Surface Water Protection

Current surface water drainage on-site is shown in Figure 4. Processing water is kept separate from stormwater. It is retained on-site for reuse and is not discharged off-site. Surface water runoff is collected in drainage ditches and culverts on-site as it travels generally east. The site is mostly contained with no outfalls off the property. Discharge of water from the site from overland flow exits the site through silt fencing or collected in the drainage basin. A site storm water pollution prevention plan (SWPPP) specifies BMPs that include good housekeeping, preventative maintenance, spill prevention and response, stormwater management

practices, employee training, inspections, and monitoring. In accordance with the SWPPP, an inspection for erosion of slopes, of drainage channels, and of unpaved areas at the facility is completed after each significant rain storm. The SWPPP is required to be revised and implemented before specific changes in industrial activities, as specified by the National Pollutant Discharge Elimination System General Permit.

At full buildout and reclamation of the site, the North Reserve, South Reserve, and East Reserve will all (see Figure 8, "Reclamation Plan") drain internally. The remainder of the site will flow generally easterly, consistent with premining conditions. The site design and actions to control drainage, siltation, and erosion will be effective in protecting downstream beneficial uses of surface water in accordance with the Porter-Cologne Water Quality Control Act, Water Code Section 13000, et seq., and the federal Clean Water Act, 33 U.S. Code Section 1251, et seq.

4.7.3 Groundwater

Groundwater Protection

Groundwater at the site is located below the floor of the existing operation and the final floor of the planned final topography. Local water levels are known to be over 300 feet below ground surface (CGI Technical Services, Inc. 2015).

Current mining has occurred to a depth of 540 feet msl, within 50 feet of the planned depth of the North Reserve. Groundwater has not been encountered. While small amounts of water may seep from lenses of sand and gravel when first encountered, the flow from such seeps rapidly diminishes. Thus, while shallow groundwater may be present in limited quantities in isolated lenses of sand and gravel, deep groundwater occurs at the site consistent with the local reported depth.

4.8 Future Mining Potential and Impact of Reclamation

The aggregate resources in the quarry are known from current mining to have a vertical extent to at least 540 msl. The current mine plan provides for resource extraction to 490 feet msl. Access to deeper reserves is not currently planned.

5. RECLAMATION

The reclamation plan includes actions designed to meet objectives for implementing physical reclamation of surfaces disturbed by mining activities. Examples of these objectives are listed below:

- Provide for long-term stability of slopes.
- Prevent wind and water erosion by stabilizing the soil surface through proper grading and drainage.
- Implement a revegetation program designed to establish self-sustaining cover.

5.1 Reclamation Plan and Surface Treatment

5.1.1 Uses Subsequent to Mining

SMARA requires a description of the "proposed use or potential uses" of a mined site after reclamation. The proposed end use of the quarry is open space or agricultural-related uses as provided in the Fresno County zoning code. The property is zoned as Exclusive Agriculture.

5.1.2 Surface Treatment for Second Use

The anticipated second land use plan for grazing includes open space, agriculture, and related uses. The plan for reclamation is shown in Figure 8. Sheet 3, "Reclamation Plan and Cross Sections," provides additional data. The planned reclaimed topography grading will be completed in such a manner as to ensure proper drainage. Mine slopes will generally not exceed 3H:1V, with the exception of the east slope of the North Reserve, which will be 1.5H:1V, and will remain in a stable reclaimed configuration. Final slopes are to be consistent with geotechnical specifications for long-term stability. Fill slopes will generally not exceed 3H:1V after final reclamation.

Revegetation will involve seeding with shrubs and forbs for erosion control pending other agricultural uses of the property. The main access roads created for mining will remain for future use.

5.1.3 Structures and Surfaces to Remain

Structures at the site are generally limited to mobile buildings in support of mining and would not remain following operations. Power extended to the site may remain.

5.2 Agricultural Lands Reclamation

5.2.1 Prime and Nonprime Lands

Mining and reclamation will not occur on soils designated as Prime Farmland by the California Department of Conservation's Farmland Mapping and Monitoring Program. Therefore requirements under CCR Section 3707 do not apply.

5.2.2 Grading, Drainage and Erosion Control

CCR Section 3706(d) requires erosion-control methods sufficient for a 20-year, 1-hour intensity return frequency interval (or intensity duration frequency) storm event. Given the end use adaptable to agriculture such as rangeland grazing, a low-impact, low-maintenance approach to sediment control is to retain rainfall by allowing it to infiltrate the soil, rather than relying on erosion-control structures and sediment catchments that require construction expense and ongoing maintenance. A revegetation design based on soil function also contributes to complying with other components listed in SMARA, including Section 3502(b), consideration of the maximum probability of water content or Section 3705(a), establishment of a vegetative cover suitable for end use and stable against long-term erosion.

At full buildout and reclamation of the site, the quarry will drain internally. The remainder of the site will flow generally northeast as it did prior to mining.

5.2.3 Geotechnical Considerations (Closure Topography, Slope Stability, Compaction)

The final quarry slopes will be graded with an overall slope of 3H:1V, with the exception of the east slope of the North Reserve, which will be 1.5H:1V. The County has placed the following conditions on slope development (Unclassified Conditional Use Permit 2126):

- No extraction of-material shall be permitted within 25 feet of any property line or within 100 feet of the Highway 33 right-of-way (Condition 11).
- 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 1 1/2:1 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 rehabilitation 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 (Condition 4).
- When excavation occurs below 40 feet in depth, a geotechnical report by a licensed geotechnical engineer or certified engineering geologist certifying that slopes are stable and not impacted by erosion. Thereafter, an annual slope stability report shall be submitted to the Fresno County Development Services Division Engineering Section prior to the County's annual inspection but not later than July 1st of each year. If certification of the proposed slopes cannot be made, the report shall specify the necessary modifications. The report shall be

updated if geologic conditions encountered during excavation are significantly different from those identified in the original report (Condition 13).

- Mining is be prohibited in the southern portion of the North Reserve, and in both the South Reserve and East Reserve (formerly phases 10-16) until such time that a geotechnical report prepared by a licensed geotechnical engineer or certified engineering geologist is completed demonstrating that mining will not adversely impact the floodplain, Zapata Chino Creek and the existing irrigation canal that traverses the subject property. The report shall address appropriate excavation techniques, setbacks, slope stability, and percolation factors of soils (Condition 14).

Appendix C was completed to ensure that the factor of safety of the east slope of the North Reserve meets the SMARA requirements.

Fill slopes may be constructed as part of overburden and process fines placement. Fill slopes will not exceed 3H:1V.

5.2.4 Resoiling

Topsoil Redistribution

The limited topsoil will be distributed at an average depth of 6 to 12 inches where most beneficial to future uses, such as rangeland grazing.

Soil Stabilizing Practices

Where topsoil cover is used, no nutrient amendments are needed. The topsoil materials are adequate for rangeland production in all soil fertility characteristics. Fertility amendment should be limited. SMARA Regulations at CCR Section 3705(e) suggests slow-release fertilizers, but this exception is for annual forage grasses, not native plants as described in the regulations. The main limitation for growth is infiltration and water availability, not nutrient content.

5.2.5 Revegetation

The site soils and vegetation are not ecotypically unique. Soils are low fertility and have very low moisture retention. Therefore, typical plant materials specified are adapted to the Central Valley of California, with its Mediterranean climatic conditions of wet, cool (but highly variable) winters with extended hot and dry summers.

An upland-rangeland seed mix, as shown in Table 2, "Representative Seed List" is selected to stabilize surfaces against erosion. The cover could support limited grazing, or serve as interim cover pending conversion to other agricultural uses. The seed mix will be sown during the rainy season; therefore, irrigation will not be required.

TABLE 2
REPRESENTATIVE SEED LIST

Common Name	Latin Name	Pounds PLS Per Acre
Mormon tea	*Ephedra Nevadensis*	4
Cattle spinach	*Atriplex polycarpa*	8
Quailbush	*Atriplex lentiformis*	6
Zorro fescue	*Festuca megalura*	10
Bladderpod	*Isomeris arborea*	6
Dwarf goldfields	*Lasthenia chrysostoma*	2
Pigmy-leafed lupine	*Lupinis bicolor*	5
	TOTAL	**41**

Note: PLS= Pure Live Seed.

Revegetation Protection Measures

Protection from herbivory is necessary until vegetation is established. The site is fenced and will not be grazed for 2 years following revegetation.

Weed Abatement

A program of exotic weed abatement will be implemented if weeds conflict with revegetation success. Weed control may include scheduling and control of nutrient application, use of herbicides, mechanical controls, hand weeding, or grazing.

5.2.6 Revegetation Success Criteria

Due to many decades of farming and mining, the existing vegetation is not representative of planned revegetation cover. Test plots will be established in an area of Phase 1. Approximately one-quarter acre will be designated as a test plot area. Two years following planting, the plot will be considered a success if a cover value of 30 percent and a species richness of three species is met.

5.3 Reclamation Schedule/Phasing

Once the full aerial extent of the planned quarry has established, mining will progress to greater depths until the final floor elevations are reached. Reclamation of each reserve will not occur until the final depth is reached and the working area is no longer needed for operations.

5.4 Removal of Structures and Equipment, Closure of Openings

5.4.1 Equipment and Structure Removal

After final mine closure, the equipment related to mining will be removed (e.g., mobile equipment, processing plant), but the main access roads throughout the site and buildings and infrastructure supportive of second land uses will remain.

Following completion of mining and reclamation activities, mobile equipment associated with mining and stationary structures at the processing plant, including the scale will be removed.

5.4.2 Openings Gated, Drill Holes, and Wells Closed

This operation currently has no open drill holes to close or monitoring wells to be abandoned. Water wells developed will remain for ongoing ranch use. If any mining-specific drill holes are developed during the course of operations, they will be closed in accordance with prevailing state requirements.

5.4.3 Roads and Compacted Surfaces

Where mining operations result in compacting soil, decompaction methods would be applied (e.g., ripping, disking) before revegetating those areas. Many roads used for postreclamation access throughout the site will remain following mining and reclamation (see Figure 8).

Final grade surfaces that are compacted shall be ripped on contour to 1-foot deep. Final grade surfaces that are ripped or were not compacted, shall be shallow disked on contour to 3–4 inches before seeding.

Internal travel routes, access roads, or ramps specifically developed for mining and unnecessary for postmining land use will be inspected for road-base materials and petroleum or lubricant spill residue. If present, this material will be removed before decompaction and revegetation.

5.5 Public Safety Considerations

5.5.1 Land Status

The quarry is private property; the second land use of grazing and other agricultural land uses will not increase the level of public exposure to the site. Final slopes are consistent with SMARA and therefore will pose no safety hazard.

5.5.2 Access

Primary access to the operating site is through a single roadway, which has a gated entrance. The entire property is fenced and gated; these features will remain at reclamation.

6. FINANCIAL ASSURANCE

This section addresses the primary reclamation tasks associated with the reclamation plan. These tasks are the basis of financial assurance calculations for the site. Financial assurance cost estimates are required to be revised annually (CCR Section 3804[c]) and will therefore change over the course of operations.

Financial assurance cost estimates for the initiation of the operation are based on:

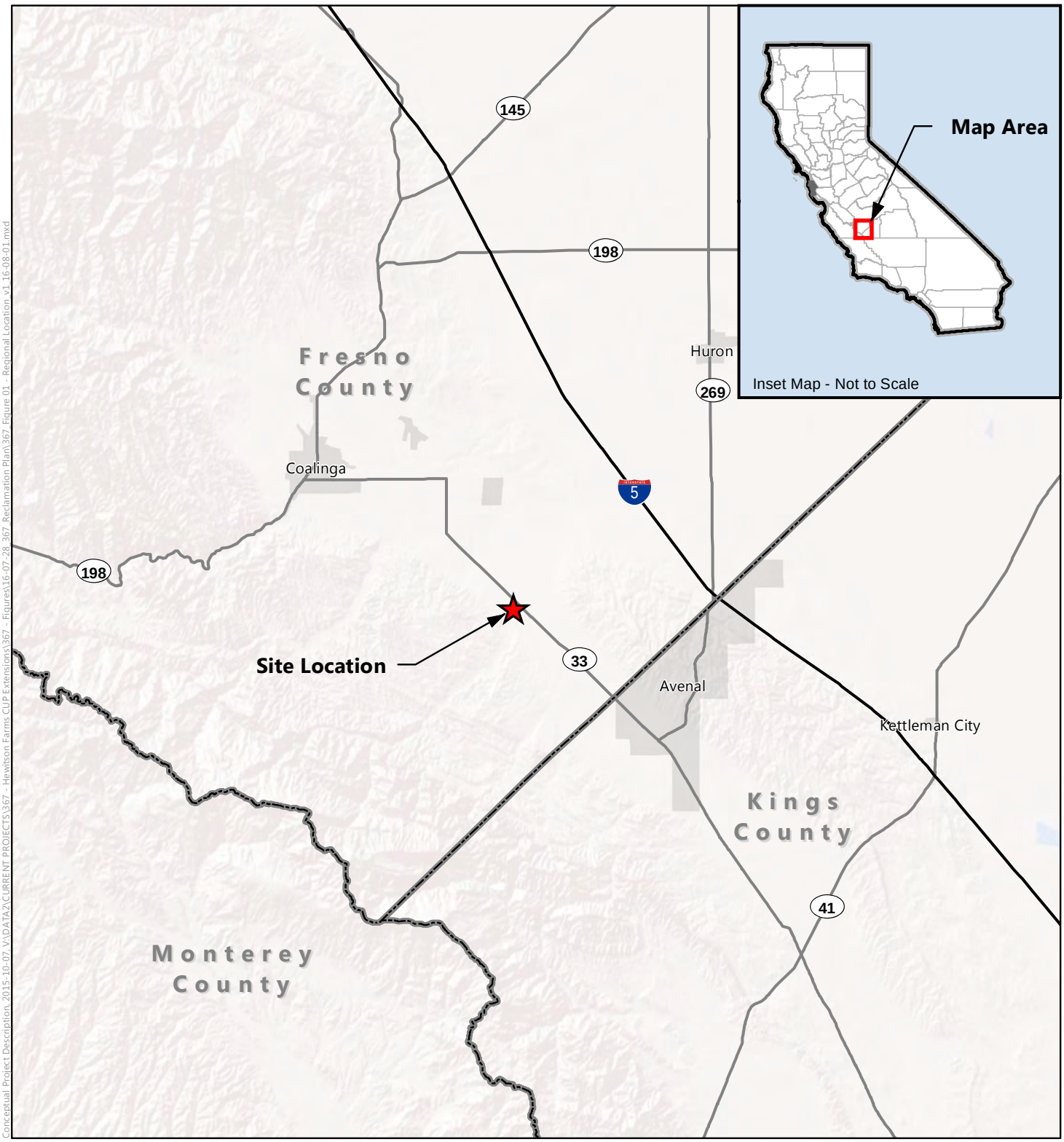
- an analysis of the physical activities necessary to implement the approved reclamation plan,
- the lead agency's (or third party contract) unit costs for each of these activities,
- the number of units of each of these activities, and
- an amount to cover contingency costs (not to exceed 10 percent of the above calculated reclamation cost) and actual lead agency administrative costs.

The following tasks will need to be completed to implement this reclamation plan:

- **Equipment and Facilities Removal**
  - Remove heavy duty equipment.
  - Remove structures and foundations at Plant Site.
- **Grading**
  - Contour slopes as necessary to conform to the existing topography and establish proper drainage.
- **Revegetation**
  - Manage topsoil stockpiles against erosion.
  - Distribute topsoil.
  - Seed and plant.
- **Monitoring/Maintenance**
  - Inspect planting and seeding success.
  - Inspect slopes for erosion.
  - Monitor for noxious weeds.
  - Maintain and weed the revegetation.

- Collect data and report on reclamation progress.
- Prepare contingency for replanting.

FIGURES



SOURCE: ESRI World Shaded Relief (2016); ESRI World Streetmap (2009); compiled by Benchmark Resources in 2016

LEGEND

- County Boundary
- Interstate
- State Route
- Urban Area

N

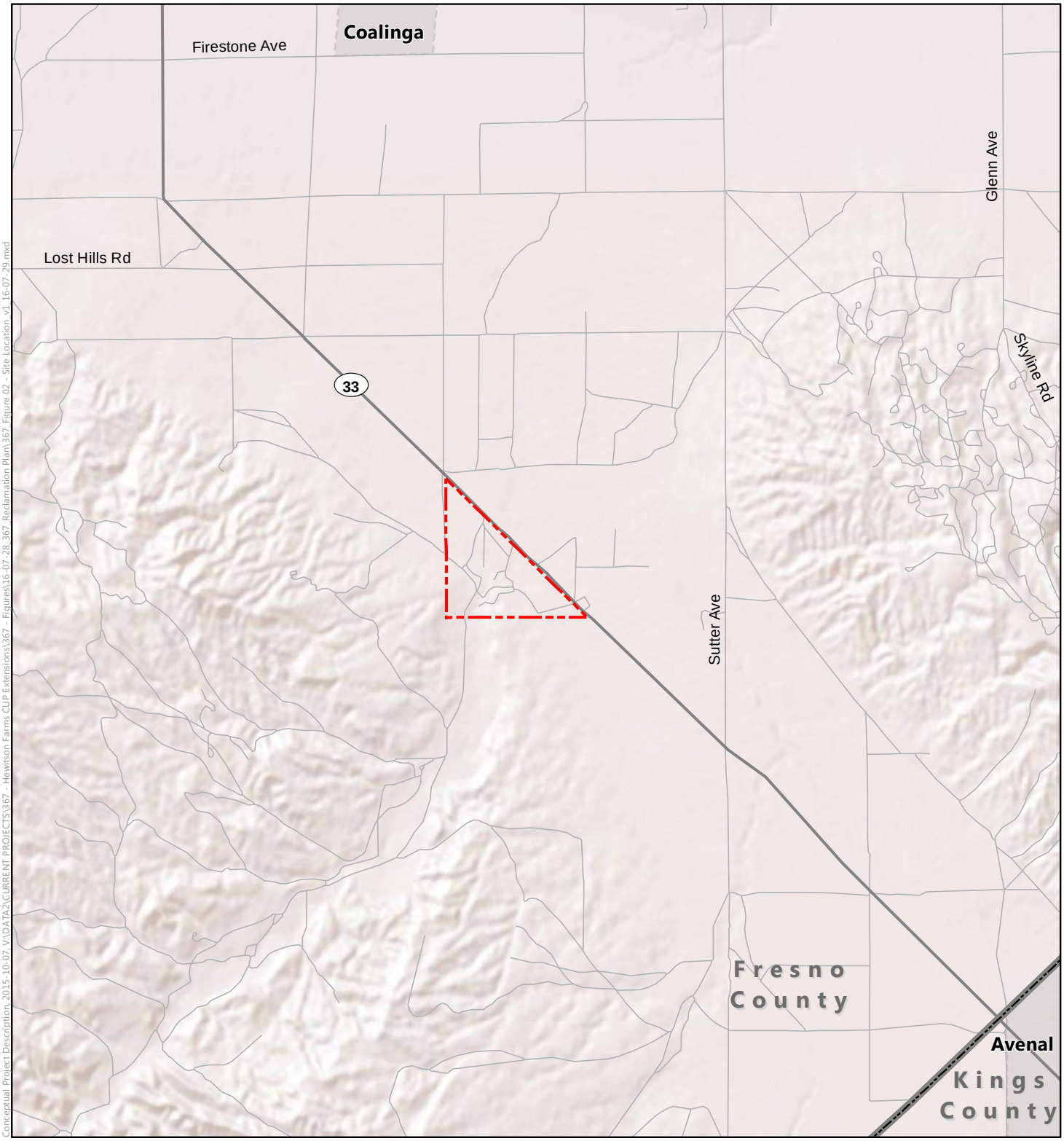
0 2.5 5 7.5 10 Miles

BENCHMARK RESOURCES

Regional Location

HEWITSON GRAVEL MINE

Figure 1



Conceptual Project Description_2015-10-07_V:\DATA2\CURRENT PROJECTS\367 - Hewitson Farms CUP Extensions\367 - Figures\16-07-28_367 Reclamation Plan\367 Figure 02 - Site Location v1 16-07-29.mxd

SOURCE: ESRI World Shaded Relief (2016); ESRI World Streetmap (2009); compiled by Benchmark Resources in 2016

LEGEND

- Site Location
- County Boundary
- State Route
- Street
- Urban Area

N

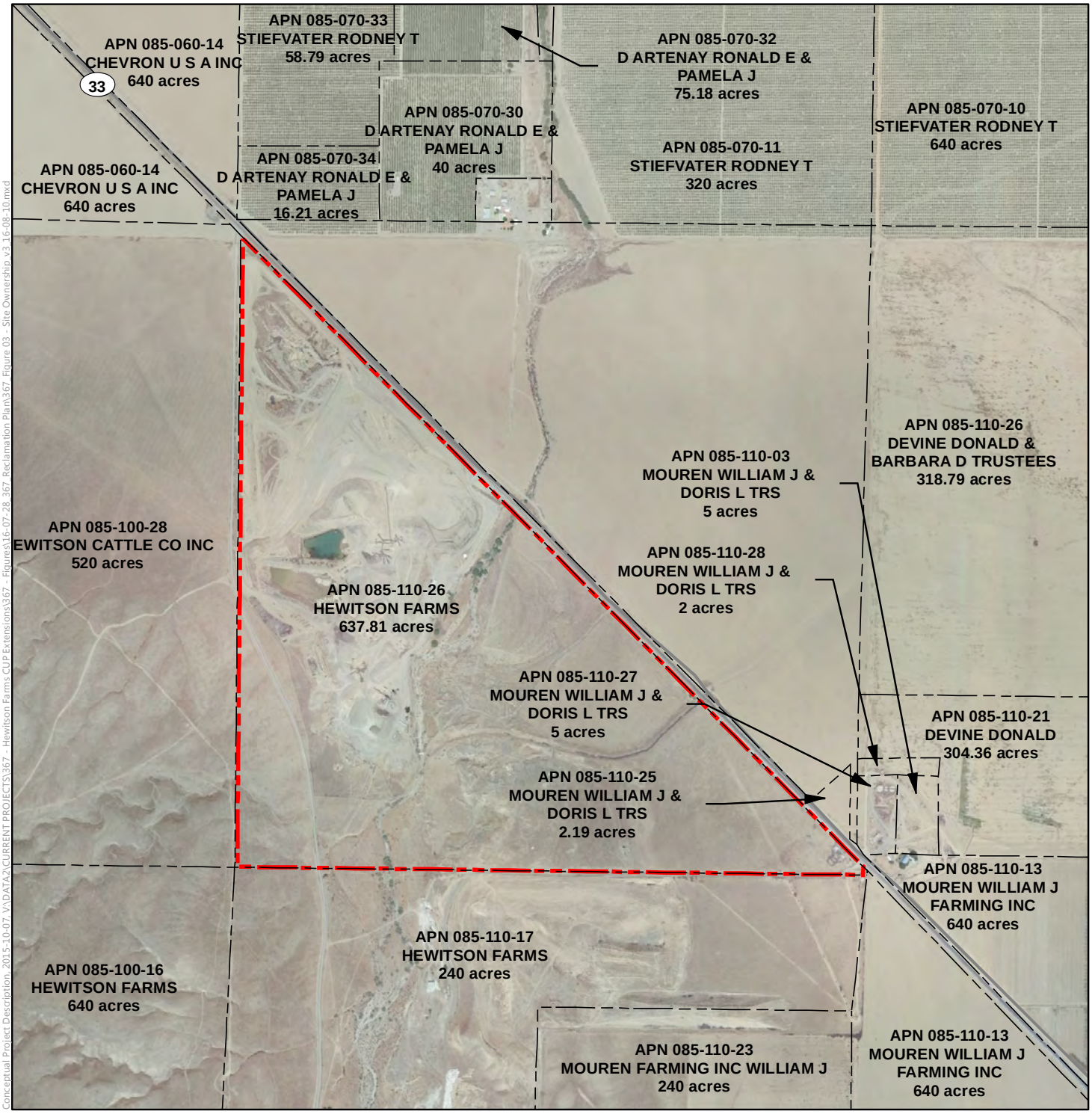
0 0.5 1 1.5 2 Miles

BENCHMARK RESOURCES

Site Location

HEWITSON GRAVEL MINE

Figure 2



Conceptual Project Description, 2015-10-07, V:\DATA2\CURRENT PROJECTS\367 - Hewitson Farms CUP Extensions\367 - Figures\16-07-28_367_Reclamation Plan\367_Figure 03 - Site Ownership v3 16-08-10.mxd

TOPOGRAPHY SURVEY: Yamabe and Horn Engineering, Inc., Flown 2016-03-30; SOURCE: Fresno County 2016; ESRI World Streetmap (2009); AERIAL: Google Earth Pro (2015-05-02); compiled by Benchmark Resources in 2016

NOTES:

1. The parcel line used to derive the project property boundary (APN 085-110-26) was determined from data collected on-site by a licensed surveyor. All other surrounding parcels were determined using geographical data from the Fresno County website.

LEGEND

- Site Location
- Parcel Lines
- State Route

N

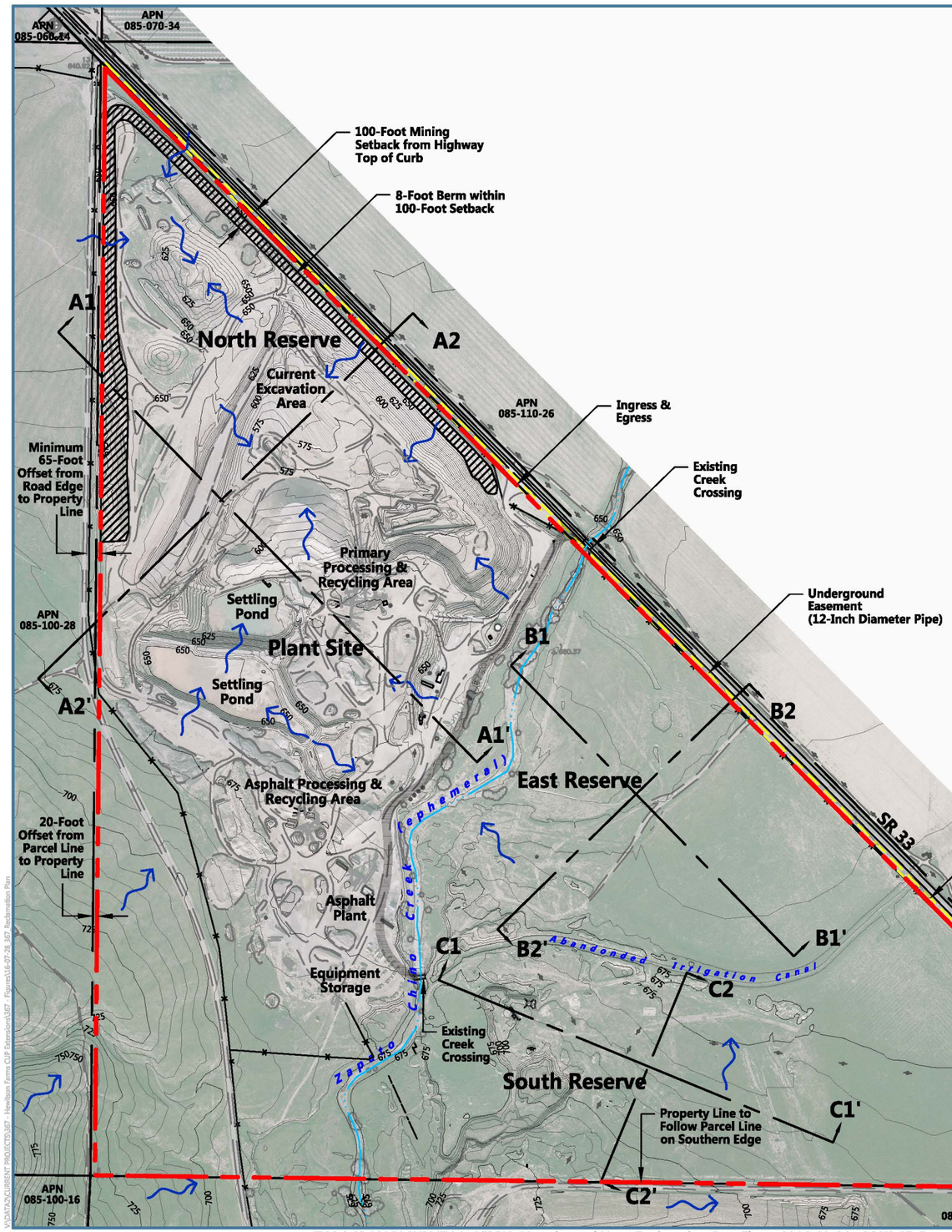
0 600 1,200 1,800 2,400 Feet

BENCHMARK RESOURCES

Site Ownership and Surrounding Parcels

HEWITSON GRAVEL MINE

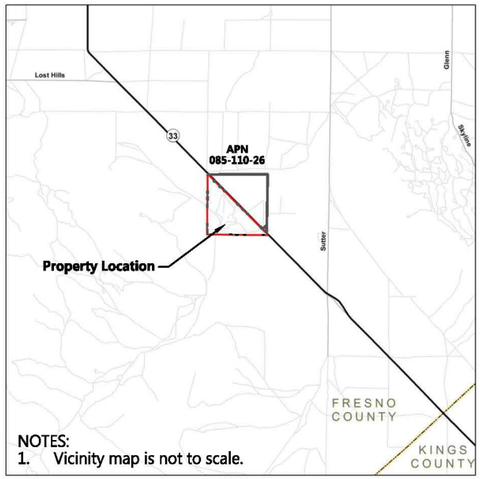
Figure 3



TOPOGRAPHY SURVEY & AERIAL: Yamabe and Horn Engineering, Inc., Flown 2016-03-30; SOURCE: Fresno County 2016; compiled by Benchmark Resources in 2016

BENCHMARK RESOURCES

Vicinity Map



NOTES:
1. Vicinity map is not to scale.

Project and Property Data

Legal Description

ALL OF SECTION 27, TOWNSHIP 21 SOUTH, RANGE 16 EAST, MOUNT DIABLO BASE AND MERIDIAN, COUNTY OF FRESNO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PROPERTY:

BEGINNING AT THE SOUTHEAST CORNER OF SECTION 27, TOWNSHIP 21 SOUTH, RANGE 16 EAST, MOUNT DIABLO BASE AND MERIDIAN, THENCE NORTH 0° 12' EAST ALONG THE EAST LINE OF SAID SECTION 27 A DISTANCE OF 143.73 FEET TO A POINT; THENCE NORTH 45° 16' 30" WEST ALONG A LINE PARALLEL TO THE CENTERLINE OF CALIFORNIA STATE HIGHWAY NUMBER 33 AND DISTANT 30 FEET NOTHERLY THEREFROM, A DISTANCE OF 42.08 FEET TO A POINT WHICH IS THE TRUE POINT OF BEGINNING; THENCE NORTH 45° 16' 50" WEST ALONG SAID PARALLEL LINE A DISTANCE OF 432.81 FEET TO A POINT ON A LINE WHICH IS 30 FEET WEST OF AND PARALLEL TO THE EAST LINE OF SAID SECTION 27. THENCE SOUTH 0° 12' WEST ALONG SAID LINE WHICH IS 30 FEET WEST OF AND PARALLEL TO THE EAST LINE OF SAID SECTION 27, A DISTANCE OF 637.24 FEET TO THE TRUE POINT OF THE BEGINNING.

Parcel Data

APN: 085-110-26
Township, Range, Section: T21 South, R16 East, Section 27
Property Address: 45315 Lost Hills Rd Coalinga, CA 93210-9660
Parcel Area: 637.81
Parcel Area within Site: ±298 acres
Zoning District: (AE-20) Exclusive Twenty Acre - Agricultural

Site Owner Information

Owner: Hewitson Farms, Inc.
Address: 39482 Highway 33, Avenal, CA 93204

Permits

Existing Use Permit: CUP 2461-R

LEGEND

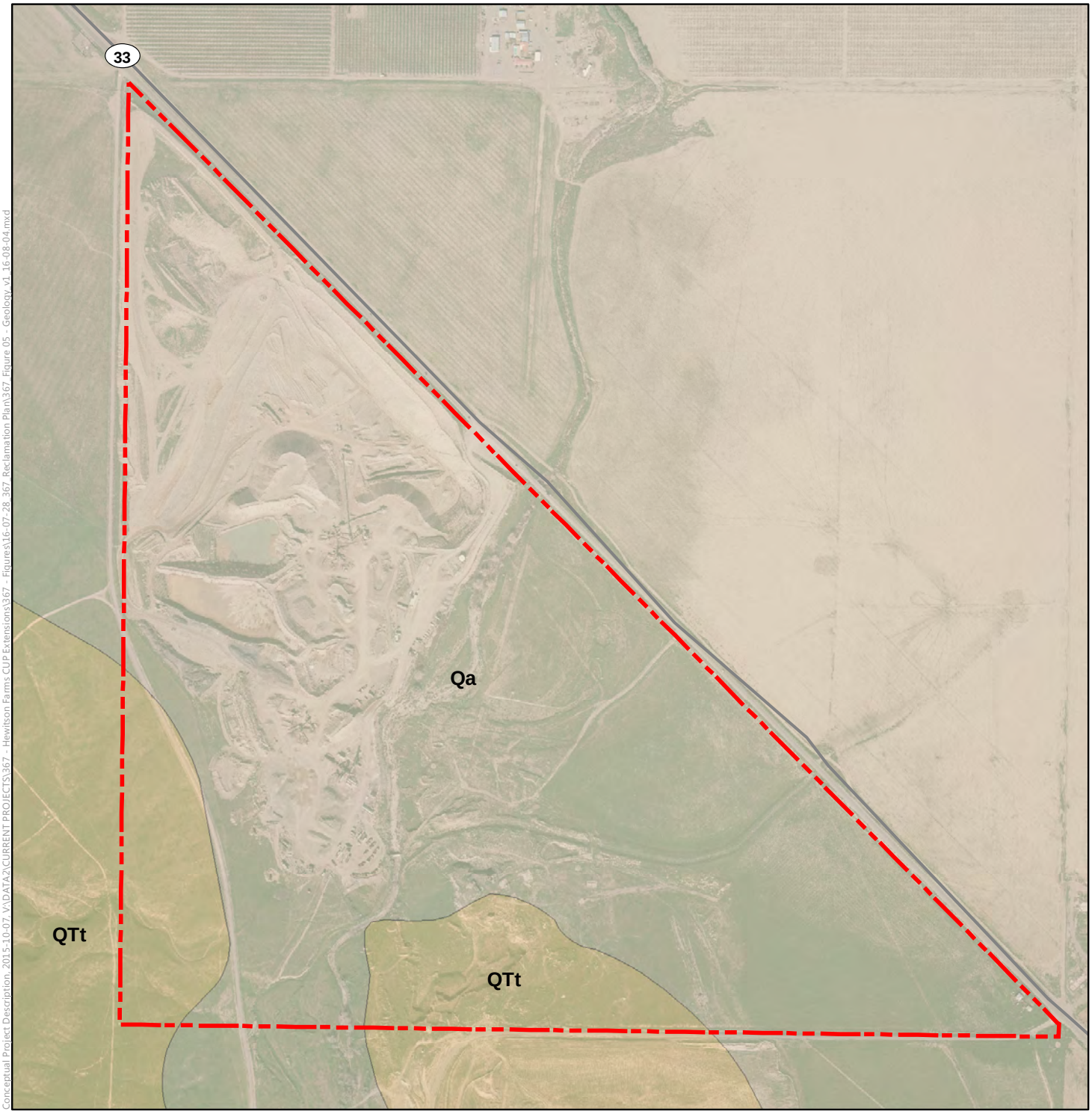
- Property Line
- Access Road
- Parcel Line
- Creek Centerline
- Paved Road
- Dirt Road
- Fence Line
- Fence Line
- 625 Primary Contour Line (25-foot interval)
- 625 Intermediate Contour Line (5-foot interval)
- Sheet Flow
- Existing Berm
- Building
- Vegetation
- Tree Location
- Well Location
- Water Tank
- Utility Post
- Pole

NOTES:
1. The parcel line used to derive the project property boundary (APN 085-110-26) was determined from data collected on-site by a licensed surveyor. All other surrounding parcels were determined using geographical data from the Fresno County website.
2. See Figure 6 for cross sections noted on figure.

Existing Operations Aerial Photograph

HEWITSON GRAVEL MINE

Figure 4



SOURCE: U.S. Geological Survey 2005; Yamabe and Horn Engineering, Inc., Flown 2016-03-30; ESRI World Streetmap (2009); compiled by Benchmark Resources in 2016

LEGEND

- Site Location
- State Route
- Qa — Alluvial gravel, sand and clay of valley areas
- QTt — Alluvial pebble gravel/conglomerate, and sandstone, gray, vaguely bedded, pebbles of white siliceous shale, hard sandstone and few of plutonic rocks and metamorphic rocks in sandy, silty matrix

N

0 400 800 1,200 1,600 Feet

BENCHMARK RESOURCES

Geology

HEWITSON GRAVEL MINE

Figure 5

100-Foot Offset from Highway to Top of Slope

A1

A2

650

1.5:1 Slope

Access

Existing Creek Crossing

25-Foot Creek Setback from Top of Slope

100-Foot Offset from Highway to Top of Slope

North Reserve
±148 acres
Quarry Floor: 490' msl

Ramp

3:1 Slope

A2'

B1

A1'

B2

25-Foot Offset from Top of Creek

Ephemeral Creek

East Reserve
±45 acres
Quarry Floor: 505' msl

3:1 Slope

3:1 Slope

Ramp

SR 33

C1

B2'

Abandoned Irrigation Canal

B1'

C2

Ramp

Existing Creek Crossing

Zapata Creek

South Reserve
±27 acres
Quarry Floor: 580' msl

3:1 Slope

C1'

C2'

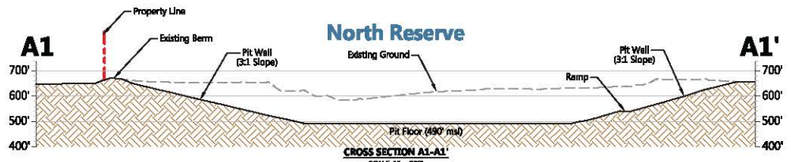
0 300 600 1,200 Feet

BENCHMARK RESOURCES

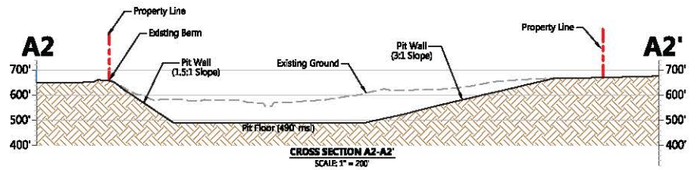
SOURCE: TOPOGRAPHY SURVEY & AERIAL: Yamabe and Horn Engineering, Inc., Flown 2016-03-30; compiled by Benchmark Resources in 2016

V:\DATA\CURRENT PROJECTS\367 - Hewitson Farms CUP Extension\367 - Figures\15-07-28_367 Reclamation Plan

North Reserve

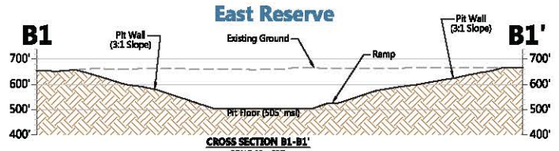


CROSS SECTION A1-A1'
SCALE: 1" = 200'

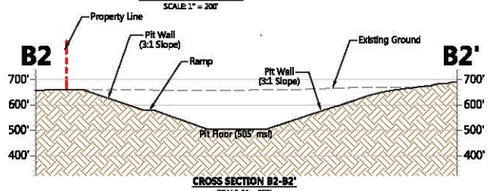


CROSS SECTION A2-A2'
SCALE: 1" = 200'

East Reserve

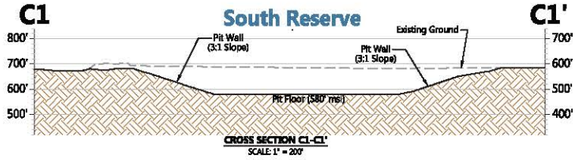


CROSS SECTION B1-B1'
SCALE: 1" = 200'

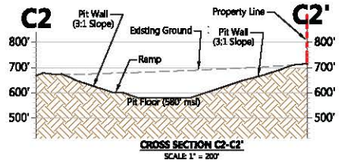


CROSS SECTION B2-B2'
SCALE: 1" = 200'

South Reserve

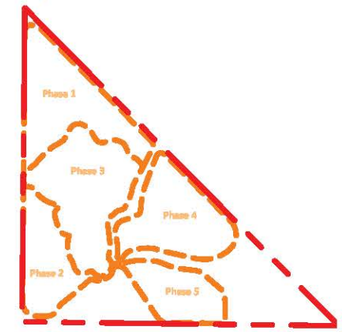


CROSS SECTION C1-C1'
SCALE: 1" = 200'



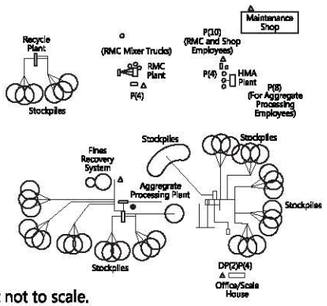
CROSS SECTION C2-C2'
SCALE: 1" = 200'

Mining Phase Map



NOTES:
1. Mining phase map not to scale.

Representative Plant Site Layout



NOTES:
1. Representative plant site layout not to scale.
2. Plant location varies over life of mine.
3. RMC = ready-mix concrete

LEGEND

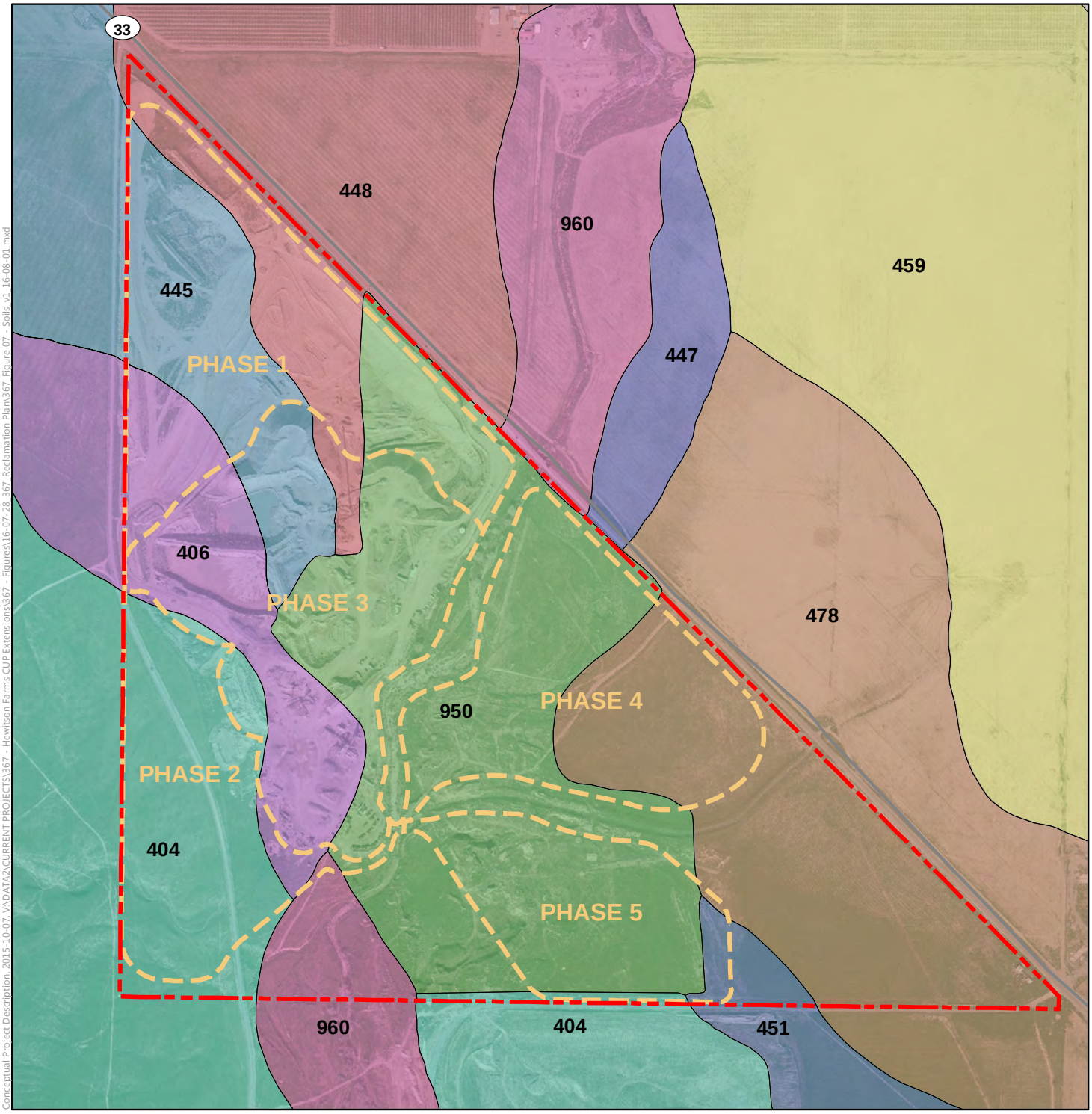
- Property Line
- Phase Boundary
- Surface Disturbace Boundary
- Potential Soil Stockpiles
- Access Road
- Creek Centerline
- Paved Road
- Dirt Road
- Fence Line
- Primary Contour Line (25-foot interval)
- Intermediate Contour Line (5-foot interval)
- Sheet Flow
- Building
- Vegetation
- Tree
- Well
- Water Tank
- Utility Post
- Pole

NOTES:
1. "msl" = mean sea level.
2. Ramp designs are for volume calculations only and do not reflect the final constructed ramp designs.
3. Phase boundaries are subject to change.

Mine Plan

HEWITSON GRAVEL MINE

Figure 6



Conceptual Project Description, 2015-10-07, V:\DATA2\CURRENT PROJECTS\367 - Hewitson Farms CUP Extension\367 - Figures\16-07-28_367_Reclamation Plan\367_Figure 07 - Soils_v1_16-08-01.mxd

SOURCE: USDA 2016; Yamabe and Horn Engineering, Inc., Flown 2016-03-30; ESRI World Streetmap (2009); compiled by Benchmark Resources in 2016

LEGEND

- Site Location
- State Route
- Mining Phase

404	Milham-Guijarral association, 5 to 15% slopes
406	Guijarral sandy loam, 2 to 5% slopes
445	Excelsior sandy loam, 0 to 2% slopes
447	Excelsior sandy loam, sandy substratum, 0 to 2% slopes
448	Excelsior loamy sand, sandy substratum, 0 to 1% slopes, eroded
451	Milham sandy loam, 0 to 2% slopes
459	Ciervo clay, 0 to 2% slopes
478	Cerini sandy loam, 0 to 2% slopes
950	Pits, gravel
960	Excelsior, sandy substratum-westhaven association, flooded, 0 to 2% slopes

N

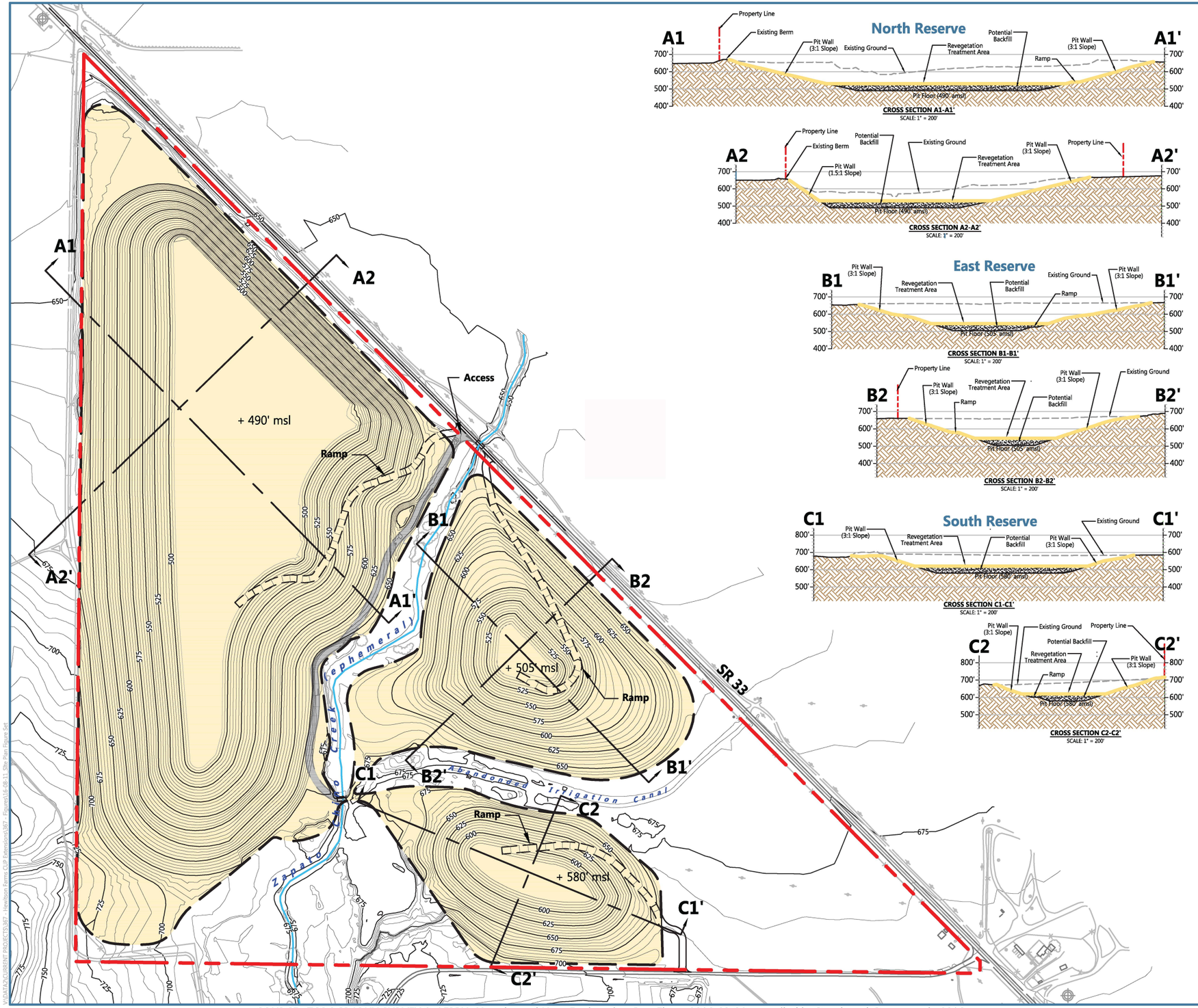
0 400 800 1,200 1,600 Feet

BENCHMARK RESOURCES

Soils

HEWITSON GRAVEL MINE

Figure 7



LEGEND

- Property Line
- Phase Boundary
- Surface Disturbace Boundary
- Access Road
- Creek Centerline
- Paved Road
- Dirt Road
- Fence Line
- Primary Contour Line (25-foot interval)
- Intermediate Contour Line (5-foot interval)
- Building
- Vegetation
- Tree
- Well
- Water Tank
- Utility Post
- Pole

RECLAMATION SUMMARY

Revegetation Treatment Areas	±223 ac
Roads and Surface to Remain	±2 ac

REVEGETATION SEED MIX

Common Name	Latin Name	Pounds PLS Per Acre
Mormon tea	*Ephedra Nevadensis*	4
Cattle spinach	*Atriplex polycarpa*	8
Quailbush	*Atriplex lentiformis*	6
Zorro fescue	*Festuca megalura*	10
Bladderpod	*Isomeris arborea*	6
Dwarf goldfields	*Lasthenia chrysostoma*	2
Pigmy-leafed lupine	*Lupinis bicolor*	5
	TOTAL	**41**

Note: PLS= Pure Live Seed.

NOTES:
1. "msl" = mean sea level.
2. Ramp designs are for volume calculations only and do not reflect the final constructed ramp designs.

N

0 300 600 1,200 Feet

SOURCE: TOPOGRAPHY SURVEY & AERIAL: Yamabe and Horn Engineering, Inc., Flown 2016-03-30; compiled by Benchmark Resources in 2016

BENCHMARK RESOURCES

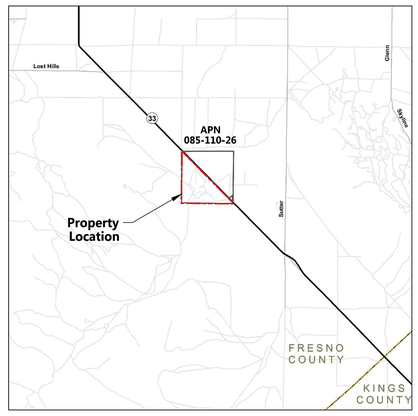
Reclamation Plan

HEWITSON GRAVEL MINE

Figure 8

SHEETS

Vicinity Map



Project and Property Data

Legal Description

ALL OF SECTION 27, TOWNSHIP 21 SOUTH, RANGE 16 EAST, MOUNT DIABLO BASE AND MERIDIAN, COUNTY OF FRESNO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PROPERTY:

BEGINNING AT THE SOUTHEAST CORNER OF SECTION 27, TOWNSHIP 21 SOUTH, RANGE 16 EAST, MOUNT DIABLO BASE AND MERIDIAN, THENCE NORTH 0° 12' EAST ALONG THE EAST LINE OF SAID SECTION 27 A DISTANCE OF 143.73 FEET TO A POINT; THENCE NORTH 45° 16' 30" WEST ALONG A LINE PARALLEL TO THE CENTERLINE OF CALIFORNIA STATE HIGHWAY NUMBER 33 AND DISTANT 30 FEET NOTHERLY THEREFROM, A DISTANCE OF 42.08 FEET TO A POINT WHICH IS THE TRUE POINT OF BEGINNING; THENCE NORTH 45° 16' 50" WEST ALONG SAID PARALLEL LINE A DISTANCE OF 432.81 FEET TO A POINT ON A LINE WHICH IS 30 FEET WEST OF AND PARALLEL TO THE EAST LINE OF SAID SECTION 27. THENCE SOUTH 0° 12' WEST ALONG SAID LINE WHICH IS 30 FEET WEST OF AND PARALLEL TO THE EAST LINE OF SAID SECTION 27, A DISTANCE OF 637.24 FEET TO THE TRUE POINT OF THE BEGINNING.

Parcel Data

APN: 085-110-26
Township, Range, Section: T21 South, R16 East, Section 27
Property Address: 45315 Lost Hills Rd Coalinga, CA 93210-9660
Parcel Area: 637.81
Parcel Area within Site: ±298 acres
Zoning District: (AE-20) Exclusive Twenty Acre - Agricultural

Site Owener Information

Owner: Hewitson Farms, Inc.
Address: 39482 Highway 33, Avenal, CA 93204

Permits

Existing Use Permit: CUP 2461-R

Legend

- Property Line
- Acces Road
- Creek Centerline
- Parcel Line
- Paved Road
- Dirt Road
- Fence Line
- Easement
- 625 Primary Contour Line (25-foot interval)
- 605 Intermediate Contour Line (5-foot interval)
- Existing Sheet Flow
- Existing Berm
- Building
- Vegetation
- Tree
- Well
- Water Tank
- Utility Post
- Pole

NOTES:
1. Vicinity map is not to scale.
2. The parcel line used to derive the project property boundary (APN 085-110-26) was determined from data collected on-site by a licensed surveyor. All other surrounding parcels were determined using geographical data from the Fresno County website.
3. See Sheet 2 for cross sections noted on figure.

TOPOGRAPHY SURVEY & AERIAL: Yamabe and Horn Engineering, Inc., Flown 2016-03-30; SOURCE: Fresno County 2016; compiled by Benchmark Resources in 2016

N

0 100 200 400 600 Feet

BENCHMARK RESOURCES

Existing Conditions

HEWITSON GRAVEL MINE

Sheet 1

North Reserve

CROSS SECTION A1-A1'
SCALE: 1" = 200'

CROSS SECTION A2-A2'
SCALE: 1" = 200'

East Reserve

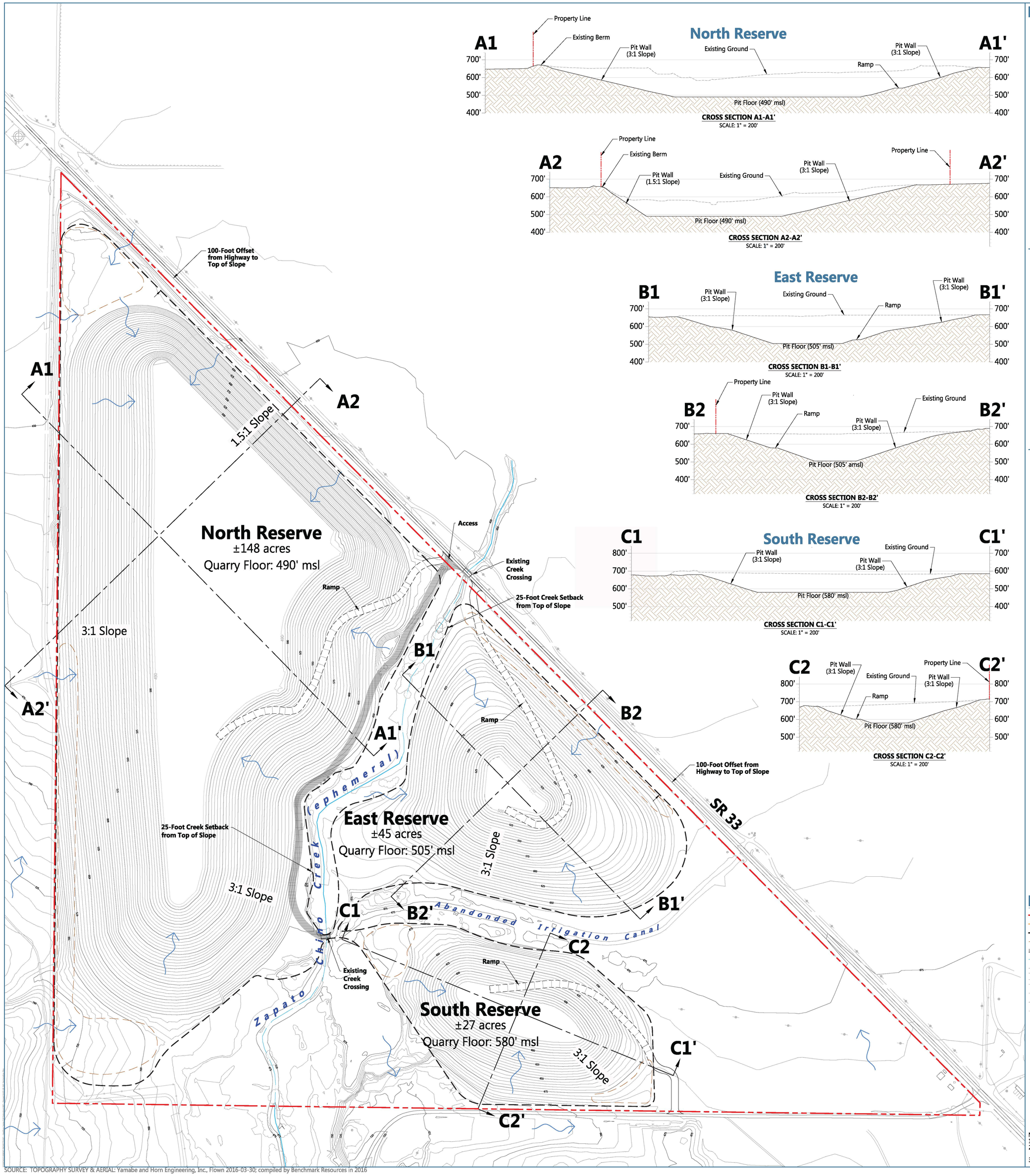
CROSS SECTION B1-B1'
SCALE: 1" = 200'

CROSS SECTION B2-B2'
SCALE: 1" = 200'

South Reserve

CROSS SECTION C1-C1'
SCALE: 1" = 200'

CROSS SECTION C2-C2'
SCALE: 1" = 200'



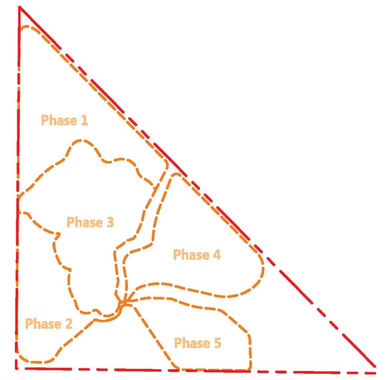
SOURCE: TOPOGRAPHY SURVEY & AERIAL: Yamabe and Horn Engineering, Inc., Flown 2016-03-30; compiled by Benchmark Resources in 2016

N

0 100 200 400 600 Feet

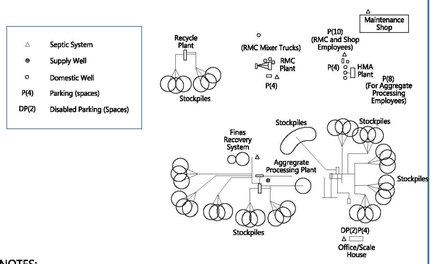
BENCHMARK RESOURCES

Mining Phase Map



NOTES:
1. Mining phase map not to scale.

Representative Plant Site Layout



NOTES:
1. Representative plant site layout not to scale.
2. Plant location varies over life of mine.
3. RMC = ready-mix concrete

LEGEND

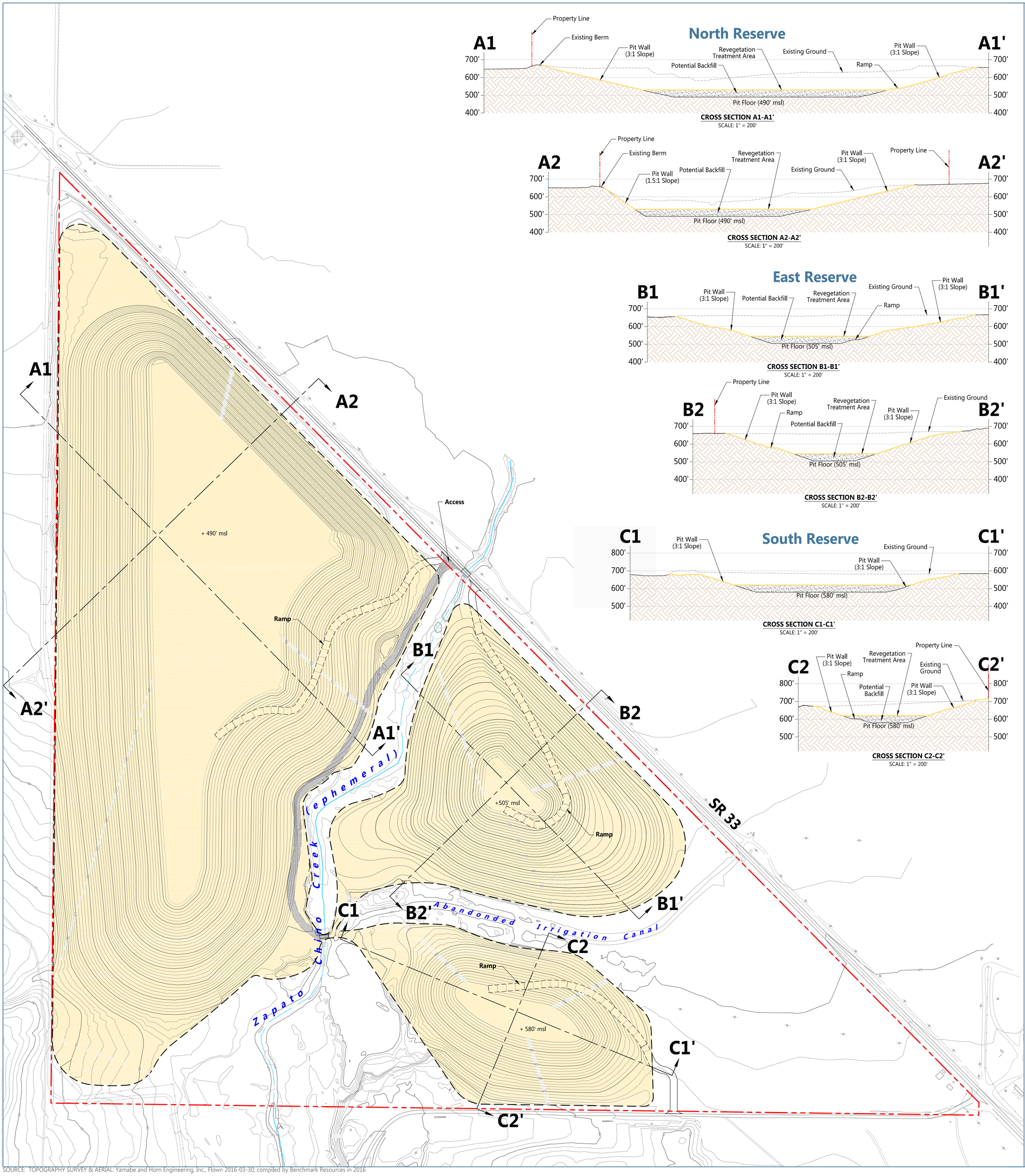
- Property Line
- Phase Boundary
- Surface Disturbace Boundary
- Potential Soil Stockpiles
- Access Road
- Creek Centerline
- Paved Road
- Dirt Road
- Fence Line
- Primary Contour Line (25-foot interval)
- Intermediate Contour Line (5-foot interval)
- Sheet Flow
- Building
- Vegetation
- Tree
- Well
- Water Tank
- Utility Post
- Pole

NOTES:
1. "msl" = mean sea level.
2. Ramp designs are for volume calculations only and do not reflect the final constructed ramp designs.
3. Phase boundaries are subject to change.

Mine Plan

HEWITSON GRAVEL MINE

Sheet 2



North Reserve

CROSS SECTION A1-A1'
SCALE: 1" = 200'

CROSS SECTION A2-A2'
SCALE: 1" = 200'

East Reserve

CROSS SECTION B1-B1'
SCALE: 1" = 200'

CROSS SECTION B2-B2'
SCALE: 1" = 200'

South Reserve

CROSS SECTION C1-C1'
SCALE: 1" = 200'

CROSS SECTION C2-C2'
SCALE: 1" = 200'

LEGEND

- Property Line
- Phase Boundary
- Surface Disturbace Boundary
- Access Road
- Creek Centerline
- Paved Road
- Dirt Road
- Fence Line
- 625 Primary Contour Line (25-foot interval)
- 605 Intermediate Contour Line (5-foot interval)
- Building
- Vegetation
- Tree
- Well
- Water Tank
- Utility Post
- Pole

RECLAMATION SUMMARY

	Revegetation Treatment Areas	±233 acres
	Roads and Surface to Remain	±2 acres

Common Name	Latin Name	Pounds PLS Per Acre
Mormon tea	*Ephedra Nevadensis*	4
Cattle spinach	*Atriplex polycarpa*	8
Quailbush	*Atriplex lentiformis*	6
Zorro fescue	*Festuca megalura*	10
Bladderpod	*Isomeris arborea*	6
Dwarf goldfields	*Lasthenia chrysostoma*	2
Pigmy-leafed lupine	*Lupinis bicolor*	5
	TOTAL	**41**

Note: PLS= Pure Live Seed.

NOTES:
1. "msl" = mean sea level.
2. Ramp designs are for volume calculations only and do not reflect the final constructed ramp designs.

SOURCE: TOPOGRAPHY SURVEY & AERIAL: Yamabe and Horn Engineering, Inc., Flown 2016-03-30; compiled by Benchmark Resources in 2016

N

0 100 200 400 600 Feet

BENCHMARK RESOURCES

Reclamation Plan

HEWITSON GRAVEL MINE

Sheet 3

REFERENCES AND RESOURCES

REFERENCES AND RESOURCES

Fresno County. 2000. *Fresno County General Plan*. Fresno, CA.

CGI Technology Services, Inc. 2015. *Slope Stability Study, Avenal Quarry, Fresno County, California*. Redding, CA. Prepared for Jaxon Enterprises, Redding, CA.

Holland, R. F. 1986 (October). *Preliminary Descriptions of the Terrestrial Natural Communities of California*. California Department of Fish and Game, Sacramento, CA.

NRCS. *See* U.S. Natural Resources Conservation Service.

U.S. Fish and Wildlife Service. 1998. *Recovery Plan for Upland Species of the San Joaquin Valley, California*. Portland, OR.

USFWS. *See* U.S Fish and Wildlife Service.

U.S. Natural Resources Conservation Service. *Soil Survey of Fresno County, California, Western Part*. In cooperation with Regents of the University of California (Agricultural Experiment Station) and U.S. Bureau of Land Management. Washington, D.C.

APPENDIX A
STATEMENT OF RESPONSIBILITY

Name and Address of Owner/Operator
(PRC § 2772(c)(1)):

Hewitson Farms
39482 State Route 33
Avenal, California 93204
Contact: Richard Hewitson
Telephone: (559) 386-5829

Name and Address of Agent
(PRC § 2772(c)(1)):

Papich Construction
800 Farroll Road
Grover Beach, California 93433
Contact: Jason Papich
Telephone: (805) 431-8952

STATEMENT OF RECLAMATION RESPONSIBILITY *(PRC § 2772[c][10]))*

I certify that the information in this reclamation plan is correct, to the best of my knowledge, and that all of the owners of possessory interest in the property in question have been notified of the planned operation and potential uses of the land after reclamation. I also certify that I am authorized on behalf of Hewitson Farms to accept responsibility for reclaiming the mined lands described and submitted herein, with any modification required by Fresno County and agreed to as conditions of approval.

Signed this ___ day of _____, 2016.

_____

Richard Hewitson
for Hewitson Farms (Owner/Operator)

APPENDIX B
SITE LEGAL DESCRIPTION

SITE LEGAL DESCRIPTION

All of Section 27, Township 21 South, Range 16 East, Mount Diablo Base and Meridian, County of Fresno, State of California, according to the official plat thereof, excepting therefrom the following described property:

Beginning at the southeast corner of Section 27, Township 21 South, Range 16 East, Mount Diablo Base and Meridian, thence north 0° 12' east along the east line of said section 27 a distance of 143.73 feet to a point; thence north 45° 16' 30" west along a line parallel to the centerline of California State Highway Number 33 and distant 30 feet northerly therefrom, a distance of 42.08 feet to a point which is the true point of beginning; thence north 45° 16' 50" west along said parallel line a distance of 432.81 feet to a point on a line 30 feet west of and parallel to the east line of said Section 27. Thence south 0° 12' west along said line which is 30 feet west of and parallel to the east line of said Section 27, a distance of 637.24 feet to the true point of the beginning.

APPENDIX C
SLOPE STABILITY EVALUATION

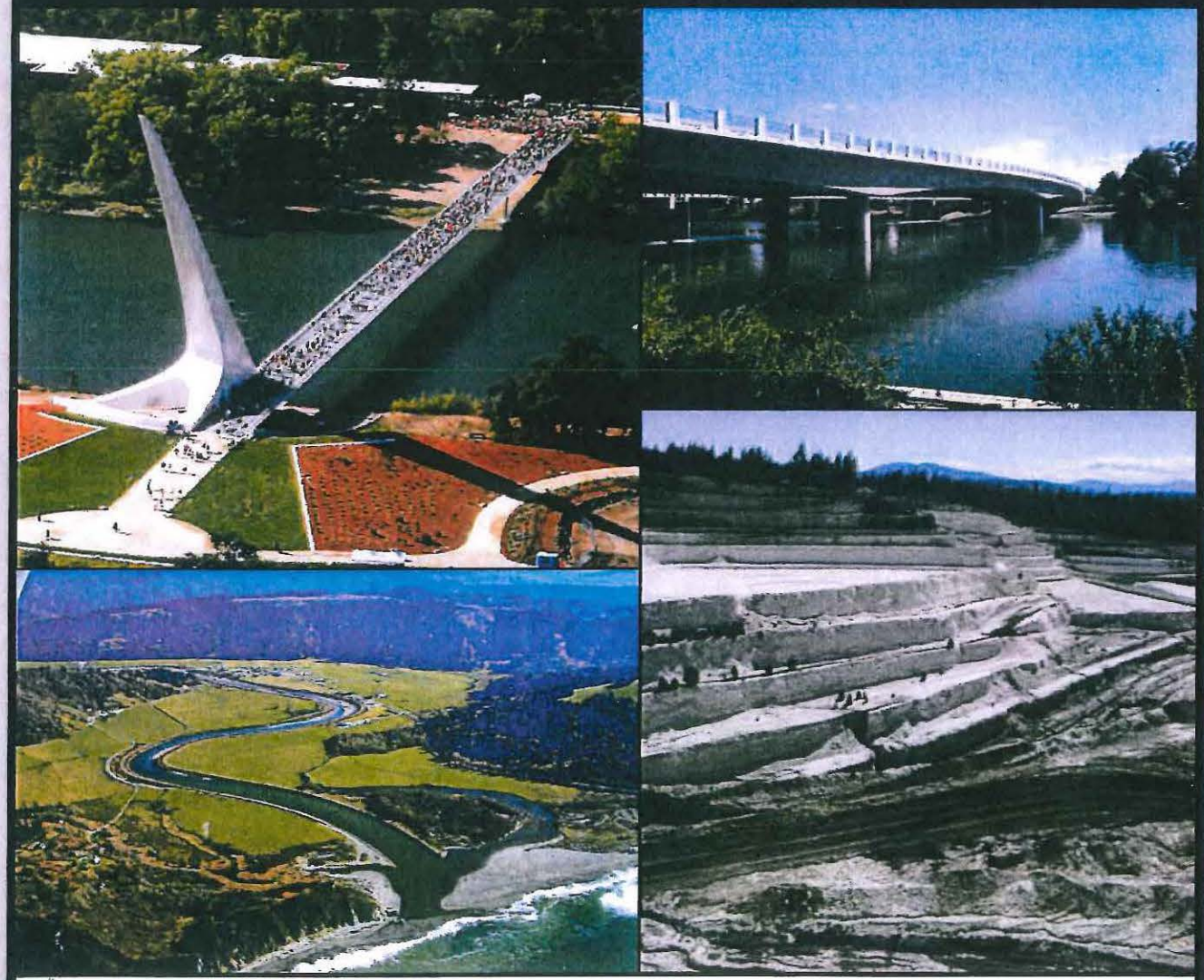
SLOPE STABILITY STUDY

AVENAL QUARRY

FRESNO COUNTY, CALIFORNIA

Prepared For:

Jaxon Enterprises



CGI TECHNICAL SERVICES INC.

CGI TECHNICAL SERVICES INC.

December 4, 2014
CGI: 14-1011.232

Mr. Jack Baker
JAXON ENTERPRISES
1643 Tahoe Court
Redding, California 96003

Subject: **Avenal Quarry Slope Stability Evaluation**
Fresno County, California

Dear Mr. Baker:

CGI Technical Services, Inc. (CGI), is pleased to present this geotechnical study evaluating slope stability within a specific area within the Avenal Quarry located in Fresno County, California. This study presents our findings, conclusions, and recommendations from our evaluations, along with topographic data for the area of study.

We appreciate the opportunity to assist you with this plan and estimate. If you have any questions pertaining to information presented herein, or if we may be of further service, please contact us at (530) 244-6277 at your earliest convenience.

Regards,

CGI TECHNICAL SERVICES, INC.

REGISTERED GEOLOGIST
JAMES A. BIANCHIN
EG NO. 1644
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
AZEDDINE BAHLOUL
GE 2847
GEOTECHNICAL
STATE OF CALIFORNIA

James A. Bianchin, P.G., C.E.G.
Senior Engineering Geologist

Azeddine Bahloul, P.E., G.E.
Senior Geotechnical Engineer

1612 Wedding Way
Redding, CA 96003
Ph: 530.244.6277
Fax: 530.244.6276

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FRESNO COUNTY, CALIFORNIA

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FRESNO COUNTY, CALIFORNIA

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Plate 6 ..... Regional Geologic Map
Plate 7 ..... Slope Reconstruction Plan

APPENDICES

Appendix A ..... Laboratory Testing
Appendix B ..... Slope Stability Analyses

1 GENERAL

CGI Technical Services, Inc. (CGi), is pleased to submit this report to Jaxon Enterprises discussing our findings, conclusions, and recommendations for our slope stability evaluations at the Avenal Quarry site located in Fresno County, California. The study location is shown on Plate 1 – Site Location Map. The following report discusses our understanding of the project, observations during site visits, and conclusions and recommendations made during this study.

1.1 PROJECT UNDERSTANDING

We understand that the quarry slope located adjacent to State Route 33 (South Lost Hills Road) was excavated at an angle that is inclined steeper than the reclamation plan specifies for the project site. We understand that this has caused concern from the quarry land owner and by the Fresno County, who oversees mine reclamation activities at the site. The location of the slope of concern is shown on Plate 2 – Study Area.

1.2 STUDY PURPOSE

This study was performed to evaluate the maximum acceptable slope inclination for a specific portion of the Avenal Quarry site for use in reclaiming that portion of the quarry.

1.3 PROJECT LOCATION

The project is located in unincorporated Fresno County, north of the City of Avenal and south of Coalinga, on the west side of Highway 33, as shown on Plate 1. The latitude and longitude for the approximate center of the subject slope are as follows:

PROJECT LOCATION			
Location		Latitude	Longitude
Approximate Center of Subject Slope	Degrees, Minutes, Seconds	36° 4' 29.6"	-120° 13' 52.7"
	Decimal Degrees	36.074890°	-120.231295°

1.4 PREVIOUS WORK PERFORMED & REFERENCES REVIEWED

We know of no site specific geotechnical nor slope stability evaluations that have been performed at the site. Geologic information has been published for the project region and was referenced during this study. Those references are cited within the text and referred to in Section 6 of this report.

1.5 SCOPE OF SERVICES

Our scope of services performed for this study included:

- Reconnaissance of the site surface conditions, topography, and existing drainage

features;

- Attempted acquisition of existing, available geotechnical data relevant to the project site;
- Review of pertinent, selected regional geological data;
- Preparation of a topographic map of the subject slope. That map is presented as Plate 3 – Slope Topography.
- Performance of laboratory testing on selected samples obtained during our field investigation. Laboratory test procedures and results of those tests are presented in Appendix A – Laboratory Testing;
- Preparation of this report, which includes:
    - A description of the study purpose;
    - A summary of our field observations and laboratory testing program;
    - A description of site surface and subsurface conditions encountered during our site visit;
    - Probabilistic estimates of horizontal strong ground motion that might affect the site;
    - A geotechnical map showing surface geology and cross section locations is presented as Plate 4 – Geotechnical Map; The cross section evaluated for this study is shown on Plate 5 – Geotechnical Cross Section;
    - Performance of slope stability evaluations for the site. Methods used to perform our evaluations and results of the analyses are presented in Appendix B – Slope Stability;
    - Geotechnical recommendations for:
        - The maximum slope inclination at the site to meet current engineering standards; and
        - Recommendations for placement of engineered fill materials at the site.
    - Appendices that present a summary of our slope stability analysis and laboratory testing programs.

2 FINDINGS

2.1 SITE CONDITIONS

2.1.1 Surface Conditions

The project site is an active aggregate quarry. Portions of the quarry southwest of the study area are currently being mined and the aggregate processed. As such, the project area contains numerous haul roads, materials stockpiles, working excavation faces, processing machinery, and scales/office.

The subject slope site was not being actively mined or graded at the time of our site visit and, based on the scattered vegetative growth in the area, apparently had not been disturbed for quite some time. The area was fallow with scattered vegetative growth. At the quarry floor beneath the slope, windrows, low soil mounds, and other signs of prior grading were observed. In general, the quarry floor is relatively flat and is inclined at less than about 5 degrees to the southwest.

The study slope is southwest facing, ranges in height from 60 to 80 feet, and ranges in inclination from about 26 degrees to vertical, as shown on Plate 2. The slope is fallow and has very sparse growth of seasonal vegetation. The slope varies from exposing a near-vertical cut face to being draped with more moderately inclined tailings.

Above the slope is a narrow bench that separates the slope from a berm extending along Highway 33 for the length of the quarry, except at the quarry entrance gate. The bench ranges in width from about 8 to 15 feet. The easterly toe of the berm is generally located about 45 feet from Highway 33. That space between berm and roadway contains pipeline easements and a barbed-wire fence, both of which were parallel to the highway. The berm ranges in height from about 15 to 17 feet and has slopes inclined at up to about 33 degrees. Both the berm and bench are fallow with almost no vegetative growth to areas where extensive tumbleweed and seasonal vegetative growth cover the soil.

2.1.2 Subsurface Conditions

Aggregate materials being mined from the site and exposed in the steeper portion of the subject slope consist of alluvium and older alluvium (Chin et al, 1993). Those sediments consist of moderate grey to light brown, partially cemented, sandy gravel with abundant fine to coarse subrounded to rounded cobbles with some boulders. Those materials are thinly to thickly bedded and locally contain lenses of fine to coarse cross bedded sands. In addition, trace thin layers of sandy silt were observed periodically in outcrops mapped during this study.

2.2 GEOLOGIC CONDITIONS

2.2.1 Regional Geology

The project site is located in the San Joaquin Valley within the Great Valley Physiographic province. The Great Valley province is bordered to the north by the Klamath and Cascade Physiographic provinces, to the east by the Cascade and Sierra Nevada Physiographic provinces, to the west by the Klamath and Coast Ranges Physiographic provinces, and to the south by the Transverse Ranges Physiographic province.

The Great Valley Physiographic province is about 50 miles wide and 400 miles long. The San Joaquin Valley, which forms the southern portion of the province, is about 150 miles long and 40 miles wide (Hinds, 1952). According to Hackel (1966), "The Great Valley is a large elongate northwest-trending asymmetric structural trough that has been filled with a tremendously thick sequence of sediments ranging from Jurassic to recent." Sediment thicknesses of up to 10 miles are reported within the San Joaquin Valley (Hackel, 1966). Sediments within the Great Valley consist of both marine and continental deposits, with most of the sediments underlying the project area consisting of continental deposits.

2.2.2 Local Geologic Setting

As previously noted, the project site is underlain by Holocene-age alluvium and Plio-Pleistocene-age older alluvium (Chen et al., 1993), as shown on Plate 6 – Regional Geologic Map. The alluvial sediments are relatively recent soils that are present near the ground surface. The older alluvium underlies the alluvium and extends to the quarry bottom without being fully penetrated.

Artificial fill is also present locally on slopes and at other locations within the quarry. Those materials consist of reworked older alluvium excavated at the site.

2.2.3 Groundwater

Groundwater was not observed seeping from quarry slopes nor exposed in the quarry bottom. The depth to groundwater beneath the site is unknown but anticipated to be relatively deep. For instance, groundwater depths at a well site located about 3,000 feet southwest of the site (Well No. 36069N1202227W001; DWR, 2014) have not been closer than 300 feet to the ground surface during a monitoring period from 1981 to the present. Therefore, we do not anticipate groundwater to be a factor in slope stability at the site.

2.2.4 Seismic Setting

The State of California designates faults as active, potentially active, and inactive depending on the recency of movement that can be substantiated for a fault. Fault activity is rated as follows:

FAULT ACTIVITY RATINGS		
Fault Activity Rating	**Geologic Period of Last Rupture**	**Time Interval (Years)**
Active	Holocene	Within last 11,000 Years
Potentially Active	Quaternary	>11,000 to 1.6 Million Years
Inactive	Pre-Quaternary	Greater than 1.6 Million Years

The California Geologic Survey (CGS) evaluates the activity rating of a fault in fault valuation reports (FER). FERs compile available geologic and seismologic data and evaluate if a fault should be zoned as active, potentially active, or inactive. If an FER evaluates a fault as active, then it is typically incorporated into a Special Studies Zone in accordance with the Alquist-Priolo Earthquake Hazards Act (AP). AP Special Studies Zones require site-specific evaluation of fault location and require a structure setback if the fault is found traversing a project site.

The site is not located within an Alquist-Priolo Earthquake Fault Zone and no active faults are known to pass through the project site (Jennings, 1994; Hart & Bryant, 1997). The closest mapped fault is the inactive Waltham Canyon fault located about 8.5 miles southwest of the site. The closest active fault is the San Andreas fault located about 17 miles southwest of the site.

2.2.5 Probabilistic Estimates of Strong Ground Motion

Probabilistic evaluations of horizontal strong ground motion that could affect the site were performed using attenuation evaluation methods provided by the U.S. Geological Survey (USGS, 2014). Because the site is underlain by older alluvial soils, the evaluations were performed using an estimated shear wave velocity in the upper 100 feet (V_{S30}) of the soil column of 270 meters per second. Evaluations were performed for design-basis (DBE) probabilistic exposures. The DBE corresponds to horizontal ground accelerations having a 10 percent probability of exceedance in a 50-year, with a statistical return period of 475 years.

The results of these evaluations are presented in the following table:

PROBABILISTIC GROUND MOTION DATA				
Earthquake Level	**Probabilistic Estimate Exposure Period (years)**	**Probability of Exceedance (%)**	**Return Period (years)**	**Estimated Peak Horizontal Ground Acceleration (g)**
Design-Basis Ground-Motion	50	10	475	0.44

It should be noted that although the seismic hazard models used for this study predict the

probability of exceedance for various levels of acceleration in a given exposure period, the models are not able to account for the effect that the passage of time since past earthquakes has on future earthquake probability. Thus, while time may affect the incipient risk of earthquakes occurring, the UBE and DBE values are based on any 100-year and 50-year exposure period, respectively, regardless of how recently earthquakes have occurred.

2.2.6 Liquefaction and Lateral Spreading

Liquefaction is described as the sudden loss of soil shear strength due to a rapid increase of soil pore water pressures caused by cyclic loading from a seismic event. In simple terms, it means that a liquefied soil acts more like a fluid than a solid when shaken during an earthquake. In order for liquefaction to occur, the following are needed:

- Granular soils (sand, silty sand, sandy silt, and some gravels);
- A high groundwater table; and
- A low density in the granular soils underlying the site.

If those criteria are present, then there is a potential that the soils could liquefy during a seismic event.

The adverse effects of liquefaction include local and regional ground settlement, ground cracking and expulsion of water and sand, the partial or complete loss of bearing and confining forces used to support loads, amplification of seismic shaking, and lateral spreading. In general, the effects of liquefaction on the proposed project could include:

- Lateral spreading;
- Vertical settlement; and/or
- The soils surrounding lifelines can lose their strength and those lifelines can become damaged or severed.

Lateral spreading is defined as lateral earth movement of liquefied soils, or soil riding on a liquefied soil layer, down slope toward an unsupported slope face, such as a creek bank, or an inclined slope face. In general, lateral spreading has been observed on low to moderate gradient slopes, but has been noted on slopes inclined as flat as one degree.

The project area is underlain by dense granular soils with groundwater more than 50 feet below the ground surface. Thus, it is our opinion that liquefaction poses no risk to slope stability at the site.

3 SLOPE STABILITY EVALUATIONS

The stability of a slope or landslide is dependent upon the balance of forces driving and resisting slope failure. Those forces are based upon a wide range of geological and physical influences, of which the most significant are:

- Surface slope geometry;
- Subsurface soil or rock profiles;
- Strength of underlying earth materials; and
- Hydrogeologic conditions within the slope.

Earthquake forces and surcharge loads also can greatly affect slope stability; however, for this study they have been omitted because they do not appear to have been an influence in the subject landslide.

The following sections discuss the influences noted above and the results of our stability analyses.

3.1 SURFACE SLOPE GEOMETRY

Topographic maps of the project site were obtained using photogrammetric methods, including twelve ground control points. The topography of the site is shown on Plate 2. The location of the cross section evaluated for this study is shown on Plate 3.

3.2 SUBSURFACE PROFILE

Subsurface geological conditions within the subject quarry slope were estimated through field mapping of the exposed quarry slope face at the site. A near-vertical quarry cut slope provided good exposure to a cross section of the alluvial and older alluvial soils from which the subject slope is composed. That exposure presents more information than conventional drill hole exploration. No additional subsurface information was available for use during this study.

3.3 EARTH MATERIAL SHEAR STRENGTHS

Strength properties of soil materials exposed within the subject slope wall were estimated from laboratory testing and from back-calculation of shear strengths performed using stability analyses. The laboratory determined shear strength of artificial fill materials composed of on-site soils found that on-site granular soils that were remolded to 90 percent relative compaction and screened of all particles greater in diameter than the No. 4 sieve had a cohesion of 200 psf and an angle of internal friction (Ø) of 40 degrees. Back calculated strengths of the undisturbed natural soils exposed in the subject slope had a cohesion of 650 psf and a Ø of 36 degrees. The back-calculation analyses are presented in Appendix B. The laboratory test results are presented in Appendix A.

3.4 HYDROGEOLOGIC CONDITIONS

As noted in Section 2.2.3, groundwater is reported at depths exceeding 300 feet below the natural ground surface. Because the quarry bottom is at a depth of about 95 feet below the natural ground surface, the depth to water is in excess of 200 feet below the quarry bottom. Thus, the slope stability modeling was performed with no phreatic surface within the model.

3.5 SLOPE STABILITY EVALUATIONS

A number of slope stability evaluations were performed to estimate the factor of safety (FOS) against slope failure for a number of scenarios. The FOS is estimated by calculating the forces resisting slope failure divided by the forces causing slope failure. Thus, a FOS of greater than 1 implies a stable slope, a FOS of less than 1 a slope that is failing, and a FOS of 1, a slope that is on the verge of failure. The following sections discuss the scenarios modeled in our stability analyses and the estimated FOS results obtained. Results of those scenarios are presented in Appendix B.

3.5.1 Slope Stability Model Scenarios

Slope stability models were performed for the following scenarios:

- Of the existing slope to back calculate the soil shear strength necessary to achieve a FOS of 1.0 under static conditions; and
- The maximum slope inclination under which the slope will have a minimum static and pseudostatic FOS of 1.5 and 1.01, respectively. The pseudostatic force used in analyses was 0.19g horizontal loading, which was estimated based on CGS (2008).

Results of those analyses are presented in Appendix B.

3.5.2 Results of Slope Stability Analyses

The following table summarizes the results of the analyses performed for this study:

RESULTS OF STABILITY ANALYSES		
Scenario	**Result**	
Existing Slope – Back Calculation of Soil Strength	**Cohesion (psf)**	**Angle of Internal Friction (Ø)**
	650	36
Maximum Slope Inclination 1.5:1 (34°)	**Factor of Safety**	
	Static	**Pseudostatic**
	1.5	1.1

4 CONCLUSIONS AND RECOMMENDATIONS

4.1 MAXIMUM SLOPE INCLINATIONS

Recommendations presented, herein, are based upon our understanding of the proposed project, as discussed in Section 1.1 of this report. Changes in the project as described may require supplemental recommendations.

Based on stability analyses and laboratory testing performed for this study, slopes inclined at maximum inclinations of 1.5:1 (34 degrees) have a FOS exceeding 1.5 and 1.01 for static and pseudostatic conditions, which are minimum stipulated values specified by CGS (2008).

Thus, we recommend that slopes along the area of concern be constructed no steeper than 1.5:1. Locations where this construction is anticipated to be necessary are shown on Plate 7 – Slope Reconstruction Plan.

4.2 CONSTRUCTION RECOMMENDATIONS

4.2.1 Keying & Benching

It is anticipated that keyways will not be necessary within the quarry bottom due to the relatively flat inclinations of slopes that will be receiving engineered fill materials.

Benches should be established where proposed engineered fill materials tie into the existing slope. Benching should be performed to remove loose artificial fill materials located on the existing slope and should extend a minimum of five feet into older alluvial materials, except where the existing slope is inclined at a near vertical angle. Where existing slopes are inclined at near vertical angles and expose older alluvium, we recommend that the upper five feet of those slopes be benched. The remainder of the near vertical slope located below the upper five feet does not have to be benched.

4.2.2 Site Drainage

Finished grading should be performed in such a manner that provides positive surface gradient away from all slopes. The ponding of water should not be allowed above or on the slopes, or at the base of engineered fill materials. Surface runoff should be directed toward engineered collection systems or suitable discharge areas and not allowed to flow onto or over slopes.

4.2.3 On-Site Soil Materials

It is our opinion that most on-site granular soils can be used for general engineered fill provided it is free of oversize fragments, organics, debris, and deleterious materials. Those soils should have no more than 50 percent passing the No. 4 sieve and 15 percent passing the No. 200 sieve. It is recommended that oversize materials exceeding 12 inches in maximum dimension be excluded from engineered fills.

4.2.4 Settlement

Settlement of engineered fill materials placed during this project will occur over time. It is anticipated that the engineered fill materials will settle faster and have a greater settlement magnitude compared to the undisturbed natural soils. The result of this will likely manifest as cracks located at the contact or above the hinge point of where the engineered fill materials contact the undisturbed older alluvium. That cracking should not imply imminent slope failure; however, it is recommended that periodic maintenance of the slope be performed and any cracks observed be filled, as necessary.

5 LIMITATIONS

This report has been prepared in substantial accordance with the generally accepted geotechnical engineering practice, as it existed in the site area at the time our services were rendered. No other warranty, either express or implied, is made.

Conclusions and recommendations contained in this report were based on the conditions encountered during our field investigation and are applicable only to those project features described herein (see Section 1.1 – Project Understanding). Soil and rock deposits can vary in type, strength, and other geotechnical properties between points of observation and exploration. Additionally, groundwater and soil moisture conditions can also vary seasonally and for other reasons. Therefore, we do not and cannot have a complete knowledge of the subsurface conditions underlying the project site. The conclusions and recommendations presented in this report are based upon the findings at the points of exploration, and interpolation and extrapolation of information between and beyond the points of observation, and are subject to confirmation based on the conditions revealed by construction. If conditions encountered during construction differ from those described in this report, or if the scope or nature of the proposed construction changes, we should be notified immediately in order to review and, if deemed necessary, conduct additional studies and/or provide supplemental recommendations. When final site design plans (grading, foundation, retaining walls, etc.) become available, CGI should have the opportunity to review the plans to ensure the recommendations presented in this report remain valid and applicable to the proposed project.

Recommendations provided in this report are based on the assumption that CGI will be retained to provide testing and observation during the construction phase in order to evaluate compliance with our recommendations.

The scope of services provided by CGI for this project did not include the investigation and/or evaluation of toxic substances, or soil or groundwater contamination of any type. If such conditions are encountered during site development, additional studies may be required. Further, services provided by CGI for this project did not include the evaluation of the presence of critical environmental habitats or culturally sensitive areas.

This report may be used only by our client and their agents and only for the purposes stated herein, within a reasonable time from its issuance. Land use, site conditions, and other factors may change over time that may require additional studies. In the event significant time elapses between the issuance date of this report and construction, CGI shall be notified of such occurrence in order to review current conditions. Depending on that review, CGI may require that additional studies be conducted and that an updated or revised report is issued.

Any party other than our client who wishes to use all or any portion of this report shall notify CGI of such intended use. Based on the intended use as well as other site-related factors, CGI may require that additional studies be conducted and that an updated or revised report be issued. Failure to comply with any of the requirements outlined above by the client or any other party shall release CGI from any liability arising from the unauthorized use of this report.

- ♦ -

6 REFERENCES

California Geological Survey (2008), Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication 117A, 97 p.

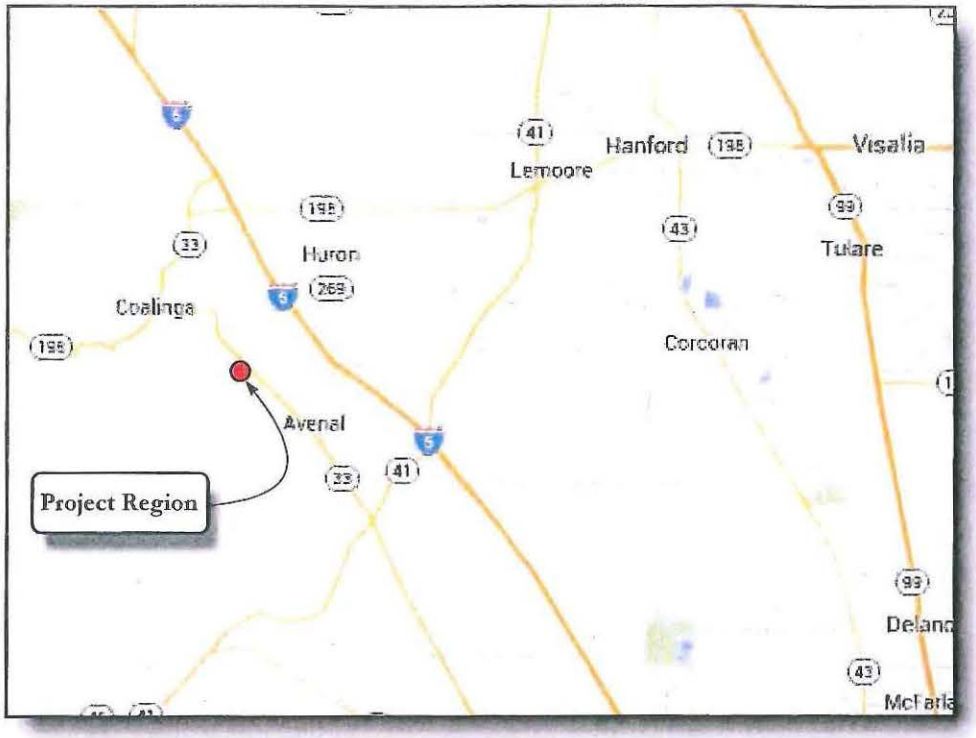
Chin, J.L., Morrow, J.R., Ross, C.R., and Clifton, H.E. (1993), Geologic Maps of Upper Cenozoic Deposits in Central California, U.S. Geological Survey Miscellaneous Investigations Series Map I-1943, Scale 1:250,000.

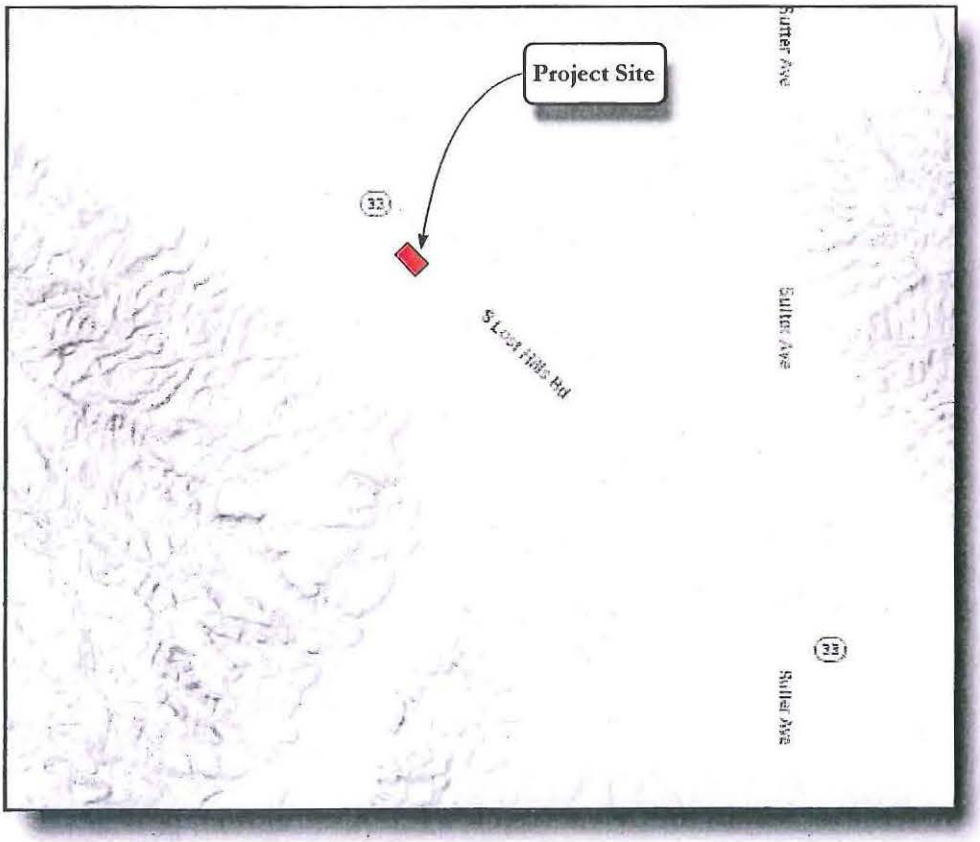
Hart, E.W. and Bryant, W.A. (1997), Fault-Rupture Zones in California, Alquist-Priolo Earthquake Fault Zoning Act with Index to Earthquake Fault Zone Maps, California Division of Mines and Geology Special Publication 42, with supplements 1 and 2 added in 1999, 38 p.

Helley, E.J. and Hardwood, D.S. (1985), Geologic Map of the Late Cenozoic Deposits of the Sacramento Valley and Northern Sierran Foothills, California, United States Geological Survey, Miscellaneous Field Studies Map MF-1790, scale 1:62,500.

Hinds, N.E. (1952), Evolution of the California Landscape, California Division of Mines and Geology Bulletin 158, pp 145-152.

Jennings, C.W. (1994), Fault Activity Map of California and Adjacent Area, with Locations and Ages of Recent Volcanic Eruptions, California Division of Mines and Geology, Geologic Data Map No. 6, Scale 1:750,000.

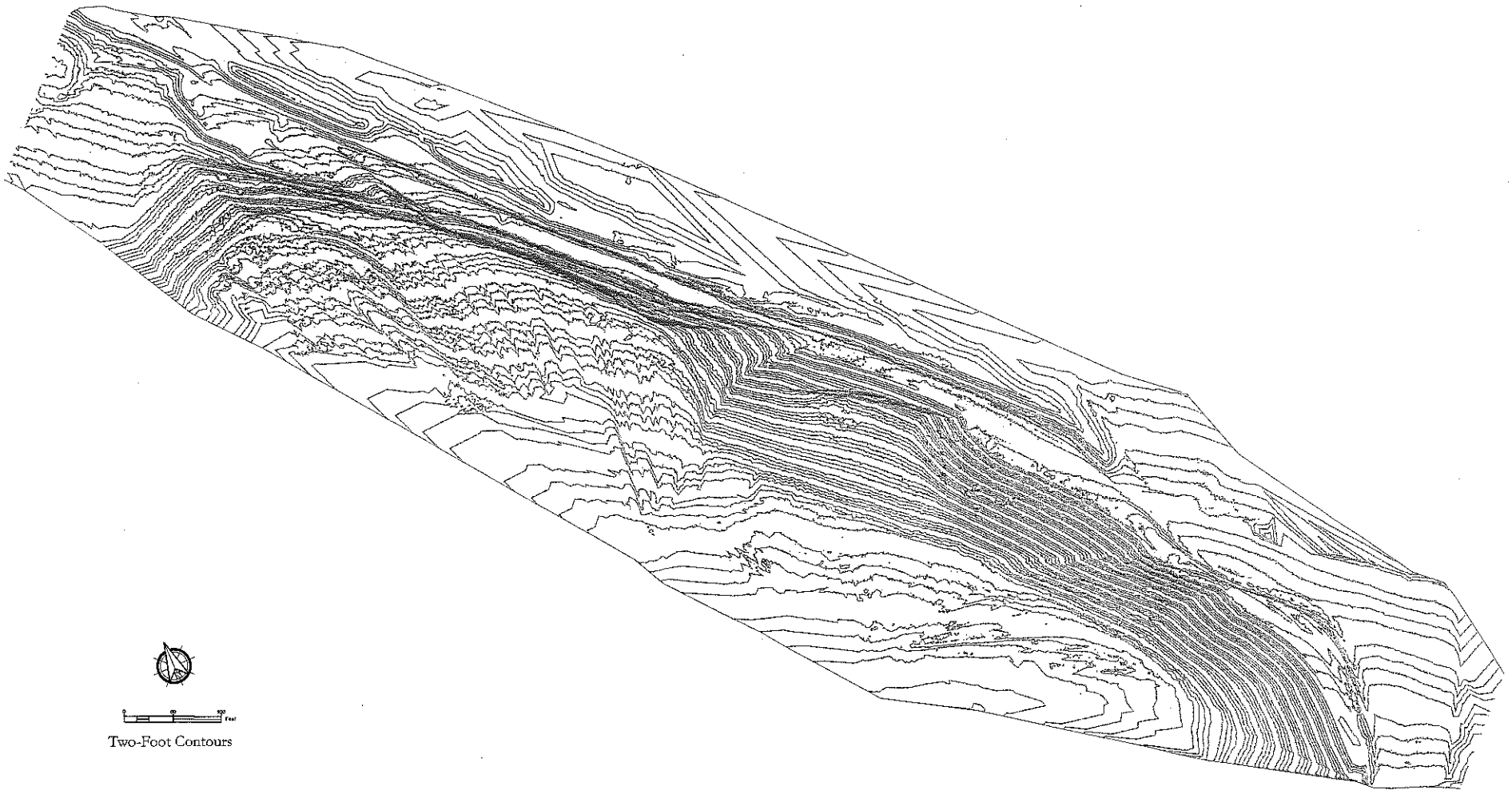




CGI Technical Services Inc. Project No.: 14-1011.232	SITE LOCATION MAP AVENAL QUARRY JAXON ENTERPRISES FRESNO COUNTY, CALIFORNIA	Plate 1

Scale Not Determined

CGI Technical Services Inc.	STUDY AREA AVENAL QUARRY JAXON ENTERPRISES FRESNO COUNTY, CALIFORNIA	Plate 2
Project No.: 14-1011.232		



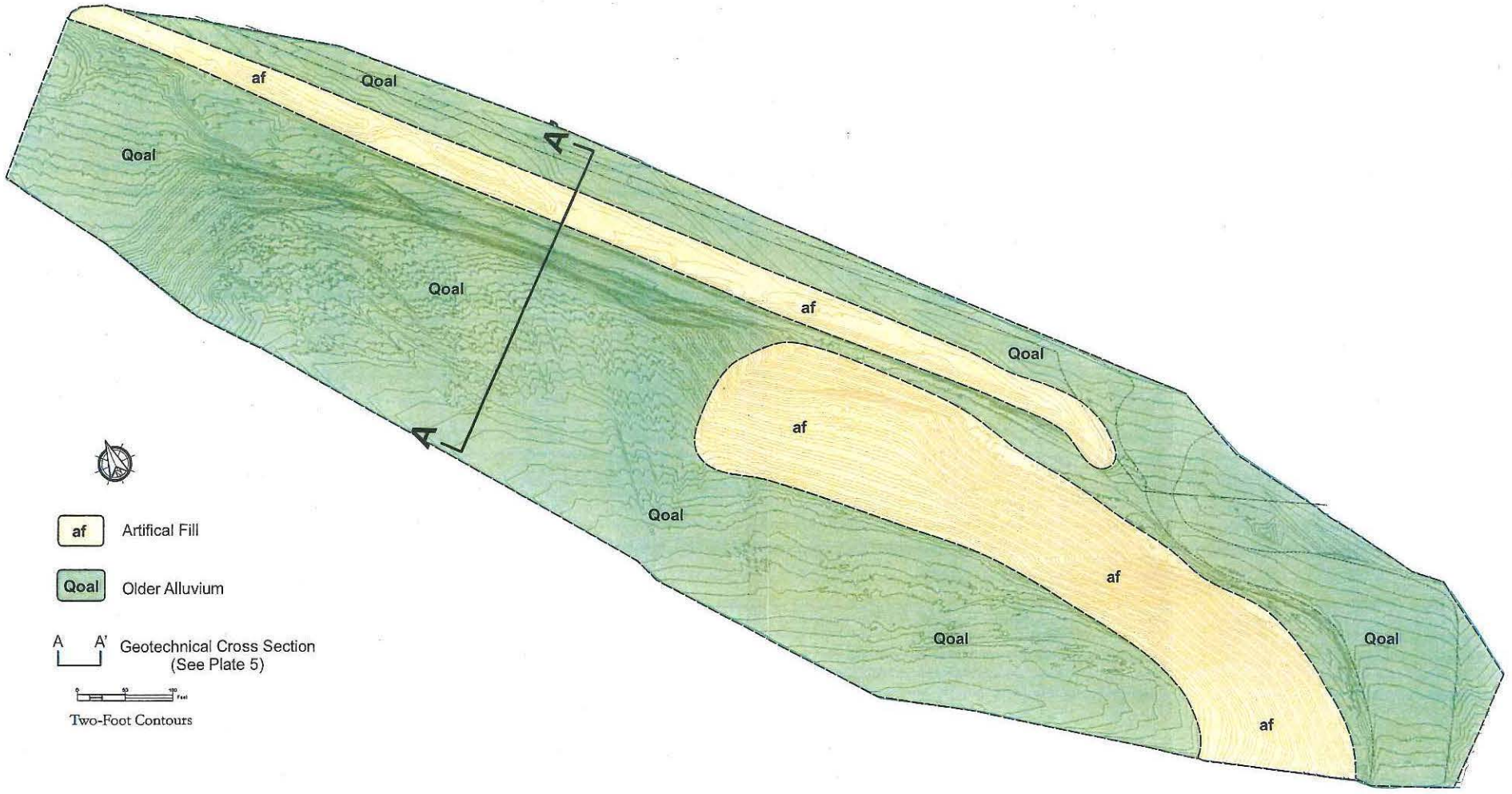
Two-Foot Contours

CGI Technical Services Inc.

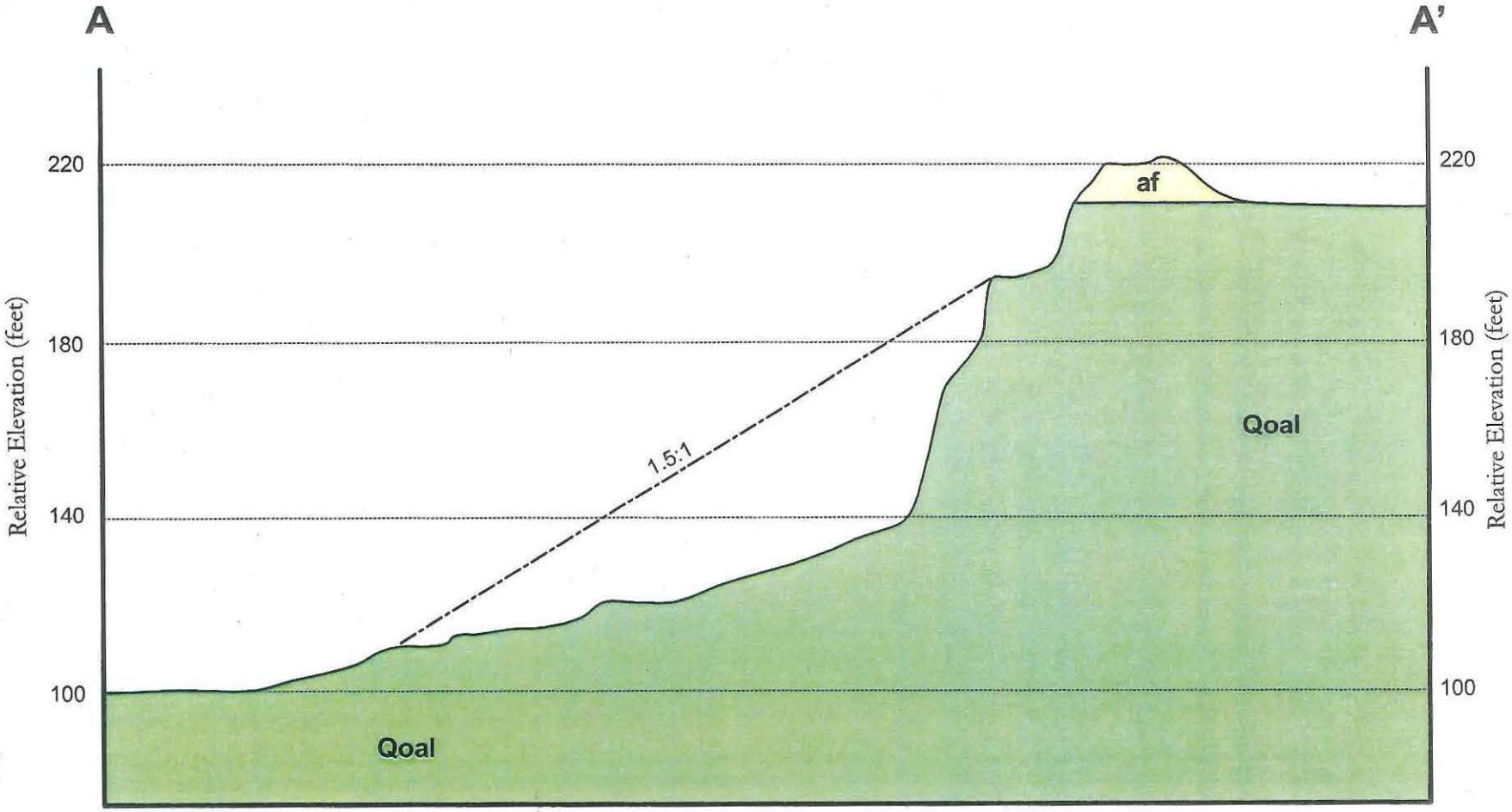
Project No.: 14-1011.232

SLOPE TOPOGRAPHY
AVENAL QUARRY
JAXON ENTERPRISES
FRESNO COUNTY, CALIFORNIA

Plate
3



CGI Technical Services Inc. Project No.: 14-1011.232	GEOTECHNICAL MAP AVENAL QUARRY JAXON ENTERPRISES FRESNO COUNTY, CALIFORNIA	Plate 4



Scale
Vertical: 1'=50'
Horizontal: 1"=50'
Vertical Exaggeration: 1x

Artifical Fill

Older Alluvium

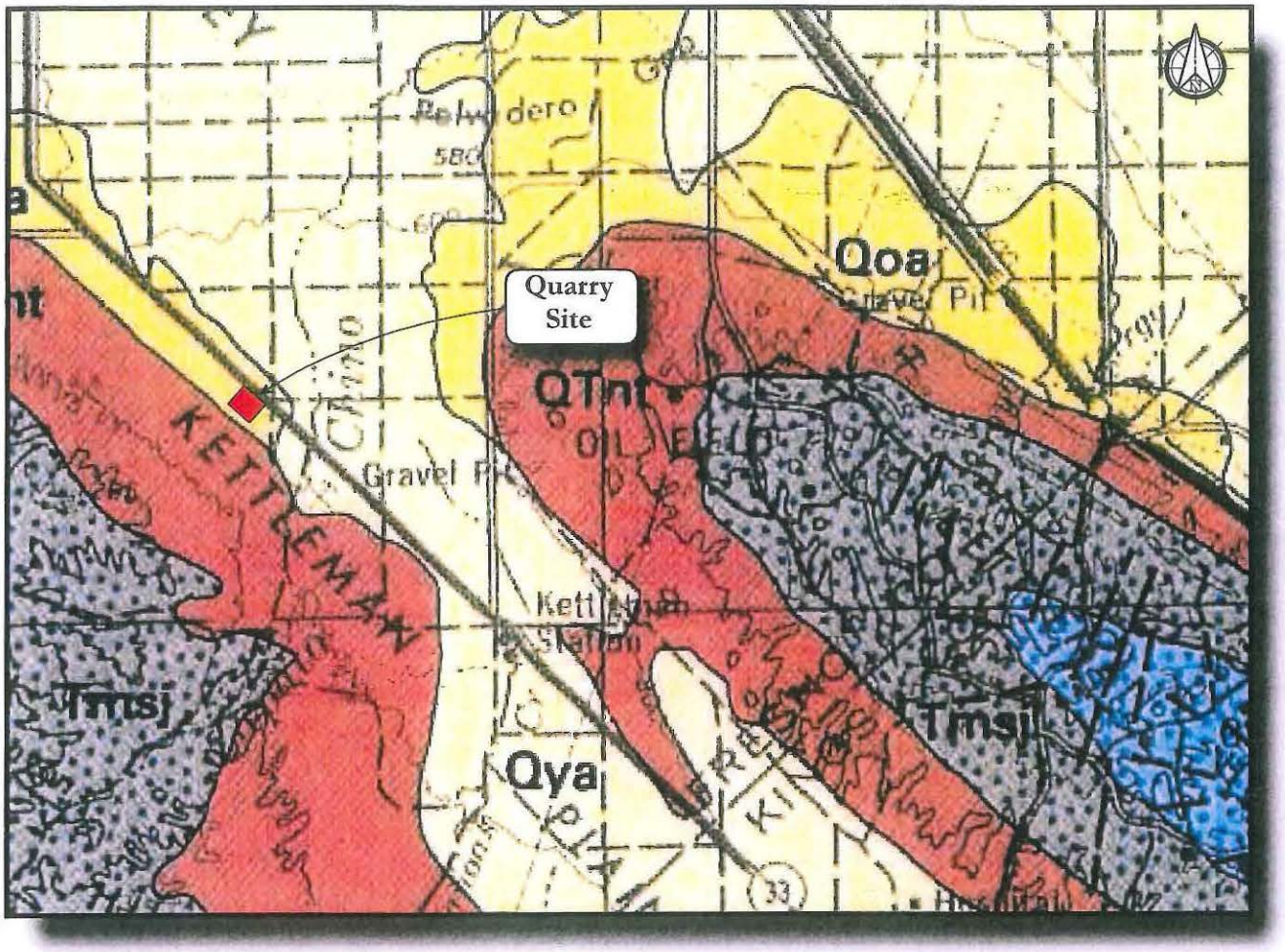
See Plate 4 for Cross Section Location

CGI Technical Services Inc.

Project No.: 14-1011.232

GEOTECHNICAL CROSS SECTION
AVENAL QUARRY
JAXON ENTERPRISES
FRESNO COUNTY, CALIFORNIA

Plate
5



Qya	Alluvium
Qoa	Older Alluvium
QTnt	Tulare Formation
Tmsj	San Joaquin Formation

Geologic Contact: dashed where approximate, dotted where covered, queried where uncertain

Fault: showing dip of fault and and trend of striae on fault surface (arrow); bar and ball on downthrown side; dashed where approximate, dotted where concealed; queried where uncertain

Geologic base map from Chin et al. (1993)

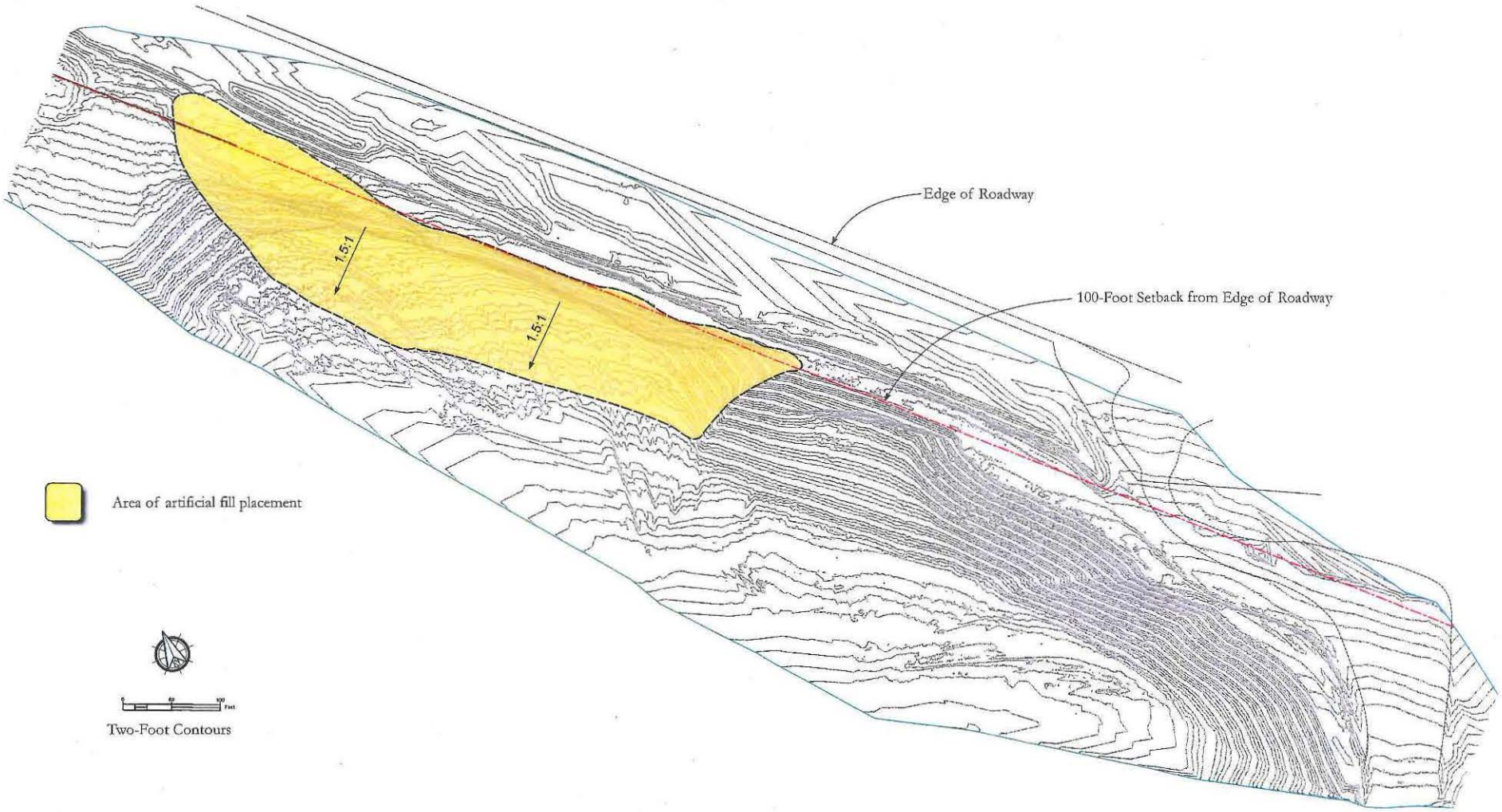
Scale Not Determined

CGI Technical Services Inc.

Project No.: 14-1011.232

REGIONAL GEOLOGIC MAP
AVENAL QUARRY
JAXON ENTERPRISES
FRESNO COUNTY, CALIFORNIA

Plate 6



CGI Technical Services Inc.	SLOPE RECONSTRUCTION PLAN AVENAL QUARRY JAXON ENTERPRISES FRESNO COUNTY, CALIFORNIA	Plate 7
Project No.: 14-1011.232		

APPENDIX A
LABORATORY TESTING

Laboratory Analyses

Laboratory tests were performed on selected bulk and relatively undisturbed soil samples to estimate engineering characteristics of the various earth materials encountered. Testing was performed under procedures described in one of the following references:

- ASTM Standards for Soil Testing, latest revision;
- Lambe, T. William, Soil Testing for Engineers, Wiley, New York, 1951;
- Laboratory Soils Testing, U.S. Army, Office of the Chief of Engineers, Engineering Manual No. 1110-2-1906, November 30, 1970.

Grain Size Distribution

Grain size distribution was determined for one selected soil sample in accordance with standard test method ASTM D422. The grain size distribution data are shown on the attached plate labeled *Laboratory Sieve Analysis.*

Direct Shear

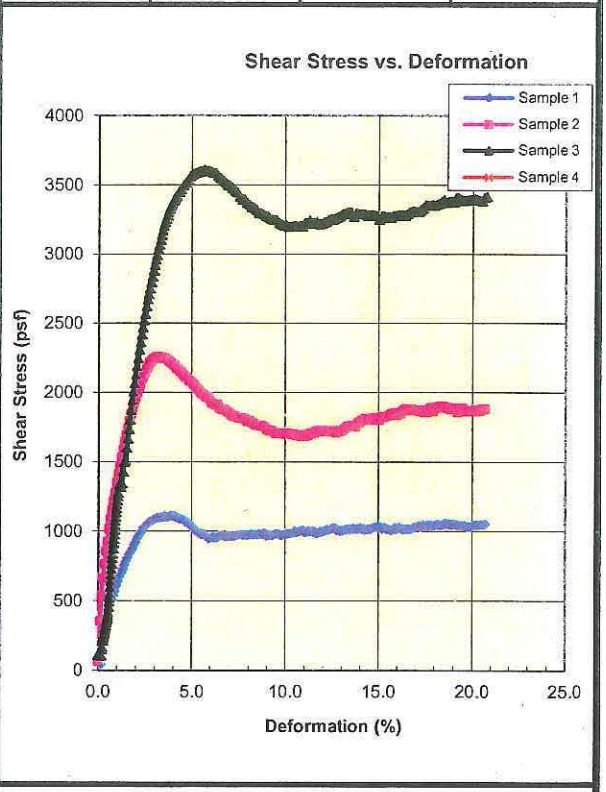
One direct shear test was performed on a selected relatively undisturbed sample using standard test method ASTM D3080. The results of the test are presented on attached plate labeled *Direct Shear.*

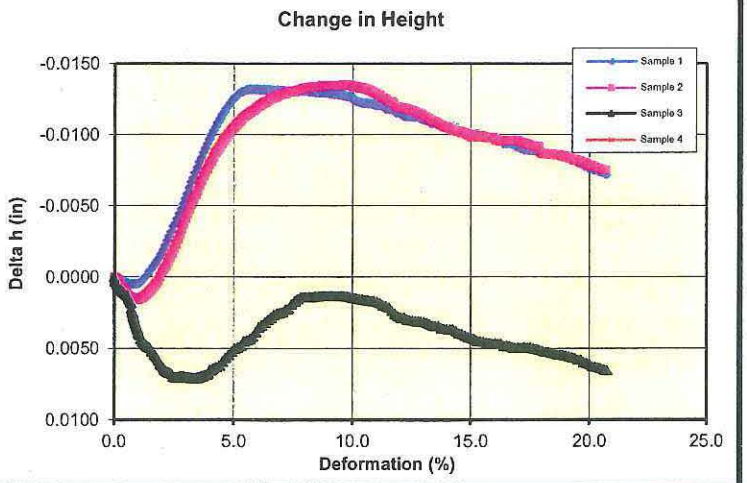
Consolidated Drained Direct Shear (ASTM D3080)

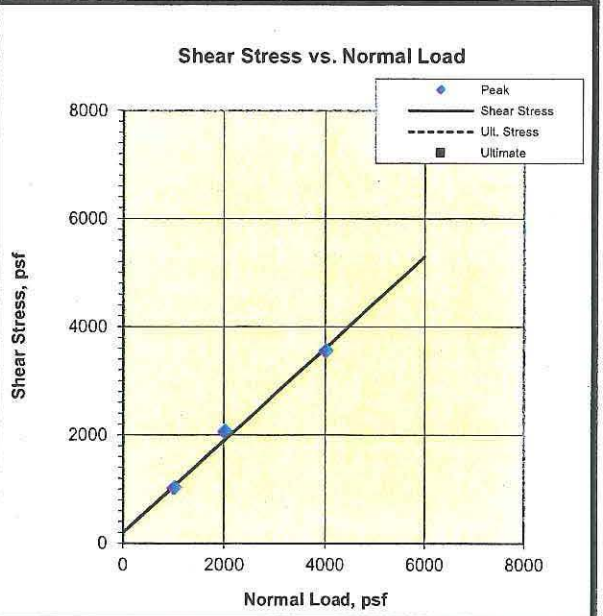
CTL Job #:	591-065	Project #:	14-1011.232	By:	MD
Client:	CGI Technical Services	Date:	11/25/2014	Checked:	PJ
Project Name:	Avenal Quarry	Remolding Info:			

Specimen Data				
	1	2	3	4
Boring:	NA	NA	NA	
Sample:				
Depth (ft):				
Visual Description:	Brown Silty SAND	Brown Silty SAND	Brown Silty SAND	
Normal Load (psf)	1000	2000	4000	
Dry Mass of Specimen (g)	147.5	151.6	151.9	
Initial Height (in)	1.00	1.00	1.00	
Initial Diameter (in)	2.41	2.41	2.41	
Initial Void Ratio	0.369	0.331	0.329	
Initial Moisture (%)	8.6	8.9	7.0	
Initial Wet Density (pcf)	133.8	138.0	135.8	
Initial Dry Density (pcf)	123.2	126.6	126.9	
Initial Saturation (%)	63.2	72.9	57.8	
ΔHeight Consol (in)	0.0180	0.0275	0.0622	
At Test Void Ratio	0.344	0.294	0.246	
At Test Moisture (%)	11.1	10.8	8.9	
At Test Wet Density (pcf)	139.4	144.4	147.5	
At Test Dry Density (pcf)	125.5	130.3	135.4	
At Test Saturation (%)	86.9	98.9	98.2	
Strain Rate (%/min)	0.01	0.01	0.01	
Strengths Picked at	5%	5%	5%	
Shear Stress (psf)	1033	2078	3561	
ΔHeight (in) at 5%	-0.0126	-0.0105	0.0052	
Ultimate Stress (psf)				

Phi (deg)	40.4	Ult. Phi (deg)	
Cohesion (psf)	200	Ult. Cohesion (psf)	







Remarks:

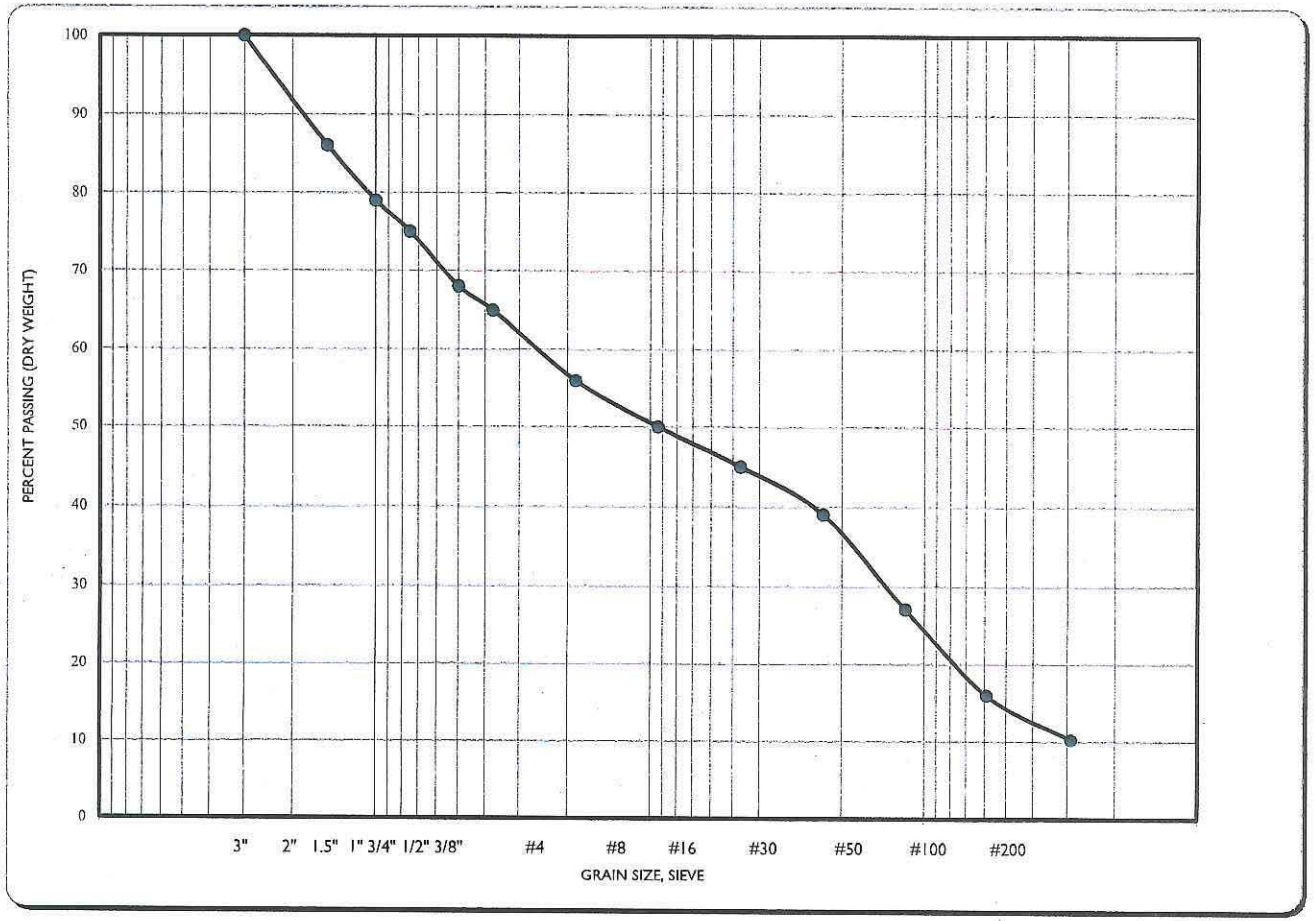
CGi Technical Services, Inc.

LABORATORY TEST RESULTS

Client: Jaxon Enterprises
Project: Avenal Quarry Slope Stability
Material Type: Sandy Gravel
USCS: SSP/GP

Sample Location: Sample 1
Sampled By: JAB
Tested By: JFB

Job No.: 14-1011.232
Lab No.: 7785
Date Received: 4-Nov-14
Date Tested: 7-Nov-14
Date Reviewed: 7-Nov-14



SIEVE ANALYSIS		
Sieve Size Standard	Grain Size (mm)	Percent Passing
6	150.00	
2	75.00	100
1.5	37.50	86
1"	25.00	79
3/4"	19.00	75
1/2"	12.50	68
3/8"	9.50	65
#4	4.75	56
#8	2.36	50
#16	1.18	45
#30	600um	39
#50	300um	27
#100	150um	16
#200	75um	10.2

APPENDIX B
SLOPE STABILITY ANALYSES

METHODS OF ANALYSIS

Computer-aided slope stability analyses were performed using the computer program SLIDE 6.0. SLIDE 6.0 was developed by Rocscience, Inc. (2012) and offers a wide variety of limit-equilibrium procedures. Those include the Modified Bishop, the Simplified and Corrected Janbu, Corps of Engineers #1 and #2, GLE/Morgenstern-Price, Lowe-Karafiath, and the Spencer methods. Those limit-equilibrium procedures are all "method of slices", but they differ from the Ordinary Method of Slices (Fellenius method – also included within SLIDE 6.0) in:

1. The simplifying assumptions that have been made achieve static determinacy; and
2. The particular conditions of equilibrium that are satisfied.

SLIDE 6.0 allows the use of any or all of the methods listed above because they better satisfy limit equilibrium conditions. A summary of the equilibrium conditions satisfied by each of these procedures and the type of failure surface for which each is useful is presented in the following table.

EQUILIBRIUM CONDITIONS SATISFIED BY PROCEDURES

Procedure of Analysis	Overall			Individual Slices			
	Moment	Vertical Force	Horizontal Force	Moment	Vertical Force	Horizontal Force	Slip Surface
Ordinary Method of Slices (Fellenius)	Yes	No	No	No	No	No	Circular Arc
Modified Bishop	Yes	(Yes)[1]	No	No	Yes	No	General Shape[2]
Simplified Janbu	No	(Yes)[1]	(Yes)[1]	No	Yes	Yes	General Shape
Spencer	Yes	(Yes)[1]	(Yes)[1]	Yes	Yes	Yes	General Shape

Per Wright (1969); (Yes)[1] - Parentheses indicate that this condition of equilibrium is implicitly satisfied as a result of the direct consideration of other equilibrium conditions; [2] – The original presentation of this procedure was for circular surfaces only.

Ordinary Method of Slices. From the above table, it is apparent that for circular failures, the Ordinary Method of Slices (Fellenius method) satisfies overall moment equilibrium, but does not satisfy individual slice moment equilibrium, or horizontal or vertical force equilibrium. Sherard et al. (1963), have suggested that the Fellenius method of slices might also be applied to non-circular surfaces; however, for noncircular surfaces that method would not, in general, satisfy any of the equilibrium conditions (Wright, 1969).

The Ordinary Method of Slices has been widely used by practicing engineers for many years

because of its simplicity, but it has long been known to grossly underestimate (and in some cases overestimate) the factor of safety. Lambe and Whitman (1969) report that in some cases the Ordinary Method of Slices may underestimate the factor of safety by about 10 to 15 percent, but in other problems (particularly for noncircular slip surfaces) the error may be as much as 60 percent. With the development of high-speed computers, this approximate method has largely been replaced by more accurate methods that better satisfy equilibrium conditions. The Ordinary Method of Slices remains an acceptable method for performing hand-calculated estimates of slope stability for conditions where accurate solutions are not required.

Modified Bishop Method. The Modified Bishop Method assumes that the normal and weight forces act through a point on the center of the base of each slice and that there are no interslice shear forces. The resulting equation can be demonstrated to satisfy vertical force equilibrium as well as overall moment equilibrium for circular shear surfaces. The Modified Bishop Method is relatively simple to perform on a calculator, although the necessary iterations make it more suitable for use on a computer system. In spite of the necessary iterations, the Modified Bishop Method typically converges rapidly, therefore, it requires little computer time to perform.

Fredlund and Krahn (1977) have shown that the Modified Bishop Method typically estimates factors of safety that are typically within a few percent of those obtained from more rigorous methods that satisfy complete moment and force equilibrium.

Simplified Janbu Method. Although the simplifying assumption made in the Simplified Janbu Method is the same as that made for the Modified Bishop Method, the conditions of equilibrium that are satisfied are not the same. The Simplified Janbu Method satisfies vertical and horizontal force equilibrium for individual slices and for the overall shear surface while assuming that there are no interslice shear forces. An advantage of the Simplified Janbu Method is its suitability for the analysis of noncircular failure surfaces. While retaining a rapid computational speed, the Simplified Janbu Method yields factors of safety that are closer to those obtained by more rigorous methods (such as the Spencer Method) than those obtained from the Ordinary Method of Slices.

Spencer Method. The Spencer Method assumes that the normal forces are located at the center of the base of each slice and that all side forces are parallel. The result is an equation that satisfies complete moment and force equilibrium. Although the Spencer Method was directly applicable to a circular shear surface, the procedure may be readily extended to slip surfaces of a general shape (Wright, 1969).

Because of the complexity of the procedure, the Spencer Method is suitable only for computer-aided slope stability analyses. Although the Spencer Method typically yields a

relatively accurate estimate of the factor of safety for a slope, its solution requires several iterations. Consequently, considerable time is needed to perform the analyses on a personal computer. Therefore, the Spencer Method is commonly used to refine the factor of safety for a critical failure plane that has been located by a search, which has used a more time-efficient method of analysis such as the Modified Bishop Method or Simplified Janbu procedure.

ANALYSES PERFORMED

Introduction. Analyses were performed to calculate the stability of the earth materials exposed in the slope. It is necessary to know the: 1) surface and subsurface geometry, 2) soil properties (unit weight and shear strength of the soil materials present), and 3) phreatic water level (groundwater) conditions.

Surface and Subsurface Geometry. Data for the surface geometry of the project area was obtained from topographic maps prepared for the site. Subsurface information was based on site mapping performed during this study.

Engineering Properties. Laboratory compression tests were used to help estimate the shear strength characteristics of the earth materials at the site. Different engineering properties apply for varying earth materials exposed in the slope. A summary of the input parameters for the soil units used in the analyses is presented in the text of the report.

Piezometric Water Level. The elevations of groundwater beneath the site are discussed in the text of the report.

REFERENCES

Fellenius, W. (1936), Calculation of the Stability of Earth Dams, Transactions of the Second Congress on Large Dams, vol. 4, pp. 445-463.

Frelund, D.G., and Krahn, J. (1977), Comparison of Slope Stability Methods of Analysis, Canadian Geotechnical Journal, vol. 14, pp. 429-439.

Janbu, N., Bjerrum, L., and Kjaernsli, B. (1956), Veiledning ved losning av fundamenterings-oppgaver-2. Stabilitetsberegning for fyllinger, skjaeringer og naturlige skraninger. (Soil Mechanics Applies to Some Engineering Problems – Chapter 2. Stability Calculations for Embankments, Cuts, and Natural Slopes), Publication 16, Normwegian Geotechnical Institute, Oslo, pp. 17-26.

Lambe, T.W., and Whitman, R.V., (1969), Soil Mechanics, John Wiley & Sons, New York, 553 pp.

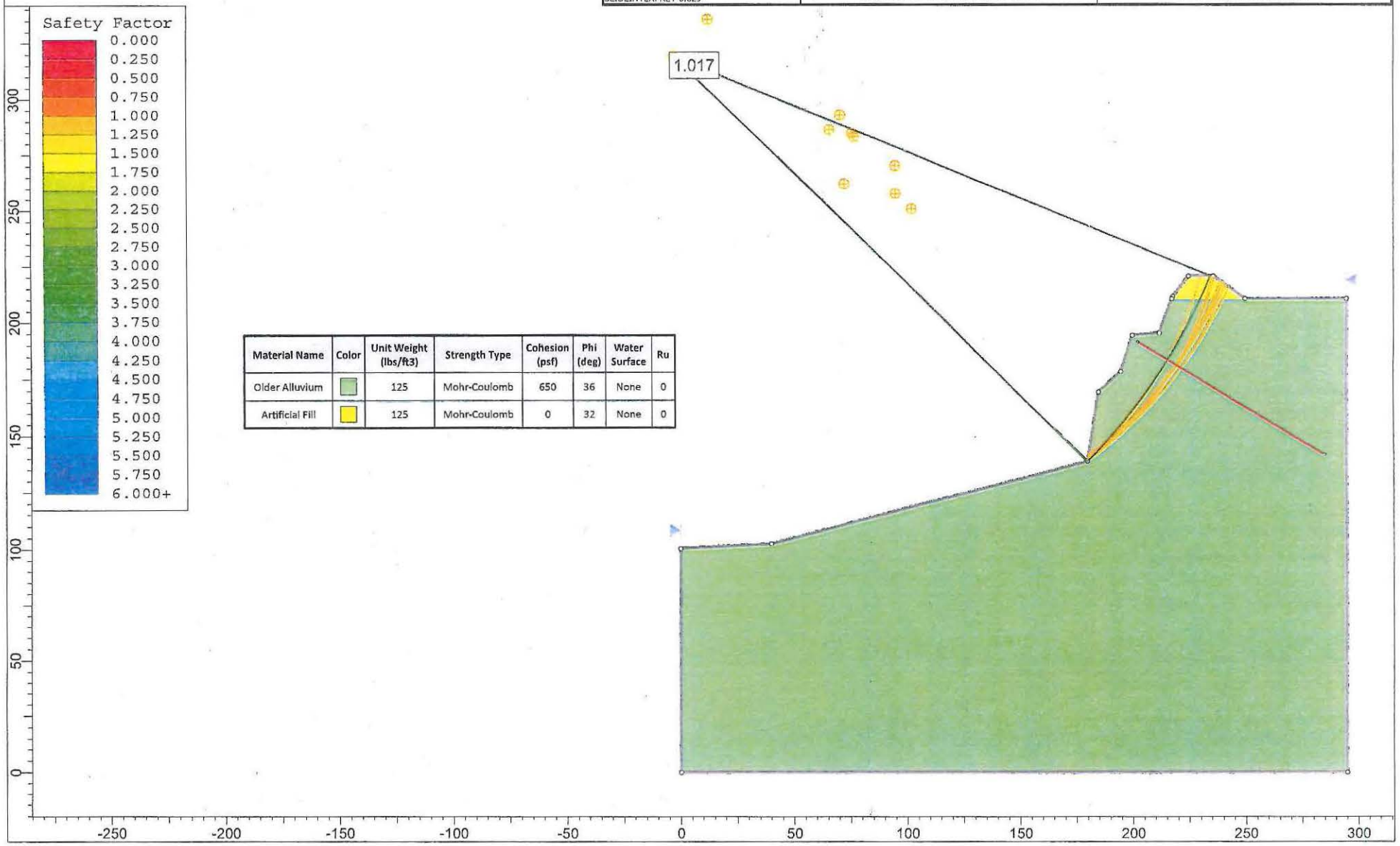
Rocscience Inc. (2012), "SLIDE (Version 6.019, Build Date: September 26, 2012)" Toronto, Ontario, Canada.

Sherard, J.L., Woodward, R.J., Gizienski, S.F., and Clevenger, W.A. (1963), Stability Analyses, Earth and Earth-Rock Dams, 1st Edition, John Wiley & Sons, New York, 345 pp.

Spencer, E. (1967), A Method of Analyses of the Stability of Embankments Assuming Parallel Inter-Slice Forces, Geotechnique, vol. 17, no. 1, pp. 11-26.

Wright, S. (1969), A Study of Slope Stability and the Undrained Shear Strength of Clay Shales, Ph.D. Thesis, University of California, Berkley.

SLIDEINTERPRET 6.029	Project: Avenal Quarry Slope Stability Evaluation	
	Analysis Description: Back Calculation of Strength	
	Drawn By: J.Bianchin	Company: CGI Technical Services, Inc.
	Date: 11/23/2014, 1:56:42 PM	File Name: BC1.dry.static.slim



Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)	Water Surface	Ru
Older Alluvium		125	Mohr-Coulomb	650	36	None	0
Artificial Fill		125	Mohr-Coulomb	0	32	None	0

Slide Analysis Information

Avenal Quarry Slope Stability Evaluation

Project Summary

File Name: BC1.dry.static
Slide Modeler Version: 6.029
Project Title: Avenal Quarry Slope Stability Evaluation
Analysis: Back Calculation of Strength
Author: J.Bianchin
Company: CGI Technical Services, Inc.
Date Created: 11/23/2014, 1:56:42 PM

General Settings

Units of Measurement: Imperial Units
Time Units: days
Permeability Units: feet/second
Failure Direction: Right to Left
Data Output: Standard
Maximum Material Properties: 20
Maximum Support Properties: 20

Analysis Options

Analysis Methods Used

Spencer

Number of slices: 50
Tolerance: 0.005
Maximum number of iterations: 50
Check malpha < 0.2: Yes
Initial trial value of FS: 1
Steffensen Iteration: Yes

Groundwater Analysis

Groundwater Method: Water Surfaces
Pore Fluid Unit Weight: 62.4 lbs/ft3
Advanced Groundwater Method: None

Random Numbers

Pseudo-random Seed: 10116

Random Number Generation Method: Park and Miller v.3

Surface Options

Surface Type: Circular
Search Method: Slope Search
Number of Surfaces: 5000
Upper Angle: Not Defined
Lower Angle: Not Defined
Composite Surfaces: Disabled
Reverse Curvature: Create Tension Crack
Minimum Elevation: Not Defined
Minimum Depth: Not Defined

Material Properties

Property	Older Alluvium	Artificial Fill
Color		
Strength Type	Mohr-Coulomb	Mohr-Coulomb
Unit Weight [lbs/ft3]	125	125
Cohesion [psf]	650	0
Friction Angle [deg]	36	32
Water Surface	None	None
Ru Value	0	0

Global Minimums

Method: spencer

FS: 1.016650
Center: -2.416, 319.361
Radius: 257.169
Left Slip Surface Endpoint: 180.017, 138.105
Right Slip Surface Endpoint: 234.782, 220.000
Resisting Moment=3.03505e+007 lb-ft
Driving Moment=2.98535e+007 lb-ft
Resisting Horizontal Force=68581.7 lb
Driving Horizontal Force=67458.8 lb
Total Slice Area=1150.09 ft2

Valid / Invalid Surfaces

Method: spencer

Number of Valid Surfaces: 3200
Number of Invalid Surfaces: 1800

Error Codes:

Error Code -100 reported for 6 surfaces
Error Code -103 reported for 88 surfaces
Error Code -107 reported for 271 surfaces
Error Code -108 reported for 460 surfaces
Error Code -109 reported for 14 surfaces
Error Code -111 reported for 541 surfaces
Error Code -112 reported for 375 surfaces
Error Code -118 reported for 45 surfaces

Error Codes

The following errors were encountered during the computation:

-100 = Both surface / slope intersections are on the same horizontal surface. In general, this will give a very high or infinite factor of safety (zero driving force), if calculated.
-103 = Two surface / slope intersections, but one or more surface / nonslope external polygon intersections lie between them. This usually occurs when the slip surface extends past the bottom of the soil region, but may also occur on a benched slope model with two sets of Slope Limits.
-107 = Total driving moment or total driving force is negative. This will occur if the wrong failure direction is specified, or if high external or anchor loads are applied against the failure direction.
-108 = Total driving moment or total driving force < 0.1. This is to limit the calculation of extremely high safety factors if the driving force is very small (0.1 is an arbitrary number).
-109 = Soiltype for slice base not located. This error should occur very rarely, if at all. It may occur if a very low number of slices is combined with certain soil geometries, such that the midpoint of a slice base is actually outside the soil region,even though the slip surface is wholly within the soil region.
-111 = safety factor equation did not converge
-112 = The coefficient M-Alpha = cos(alpha)(1+tan(alpha)tan(phi)/F) < 0.2 for the final iteration of the safety factor calculation. This screens out some slip surfaces which may not be valid in the context of the analysis, in particular, deep seated slip surfaces with many high negative base angle slices in the passive zone.
-118 = Surface does not pass through the search focus

Slice Data

Global Minimum Query (spencer) - Safety Factor: 1.01665

Slice Number	Width [ft]	Weight [lbs]	Base Material	Base Cohesion [psf]	Base Friction Angle [degrees]	Shear Stress [psf]	Shear Strength [psf]	Base Normal Stress [psf]	Pore Pressure [psf]	Effective Normal Stress [psf]
1	1.094	388.028	Older Alluvium	650	36	588.39	598.186	-71.3154	0	-71.3154
2	1.094	1163.16	Older Alluvium	650	36	864.724	879.122	315.36	0	315.36
3	1.094	1936.42	Older Alluvium	650	36	1136.58	1155.5	695.758	0	695.758
4	1.094	2707.77	Older Alluvium	650	36	1403.91	1427.28	1069.84	0	1069.84
5	1.094	3398.67	Older Alluvium	650	36	1639	1666.29	1398.8	0	1398.8
6	1.094	3495.3	Older Alluvium	650	36	1662.56	1690.24	1431.78	0	1431.78
			Older							

			Alluvium							
8	1.094	3438.26	Older Alluvium	650	36	1621.67	1648.67	1374.55	0	1374.55
9	1.094	3406.6	Older Alluvium	650	36	1600.26	1626.9	1344.59	0	1344.59
10	1.094	3372.8	Older Alluvium	650	36	1578.2	1604.48	1313.73	0	1313.73
11	1.094	3336.79	Older Alluvium	650	36	1555.5	1581.4	1281.97	0	1281.97
12	1.094	3298.54	Older Alluvium	650	36	1532.16	1557.67	1249.3	0	1249.3
13	1.094	3258	Older Alluvium	650	36	1508.17	1533.28	1215.73	0	1215.73
14	1.094	3231.03	Older Alluvium	650	36	1488.79	1513.58	1188.61	0	1188.61
15	1.094	3446.53	Older Alluvium	650	36	1548.68	1574.47	1272.42	0	1272.42
16	1.094	3742.85	Older Alluvium	650	36	1633.51	1660.71	1391.12	0	1391.12
17	1.094	4036.64	Older Alluvium	650	36	1715.81	1744.38	1506.29	0	1506.29
18	1.094	4327.84	Older Alluvium	650	36	1795.56	1825.46	1617.89	0	1617.89
19	1.094	4490.82	Older Alluvium	650	36	1833.1	1863.62	1670.4	0	1670.4
20	1.094	4326.88	Older Alluvium	650	36	1767.26	1796.68	1578.27	0	1578.27
21	1.094	4143.62	Older Alluvium	650	36	1696.21	1724.45	1478.85	0	1478.85
22	1.094	3957.48	Older Alluvium	650	36	1625.17	1652.23	1379.45	0	1379.45
23	1.094	3768.37	Older Alluvium	650	36	1554.17	1580.04	1280.1	0	1280.1
24	1.094	3576.22	Older Alluvium	650	36	1483.2	1507.9	1180.79	0	1180.79
25	1.094	3380.92	Older Alluvium	650	36	1412.28	1435.8	1081.56	0	1081.56
26	1.094	3182.39	Older Alluvium	650	36	1341.43	1363.77	982.415	0	982.415
27	1.094	2980.51	Older Alluvium	650	36	1270.66	1291.82	883.382	0	883.382
28	1.094	2775.18	Older Alluvium	650	36	1199.98	1219.96	784.483	0	784.483
29	1.094	2566.28	Older Alluvium	650	36	1129.41	1148.22	685.738	0	685.738
30	1.094	2466.77	Older Alluvium	650	36	1090.99	1109.16	631.977	0	631.977
31	1.094	2626.17	Older Alluvium	650	36	1125.57	1144.31	680.353	0	680.353
32	1.094	2792.29	Older Alluvium	650	36	1160.82	1180.15	729.69	0	729.69

33	1.094	2954.3	Older Alluvium	650	36	1193.71	1213.58	775.705	0	775.705
34	1.094	3112.05	Older Alluvium	650	36	1224.19	1244.57	818.358	0	818.358
35	1.094	3257.25	Older Alluvium	650	36	1250.06	1270.87	854.557	0	854.557
36	1.094	3252.83	Older Alluvium	650	36	1235.33	1255.9	833.947	0	833.947
37	1.094	3190.12	Older Alluvium	650	36	1205.26	1225.33	791.869	0	791.869
38	1.094	3122.39	Older Alluvium	650	36	1174.11	1193.66	748.28	0	748.28
39	1.094	3049.41	Older Alluvium	650	36	1141.87	1160.88	703.17	0	703.17
40	1.094	2970.93	Older Alluvium	650	36	1108.55	1127	656.538	0	656.538
41	1.094	2886.67	Older Alluvium	650	36	1074.13	1092.01	608.377	0	608.377
42	1.094	2721.55	Older Alluvium	650	36	1020.57	1037.56	533.433	0	533.433
43	1.094	2433.84	Older Alluvium	650	36	938.931	954.564	419.198	0	419.198
44	1.094	2138.06	Older Alluvium	650	36	857.43	871.706	305.152	0	305.152
45	1.094	1835.14	Older Alluvium	650	36	776.447	789.375	191.834	0	191.834
46	1.094	1524.68	Older Alluvium	650	36	696.049	707.638	79.3322	0	79.3322
47	1.11033	1221.71	Artificial Fill	0	32	242.636	246.676	394.765	0	394.765
48	1.11033	884.674	Artificial Fill	0	32	172.181	175.048	280.135	0	280.135
49	1.11033	538.053	Artificial Fill	0	32	102.513	104.22	166.786	0	166.786
50	1.11033	181.131	Artificial Fill	0	32	33.9861	34.552	55.2946	0	55.2946

Interslice Data

Global Minimum Query (spencer) - Safety Factor: 1.01665

Slice Number	X coordinate [ft]	Y coordinate - Bottom [ft]	Interslice Normal Force [lbs]	Interslice Shear Force [lbs]	Interslice Force Angle [degrees]
1	180.017	138.105	0	0	0
2	181.111	139.212	724.718	179.834	13.9361
3	182.205	140.334	1320.07	327.566	13.9361
4	183.299	141.469	1777.6	441.1	13.9361
5	184.393	142.618	2088.85	518.333	13.936
6	185.487	143.782	2260	560.802	13.936
7	186.581	144.96	2397.7	594.972	13.936
8	187.675	146.153	2525.55	626.697	13.936
9	188.769	147.361	2644.34	656.174	13.9361

10	189.863	148.585	2754.92	683.613	13.936
11	190.957	149.825	2858.18	709.237	13.9361
12	192.051	151.081	2955.09	733.283	13.936
13	193.145	152.353	3046.65	756.004	13.936
14	194.239	153.643	3133.94	777.665	13.9361
15	195.333	154.95	3214.27	797.597	13.936
16	196.427	156.275	3228.12	801.034	13.936
17	197.521	157.618	3152.42	782.25	13.936
18	198.615	158.98	2984.18	740.504	13.9361
19	199.709	160.361	2720.46	675.062	13.936
20	200.803	161.761	2392.5	593.681	13.936
21	201.897	163.182	2089.41	518.473	13.9361
22	202.991	164.624	1818.88	451.343	13.9361
23	204.085	166.087	1584.22	393.114	13.9361
24	205.179	167.572	1388.86	344.636	13.9361
25	206.273	169.079	1236.35	306.792	13.9361
26	207.367	170.61	1130.4	280.501	13.9361
27	208.461	172.165	1074.85	266.717	13.9361
28	209.555	173.745	1073.7	266.431	13.9361
29	210.649	175.351	1131.12	280.679	13.936
30	211.743	176.983	1251.45	310.539	13.9361
31	212.837	178.642	1400.02	347.405	13.9361
32	213.931	180.33	1486.93	368.97	13.936
33	215.025	182.047	1507.76	374.139	13.936
34	216.119	183.795	1461.94	362.769	13.936
35	217.213	185.575	1349.01	334.747	13.936
36	218.307	187.387	1171.79	290.772	13.9361
37	219.401	189.235	987.052	244.93	13.9361
38	220.495	191.118	818.579	203.125	13.9361
39	221.589	193.038	669.913	166.234	13.936
40	222.683	194.998	544.886	135.21	13.9361
41	223.777	196.999	447.655	111.082	13.936
42	224.871	199.044	382.731	94.9719	13.936
43	225.965	201.133	387.987	96.2762	13.9361
44	227.059	203.271	522.292	129.603	13.936
45	228.153	205.459	795.499	197.397	13.936
46	229.247	207.701	1217.53	302.12	13.936
47	230.341	210	1799.02	446.415	13.9361
48	231.451	212.395	1123.81	278.865	13.936
49	232.561	214.857	625.981	155.333	13.9361
50	233.672	217.39	317.662	78.8255	13.936
51	234.782	220	0	0	0

List Of Coordinates

Focus Search Line

X	Y
202.475	191.185
285.17	140.948

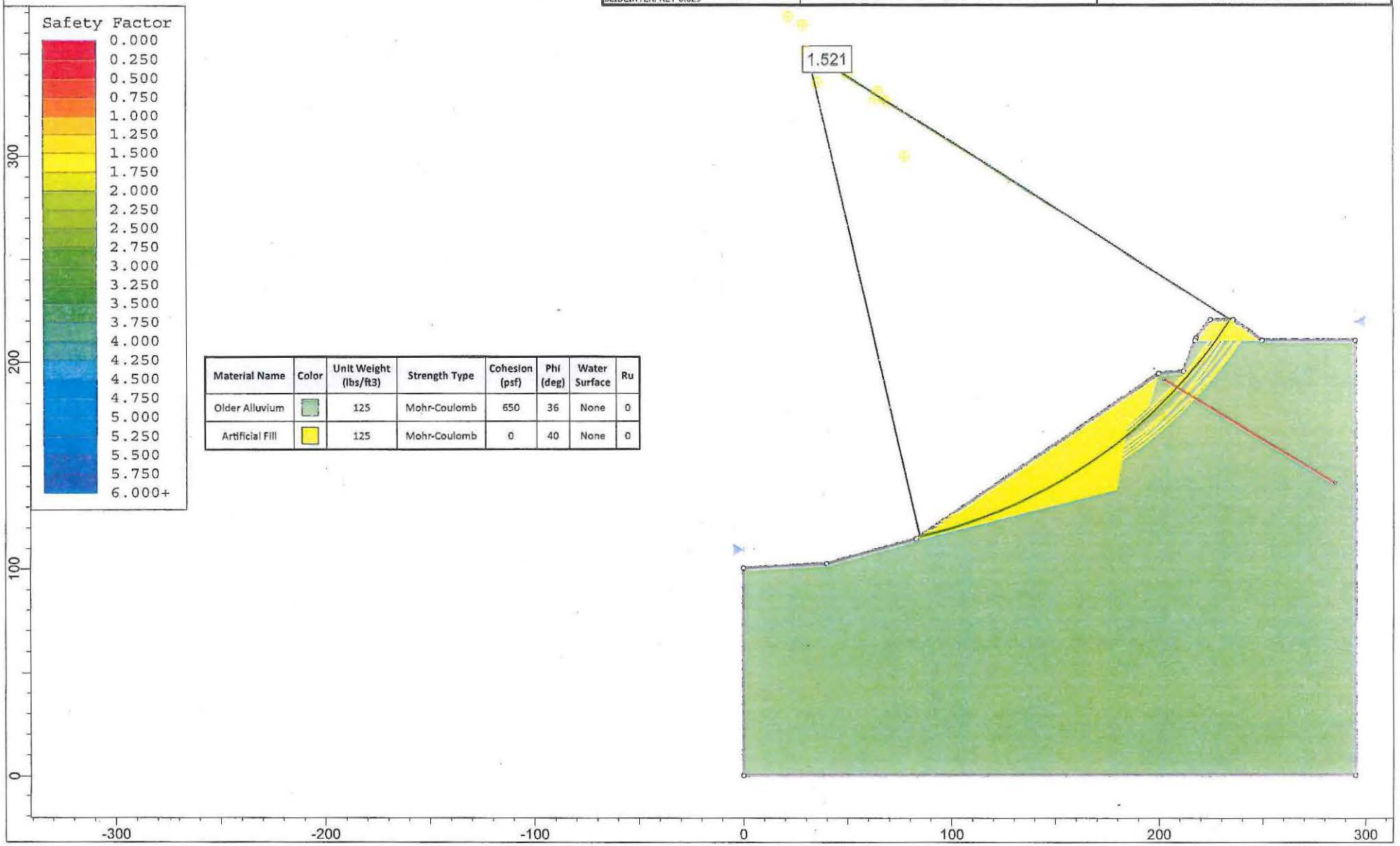
External Boundary

X	Y
295	0
295	210
250	210
236	220
225	220
218	211
217.625	210
212	195
200	194
195	178
185	169
180	138
40	102
0	100
0	0

Material Boundary

X	Y
217.625	210
250	210

SLIDEINTERPRET 6.029	Project: Avenal Quarry Slope Stability Evaluation	
	Analysis Description: Maximum Slope Inclination, Static Conditions	
	Drawn By: J.Bianchin	Company: CGI Technical Services, Inc.
	Date: 11/23/2014, 1:56:42 PM	File Name: Final.1.5-1.dry.slim



Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)	Water Surface	Ru
Older Alluvium		125	Mohr-Coulomb	650	36	None	0
Artificial Fill		125	Mohr-Coulomb	0	40	None	0

Slide Analysis Information

Avenal Quarry Slope Stability Evaluation

Project Summary

File Name: Final.1.5-1.dry
Slide Modeler Version: 6.029
Project Title: Avenal Quarry Slope Stability Evaluation
Analysis: Maximum Slope Inclination, Static Conditions
Author: J.Bianchin
Company: CGI Technical Services, Inc.
Date Created: 11/23/2014, 1:56:42 PM

General Settings

Units of Measurement: Imperial Units
Time Units: days
Permeability Units: feet/second
Failure Direction: Right to Left
Data Output: Standard
Maximum Material Properties: 20
Maximum Support Properties: 20

Analysis Options

Analysis Methods Used

Spencer

Number of slices: 50
Tolerance: 0.005
Maximum number of iterations: 50
Check malpha < 0.2: Yes
Initial trial value of FS: 1
Steffensen Iteration: Yes

Groundwater Analysis

Groundwater Method: Water Surfaces
Pore Fluid Unit Weight: 62.4 lbs/ft3
Advanced Groundwater Method: None

Random Numbers

Pseudo-random Seed: 10116

Random Number Generation Method: Park and Miller v.3

Surface Options

Surface Type: Circular
Search Method: Slope Search
Number of Surfaces: 5000
Upper Angle: Not Defined
Lower Angle: Not Defined
Composite Surfaces: Disabled
Reverse Curvature: Create Tension Crack
Minimum Elevation: Not Defined
Minimum Depth: Not Defined

Material Properties

Property	Older Alluvium	Artificial Fill
Color		
Strength Type	Mohr-Coulomb	Mohr-Coulomb
Unit Weight [lbs/ft3]	125	125
Cohesion [psf]	650	0
Friction Angle [deg]	36	40
Water Surface	None	None
Ru Value	0	0

Global Minimums

Method: spencer

FS: 1.520860
Center: 30.806, 351.839
Radius: 242.697
Left Slip Surface Endpoint: 84.785, 115.221
Right Slip Surface Endpoint: 234.571, 220.000
Resisting Moment=5.23111e+007 lb-ft
Driving Moment=3.43958e+007 lb-ft
Resisting Horizontal Force=173791 lb
Driving Horizontal Force=114272 lb
Total Slice Area=2066.89 ft2

Valid / Invalid Surfaces

Method: spencer

Number of Valid Surfaces: 3628
Number of Invalid Surfaces: 1372

Error Codes:

Error Code -100 reported for 2 surfaces
Error Code -103 reported for 69 surfaces
Error Code -105 reported for 1 surface
Error Code -107 reported for 262 surfaces
Error Code -108 reported for 180 surfaces
Error Code -109 reported for 10 surfaces
Error Code -111 reported for 349 surfaces
Error Code -112 reported for 403 surfaces
Error Code -118 reported for 96 surfaces

Error Codes

The following errors were encountered during the computation:

-100 = Both surface / slope intersections are on the same horizontal surface. In general, this will give a very high or infinite factor of safety (zero driving force), if calculated.
-103 = Two surface / slope intersections, but one or more surface / nonslope external polygon intersections lie between them. This usually occurs when the slip surface extends past the bottom of the soil region, but may also occur on a benched slope model with two sets of Slope Limits.
-105 = More than two surface / slope intersections with no valid slip surface.
-107 = Total driving moment or total driving force is negative. This will occur if the wrong failure direction is specified, or if high external or anchor loads are applied against the failure direction.
-108 = Total driving moment or total driving force < 0.1. This is to limit the calculation of extremely high safety factors if the driving force is very small (0.1 is an arbitrary number).
-109 = Soiltype for slice base not located. This error should occur very rarely, if at all. It may occur if a very low number of slices is combined with certain soil geometries, such that the midpoint of a slice base is actually outside the soil region,even though the slip surface is wholly within the soil region.
-111 = safety factor equation did not converge
-112 = The coefficient M-Alpha = cos(alpha)(1+tan(alpha)tan(phi)/F) < 0.2 for the final iteration of the safety factor calculation. This screens out some slip surfaces which may not be valid in the context of the analysis, in particular, deep seated slip surfaces with many high negative base angle slices in the passive zone.
-118 = Surface does not pass through the search focus

Slice Data

Global Minimum Query (spencer) - Safety Factor: 1.52086

Slice Number	Width [ft]	Weight [lbs]	Base Material	Base Cohesion [psf]	Base Friction Angle [degrees]	Shear Stress [psf]	Shear Strength [psf]	Base Normal Stress [psf]	Pore Pressure [psf]	Effective Normal Stress [psf]
1	3.01101	254.373	Artificial Fill	0	40	48.3596	73.5482	87.6514	0	87.6514
2	3.01101	755.465	Artificial Fill	0	40	141.528	215.245	256.519	0	256.519
3	3.01101	1241.17	Artificial Fill	0	40	229.137	348.486	415.308	0	415.308
4	3.01101	1711.35	Artificial Fill	0	40	311.349	473.519	564.318	0	564.318
5	3.01101	2165.83	Artificial Fill	0	40	388.321	590.582	703.827	0	703.827
6	3.01101	2604.44	Artificial Fill	0	40	460.198	699.896	834.103	0	834.103
7	3.01101	3027	Artificial Fill	0	40	527.12	801.676	955.399	0	955.399
8	3.01101	3433.31	Artificial Fill	0	40	589.221	896.122	1067.96	0	1067.96
9	3.01101	3823.16	Artificial Fill	0	40	646.627	983.429	1172.01	0	1172.01
10	3.01101	4196.33	Artificial Fill	0	40	699.46	1063.78	1267.76	0	1267.76

11	3.01101	4552.6	Artificial Fill	0	40	747.827	1137.34	1355.43	0	1355.43
12	3.01101	4891.69	Artificial Fill	0	40	791.848	1204.29	1435.21	0	1435.21
13	3.01101	5213.36	Artificial Fill	0	40	831.615	1264.77	1507.3	0	1507.3
14	3.01101	5517.32	Artificial Fill	0	40	867.24	1318.95	1571.86	0	1571.86
15	3.01101	5803.27	Artificial Fill	0	40	898.801	1366.95	1629.07	0	1629.07
16	3.01101	6070.9	Artificial Fill	0	40	926.403	1408.93	1679.1	0	1679.1
17	3.01101	6319.86	Artificial Fill	0	40	950.12	1445	1722.09	0	1722.09
18	3.01101	6549.79	Artificial Fill	0	40	970.043	1475.3	1758.19	0	1758.19
19	3.01101	6760.32	Artificial Fill	0	40	986.245	1499.94	1787.56	0	1787.56
20	3.01101	6951.03	Artificial Fill	0	40	998.797	1519.03	1810.31	0	1810.31
21	3.01101	7121.51	Artificial Fill	0	40	1007.77	1532.68	1826.58	0	1826.58
22	3.01101	7271.27	Artificial Fill	0	40	1013.24	1541	1836.49	0	1836.49
23	3.01101	7399.84	Artificial Fill	0	40	1015.27	1544.08	1840.16	0	1840.16
24	3.01101	7506.69	Artificial Fill	0	40	1013.91	1542.01	1837.7	0	1837.7
25	3.01101	7591.25	Artificial Fill	0	40	1009.23	1534.89	1829.22	0	1829.22
26	3.01101	7652.93	Artificial Fill	0	40	1001.28	1522.81	1814.81	0	1814.81
27	3.01101	7691.09	Artificial Fill	0	40	990.117	1505.83	1794.58	0	1794.58
28	3.01101	7705.03	Artificial Fill	0	40	975.797	1484.05	1768.63	0	1768.63
29	3.01101	7694.02	Artificial Fill	0	40	958.366	1457.54	1737.03	0	1737.03
30	3.01101	7657.25	Artificial Fill	0	40	937.864	1426.36	1699.87	0	1699.87
31	3.01101	7593.87	Artificial Fill	0	40	914.351	1390.6	1657.25	0	1657.25
32	3.01101	7502.95	Artificial Fill	0	40	887.86	1350.31	1609.24	0	1609.24
33	3.01101	7383.49	Artificial Fill	0	40	858.435	1305.56	1555.9	0	1555.9
34	2.90618	6985.55	Older Alluvium	650	36	1114.19	1694.53	1437.67	0	1437.67
35	2.90618	6818.98	Older Alluvium	650	36	1082.31	1646.05	1370.94	0	1370.94
36	2.90618	6623.61	Older Alluvium	650	36	1048.03	1593.91	1299.19	0	1299.19
37	2.90618	6398.2	Older Alluvium	650	36	1011.37	1538.16	1222.44	0	1222.44
38	2.90618	6141.45	Older Alluvium	650	36	972.342	1478.8	1140.74	0	1140.74
39	2.90618	.5757.5	Older Alluvium	650	36	921.945	1402.15	1035.25	0	1035.25
40	2.90618	4865.04	Older Alluvium	650	36	825.094	1254.85	832.508	0	832.508
41	2.90618	3870.97	Older Alluvium	650	36	721.878	1097.88	616.448	0	616.448
42	2.90618	2838.75	Older Alluvium	650	36	618.58	940.774	400.215	0	400.215
43	2.90618	2002.81	Older Alluvium	650	36	536.165	815.432	227.698	0	227.698
44	2.90618	3150.6	Older Alluvium	650	36	628.48	955.83	420.94	0	420.94
45	2.90618	4626.74	Older Alluvium	650	36	744.317	1132	663.42	0	663.42
46	2.90618	4992.75	Older Alluvium	650	36	762.39	1159.49	701.252	0	701.252

47	2.90618	5000.49	Older Alluvium	650	36	749.765	1140.29	674.822	0	674.822
48	2.90618	4348.07	Older Alluvium	650	36	684.501	1041.03	538.206	0	538.206
49	3.41498	3230.12	Artificial Fill	0	40	235.413	358.03	426.683	0	426.683
50	3.41498	1095.76	Artificial Fill	0	40	89.6355	136.323	162.463	0	162.463

Interslice Data

Global Minimum Query (spencer) - Safety Factor: 1.52086

Slice Number	X coordinate [ft]	Y coordinate - Bottom [ft]	Interslice Normal Force [lbs]	Interslice Shear Force [lbs]	Interslice Force Angle [degrees]
1	84.7855	115.221	0	0	0
2	87.7965	115.928	83.64	44.6132	28.0753
3	90.8075	116.676	317.986	169.612	28.0752
4	93.8185	117.465	680.341	362.891	28.0753
5	96.8295	118.295	1149.3	613.03	28.0752
6	99.8405	119.167	1704.68	909.269	28.0753
7	102.852	120.082	2327.5	1241.48	28.0753
8	105.863	121.039	2999.9	1600.13	28.0752
9	108.874	122.04	3705.13	1976.3	28.0753
10	111.885	123.085	4427.48	2361.6	28.0753
11	114.896	124.175	5152.29	2748.21	28.0753
12	117.907	125.31	5865.88	3128.83	28.0752
13	120.918	126.491	6555.54	3496.69	28.0752
14	123.929	127.718	7209.49	3845.51	28.0753
15	126.94	128.993	7816.88	4169.49	28.0753
16	129.951	130.316	8367.76	4463.32	28.0752
17	132.962	131.689	8853.06	4722.18	28.0752
18	135.973	133.111	9264.6	4941.69	28.0752
19	138.984	134.584	9595.03	5117.94	28.0752
20	141.995	136.11	9837.87	5247.48	28.0753
21	145.006	137.689	9987.51	5327.29	28.0752
22	148.017	139.322	10039.2	5354.84	28.0752
23	151.028	141.01	9988.9	5328.03	28.0752
24	154.039	142.756	9833.66	5245.23	28.0753
25	157.05	144.56	9571.24	5105.26	28.0753
26	160.061	146.424	9200.33	4907.42	28.0753
27	163.072	148.35	8720.52	4651.48	28.0752
28	166.083	150.339	8132.29	4337.73	28.0753
29	169.094	152.394	7437.12	3966.92	28.0752
30	172.105	154.515	6637.41	3540.37	28.0753
31	175.116	156.707	5736.64	3059.9	28.0753
32	178.127	158.97	4739.32	2527.93	28.0752
33	181.138	161.307	3651.08	1947.47	28.0753

34	184.149	163.722	2478.75	1322.16	28.0754
35	187.055	166.129	2256.77	1203.75	28.0752
36	189.961	168.614	1996.23	1064.78	28.0753
37	192.867	171.179	1709.24	911.703	28.0753
38	195.773	173.829	1409.41	751.771	28.0752
39	198.68	176.567	1111.99	593.129	28.0752
40	201.586	179.397	861.258	459.391	28.0753
41	204.492	182.325	822.085	438.496	28.0752
42	207.398	185.354	1052.46	561.378	28.0753
43	210.304	188.492	1594.57	850.536	28.0752
44	213.211	191.744	2412.43	1286.78	28.0753
45	216.117	195.117	2819.15	1503.72	28.0752
46	219.023	198.619	2658.83	1418.21	28.0753
47	221.929	202.26	2321.47	1238.26	28.0752
48	224.835	206.05	1943.25	1036.52	28.0752
49	227.742	210	1806.57	963.614	28.0752
50	231.156	214.866	534.256	284.97	28.0753
51	234.571	220	0	0	0

List Of Coordinates

Focus Search Line

X	Y
202.475	191.185
285.17	140.948

External Boundary

X	Y
295	0
295	210
250	210
236	220
225	220
218	211
217.625	210
212	195
200	194
83	114
40	102
0	100
0	0

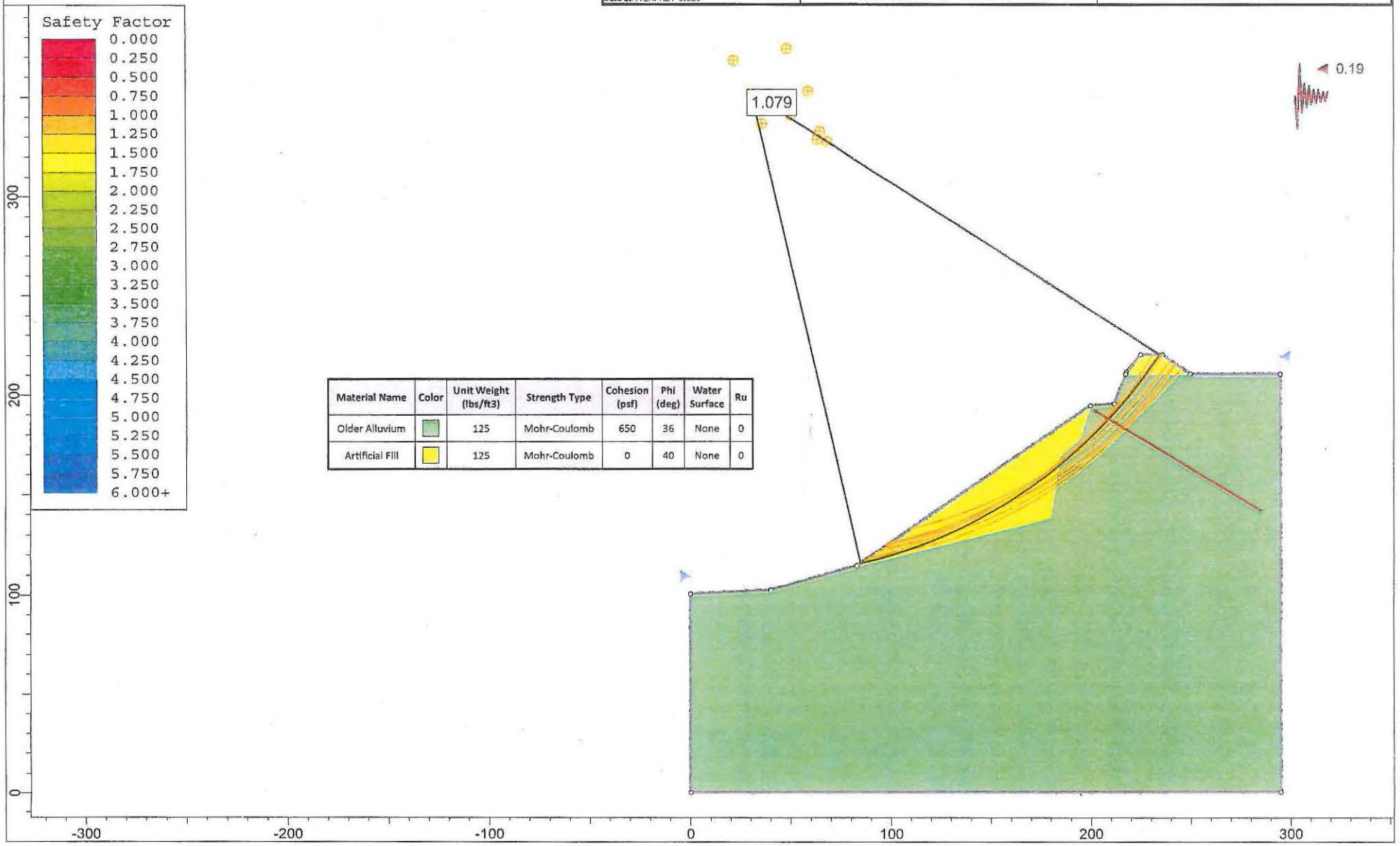
Material Boundary

X	Y
217.625	210
250	210

Material Boundary

X	Y
83	114
180	138
185	169
195	178
200	194

SLIDEINTERPRET 6.029	Project: Avenal Quarry Slope Stability Evaluation	
	Analysis Description: Maximum Slope Inclination, Pseudostatic Conditions	
	Drawn By: J.Bianchin	Company: CGI Technical Services, Inc.
	Date: 11/23/2014, 1:56:42 PM	File Name: Final.1.5-1PS.slim



Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)	Water Surface	Ru
Older Alluvium		125	Mohr-Coulomb	650	36	None	0
Artificial Fill		125	Mohr-Coulomb	0	40	None	0

Slide Analysis Information

Avenal Quarry Slope Stability Evaluation

Project Summary

File Name: Final.1.5-1PS
Slide Modeler Version: 6.029
Project Title: Avenal Quarry Slope Stability Evaluation
Analysis: Maximum Slope Inclination, Pseudostatic Conditions
Author: J.Bianchin
Company: CGI Technical Services, Inc.
Date Created: 11/23/2014, 1:56:42 PM

General Settings

Units of Measurement: Imperial Units
Time Units: days
Permeability Units: feet/second
Failure Direction: Right to Left
Data Output: Standard
Maximum Material Properties: 20
Maximum Support Properties: 20

Analysis Options

Analysis Methods Used

Spencer

Number of slices: 50
Tolerance: 0.005
Maximum number of iterations: 50
Check malpha < 0.2: Yes
Initial trial value of FS: 1
Steffensen Iteration: Yes

Groundwater Analysis

Groundwater Method: Water Surfaces
Pore Fluid Unit Weight: 62.4 lbs/ft3
Advanced Groundwater Method: None

Random Numbers

Pseudo-random Seed: 10116

Random Number Generation Method: Park and Miller v.3

Surface Options

Surface Type: Circular
Search Method: Slope Search
Number of Surfaces: 5000
Upper Angle: Not Defined
Lower Angle: Not Defined
Composite Surfaces: Disabled
Reverse Curvature: Create Tension Crack
Minimum Elevation: Not Defined
Minimum Depth: Not Defined

Loading

Seismic Load Coefficient (Horizontal): 0.19

Material Properties

Property	Older Alluvium	Artificial Fill
Color		
Strength Type	Mohr-Coulomb	Mohr-Coulomb
Unit Weight [lbs/ft3]	125	125
Cohesion [psf]	650	0
Friction Angle [deg]	36	40
Water Surface	None	None
Ru Value	0	0

Global Minimums

Method: spencer

FS: 1.078670
Center: 30.806, 351.839
Radius: 242.697
Left Slip Surface Endpoint: 84.785, 115.221
Right Slip Surface Endpoint: 234.571, 220.000
Resisting Moment=4.71779e+007 lb-ft
Driving Moment=4.3737e+007 lb-ft
Resisting Horizontal Force=157559 lb
Driving Horizontal Force=146068 lb
Total Slice Area=2066.89 ft2

Valid / Invalid Surfaces

Method: spencer

Number of Valid Surfaces: 2652
Number of Invalid Surfaces: 2348

Error Codes:

Error Code -100 reported for 2 surfaces
Error Code -103 reported for 69 surfaces
Error Code -105 reported for 1 surface
Error Code -107 reported for 164 surfaces
Error Code -108 reported for 581 surfaces
Error Code -109 reported for 10 surfaces
Error Code -111 reported for 802 surfaces
Error Code -112 reported for 623 surfaces
Error Code -118 reported for 96 surfaces

Error Codes

The following errors were encountered during the computation:

-100 = Both surface / slope intersections are on the same horizontal surface. In general, this will give a very high or infinite factor of safety (zero driving force), if calculated.
-103 = Two surface / slope intersections, but one or more surface / nonslope external polygon intersections lie between them. This usually occurs when the slip surface extends past the bottom of the soil region, but may also occur on a benched slope model with two sets of Slope Limits.
-105 = More than two surface / slope intersections with no valid slip surface.
-107 = Total driving moment or total driving force is negative. This will occur if the wrong failure direction is specified, or if high external or anchor loads are applied against the failure direction.
-108 = Total driving moment or total driving force < 0.1. This is to limit the calculation of extremely high safety factors if the driving force is very small (0.1 is an arbitrary number).
-109 = Soiltype for slice base not located. This error should occur very rarely, if at all. It may occur if a very low number of slices is combined with certain soil geometries, such that the midpoint of a slice base is actually outside the soil region,even though the slip surface is wholly within the soil region.
-111 = safety factor equation did not converge
-112 = The coefficient M-Alpha = cos(alpha)(1+tan(alpha)tan(phi)/F) < 0.2 for the final iteration of the safety factor calculation. This screens out some slip surfaces which may not be valid in the context of the analysis, in particular, deep seated slip surfaces with many high negative base angle slices in the passive zone.
-118 = Surface does not pass through the search focus

Slice Data

Global Minimum Query (spencer) - Safety Factor: 1.07867

Slice Number	Width [ft]	Weight [lbs]	Base Material	Base Cohesion [psf]	Base Friction Angle [degrees]	Shear Stress [psf]	Shear Strength [psf]	Base Normal Stress [psf]	Pore Pressure [psf]	Effective Normal Stress [psf]
1	3.01101	254.373	Artificial Fill	0	40	83.5512	90.1242	107.406	0	107.406
2	3.01101	755.465	Artificial Fill	0	40	239.819	258.686	308.29	0	308.29
3	3.01101	1241.17	Artificial Fill	0	40	380.943	410.912	489.705	0	489.705
4	3.01101	1711.35	Artificial Fill	0	40	508.028	547.995	653.074	0	653.074
5	3.01101	2165.83	Artificial Fill	0	40	622.09	671.03	799.702	0	799.702
6	3.01101	2604.44	Artificial Fill	0	40	724.064	781.026	930.789	0	930.789

7	3.01101	3027	Artificial Fill	0	40	814.81	878.911	1047.44	0	1047.44
8	3.01101	3433.31	Artificial Fill	0	40	895.118	965.537	1150.68	0	1150.68
9	3.01101	3823.16	Artificial Fill	0	40	965.717	1041.69	1241.44	0	1241.44
10	3.01101	4196.33	Artificial Fill	0	40	1027.28	1108.1	1320.58	0	1320.58
11	3.01101	4552.6	Artificial Fill	0	40	1080.43	1165.43	1388.9	0	1388.9
12	3.01101	4891.69	Artificial Fill	0	40	1125.73	1214.29	1447.14	0	1447.14
13	3.01101	5213.36	Artificial Fill	0	40	1163.71	1255.26	1495.96	0	1495.96
14	3.01101	5517.32	Artificial Fill	0	40	1194.86	1288.86	1536	0	1536
15	3.01101	5803.27	Artificial Fill	0	40	1219.62	1315.57	1567.83	0	1567.83
16	3.01101	6070.9	Artificial Fill	0	40	1238.41	1335.84	1591.99	0	1591.99
17	3.01101	6319.86	Artificial Fill	0	40	1251.61	1350.07	1608.96	0	1608.96
18	3.01101	6549.79	Artificial Fill	0	40	1259.57	1358.66	1619.19	0	1619.19
19	3.01101	6760.32	Artificial Fill	0	40	1262.62	1361.95	1623.11	0	1623.11
20	3.01101	6951.03	Artificial Fill	0	40	1261.05	1360.26	1621.1	0	1621.1
21	3.01101	7121.51	Artificial Fill	0	40	1255.16	1353.9	1613.51	0	1613.51
22	3.01101	7271.27	Artificial Fill	0	40	1245.17	1343.13	1600.68	0	1600.68
23	3.01101	7399.84	Artificial Fill	0	40	1231.35	1328.22	1582.91	0	1582.91
24	3.01101	7506.69	Artificial Fill	0	40	1213.89	1309.39	1560.47	0	1560.47
25	3.01101	7591.25	Artificial Fill	0	40	1193.01	1286.86	1533.62	0	1533.62
26	3.01101	7652.93	Artificial Fill	0	40	1168.88	1260.84	1502.62	0	1502.62
27	3.01101	7691.09	Artificial Fill	0	40	1141.69	1231.51	1467.66	0	1467.66
28	3.01101	7705.03	Artificial Fill	0	40	1111.59	1199.04	1428.96	0	1428.96
29	3.01101	7694.02	Artificial Fill	0	40	1078.72	1163.58	1386.71	0	1386.71
30	3.01101	7657.25	Artificial Fill	0	40	1043.22	1125.29	1341.07	0	1341.07
31	3.01101	7593.87	Artificial Fill	0	40	1005.22	1084.3	1292.22	0	1292.22
32	3.01101	7502.95	Artificial Fill	0	40	964.827	1040.73	1240.3	0	1240.3
33	3.01101	7383.49	Artificial Fill	0	40	922.162	994.709	1185.45	0	1185.45
34	2.90618	6985.55	Older Alluvium	650	36	1407.82	1518.58	1195.49	0	1195.49
35	2.90618	6818.98	Older Alluvium	650	36	1363.04	1470.27	1129.01	0	1129.01
36	2.90618	6623.61	Older Alluvium	650	36	1316.62	1420.2	1060.09	0	1060.09
37	2.90618	6398.2	Older Alluvium	650	36	1268.64	1368.44	988.848	0	988.848
38	2.90618	6141.45	Older Alluvium	650	36	1219.16	1315.07	915.387	0	915.387
39	2.90618	5757.5	Older Alluvium	650	36	1159.47	1250.68	826.77	0	826.77
40	2.90618	4865.04	Older Alluvium	650	36	1056.12	1139.21	673.34	0	673.34
41	2.90618	3870.97	Older Alluvium	650	36	948.988	1023.65	514.279	0	514.279
42	2.90618	2838.75	Older Alluvium	650	36	844.297	910.718	358.846	0	358.846
43	2.90618	2002.81	Older Alluvium	650	36	761.631	821.548	236.115	0	236.115
			Older							

			Alluvium							
45	2.90618	4626.74	Older Alluvium	650	36	938.451	1012.28	498.635	0	498.635
46	2.90618	4992.75	Older Alluvium	650	36	946.124	1020.56	510.027	0	510.027
47	2.90618	5000.49	Older Alluvium	650	36	926.379	999.257	480.712	0	480.712
48	2.90618	4348.07	Older Alluvium	650	36	862.19	930.018	385.412	0	385.412
49	3.41498	3230.12	Artificial Fill	0	40	204.935	221.057	263.445	0	263.445
50	3.41498	1095.76	Artificial Fill	0	40	68.251	73.6203	87.7373	0	87.7373

Interslice Data

Global Minimum Query (spencer) - Safety Factor: 1.07867

Slice Number	X coordinate [ft]	Y coordinate - Bottom [ft]	Interslice Normal Force [lbs]	Interslice Shear Force [lbs]	Interslice Force Angle [degrees]
1	84.7855	115.221	0	0	0
2	87.7965	115.928	127.681	136.153	46.8392
3	90.8075	116.676	476.816	508.453	46.8391
4	93.8185	117.465	1003.47	1070.06	46.8394
5	96.8295	118.295	1668.08	1778.76	46.8392
6	99.8405	119.167	2435.02	2596.59	46.8392
7	102.852	120.082	3272.34	3489.46	46.8391
8	105.863	121.039	4151.39	4426.84	46.8392
9	108.874	122.04	5046.59	5381.43	46.8391
10	111.885	123.085	5935.13	6328.93	46.8391
11	114.896	124.175	6796.81	7247.78	46.8391
12	117.907	125.31	7613.76	8118.94	46.8391
13	120.918	126.491	8370.32	8925.7	46.8392
14	123.929	127.718	9052.83	9653.49	46.8391
15	126.94	128.993	9649.51	10289.8	46.8392
16	129.951	130.316	10150.3	10823.8	46.8392
17	132.962	131.689	10546.7	11246.5	46.8392
18	135.973	133.111	10831.8	11550.5	46.8391
19	138.984	134.584	11000	11729.9	46.8392
20	141.995	136.11	11047.1	11780.1	46.8392
21	145.006	137.689	10970.1	11698	46.8392
22	148.017	139.322	10767.1	11481.5	46.8391
23	151.028	141.01	10437.5	11130	46.839
24	154.039	142.756	9981.49	10643.8	46.8392
25	157.05	144.56	9400.57	10024.3	46.8391
26	160.061	146.424	8697.07	9274.12	46.8391
27	163.072	148.35	7874.31	8396.77	46.8391
28	166.083	150.339	6936.58	7396.83	46.8392

29	169.094	152.394	5889.12	6279.86	46.8391
30	172.105	154.515	4738.07	5052.44	46.8391
31	175.116	156.707	3490.54	3722.14	46.8391
32	178.127	158.97	2154.61	2297.57	46.8391
33	181.138	161.307	739.319	788.373	46.8391
34	184.149	163.722	-745.279	-794.729	46.8391
35	187.055	166.129	-852.179	-908.722	46.8392
36	189.961	168.614	-985.474	-1050.86	46.8391
37	192.867	171.179	-1131.29	-1206.36	46.8393
38	195.773	173.829	-1274.65	-1359.22	46.8391
39	198.68	176.567	-1399.34	-1492.19	46.8392
40	201.586	179.397	-1458.6	-1555.38	46.8392
41	204.492	182.325	-1280.16	-1365.1	46.8392
42	207.398	185.354	-811.575	-865.423	46.8391
43	210.304	188.492	-19.3868	-20.6731	46.8391
44	213.211	191.744	1049.13	1118.74	46.8391
45	216.117	195.117	1704.9	1818.02	46.8391
46	219.023	198.619	1810.9	1931.05	46.8391
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50	231.156	214.866	649.935	693.058	46.8391
51	234.571	220	0	0	0

List Of Coordinates

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225	220
218	211
217.625	210
212	195
200	194
83	114
40	102

0	100
0	0

Material Boundary

X	Y
217.625	210
250	210

Material Boundary

X	Y
83	114
180	138
185	169
195	178
200	194

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 7011		**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:
Ejaz Ahmad, Planner	559	600-4204	N/A

Applicant (Name):	Project Title:
Hewitson Farms	Unclassified Conditional Use Permit Application No. 3509

Project Description:

Allow continued aggregate (rock, sand, gravel) mining operations with incidental facilities approved under CUP No. 2461R beyond the current expiration date of 2018 on a 298-acre portion of a 637.81-acre parcel in the AE-20 (Exclusive Agricultural, 20-acre minimum parcel size) Zone District. The project site is located on the West side of State Highway 33 between Lost Hills Road and Sutter Avenue, approximately 6.9 miles southeast of the nearest city limits of the City of Coalinga (45315 Lost Hills Road, Coalinga, CA) (Sup. Dist.: 5) (APN: 085-110-26).

Justification for Mitigated Negative Declaration:

Based upon the Initial Study (IS 7011) prepared for Unclassified Conditional Use Permit Application No. 3509, staff has concluded that the project will not have a significant effect on the environment.

No impacts were identified related to population and housing and recreation.

Potential impacts related to air quality, agricultural and forestry resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, public services, transportation/traffic and utilities and service systems have been determined to be less than significant.

Potential impact related to aesthetics, biological resources, cultural resources, and noise has been determined to be less than significant with the identified mitigation measure.

The Initial Study and MND is available for review at 2220 Tulare Street, Suite A, Street Level, located on the southeast corner of Tulare and “M” Street, Fresno, California.

FINDING:

The proposed project will not have a significant impact on the environment.

Newspaper and Date of Publication:	Review Date Deadline:
Fresno Business Journal – September 11 , 2017	October 11, 2017

Date:	Type or Print Name:	Submitted by (Signature):
September 6, 2017	Marianne Mollring, Senior Planner	

State 15083, 15085

County Clerk File No.:_____

LOCAL AGENCY
MITIGATED NEGATIVE DECLARATION

EXHIBIT 10