

**GRANITE CONSTRUCTION COMPANY
ESPARTO MINING AND RECLAMATION PROJECT
RECLAMATION PLAN**



SUBMITTED TO:
County of Yolo
Parks and Resources Department
120 West Main Street, Suite C
Woodland, CA 95695

OCTOBER 2007

GRANITE

**GRANITE CONSTRUCTION COMPANY
ESPARTO FACILITY
RECLAMATION PLAN**

STATEMENT OF RESPONSIBILITIES

I, the undersigned, hereby agree to accept full responsibility for reclamation of all mined lands as described and submitted herein and in conformance with the applicable requirements of Articles 1 and 9 (commencing with Sections 3500 et seq. and 3700 et seq., respectively) of Chapter 8 of Division 2 of Title 14 of the California Code of Regulations, the Surface Mining and Reclamation Act commencing with Section 2710 et seq., and with any modifications requested by the administering agency as conditions of approval.

Signed this _____ day of _____, 20____.

Mine Operator or Operator's Agent _____

GRANITE CONSTRUCTION COMPANY ESPARTO FACILITY RECLAMATION PLAN

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GRANITE CONSTRUCTION COMPANY ESPARTO FACILITY RECLAMATION PLAN

EXECUTIVE SUMMARY

The Granite Construction Company (“Granite”) Esparto Mining Project (“Project”) is an application for a Conditional Use Permit (CUP) and reclamation plan for mining, processing, and sale of sand and gravel resources. The proposal includes a request for approval of a 30-year mining and processing operation located approximately 1.5 miles north of the town of Esparto along County Road 87 (see Figure 1, Regional Location Map, and Figure 2, Site Location Map).

This application is designed to be consistent with the Yolo County Off-Channel Mining Plan, including its Surface Mining and Surface Mining Reclamation Ordinances. In addition, Granite has carefully reviewed the *Technical Studies and Recommendations for the Lower Cache Creek Resource Management Plan*, and believes the Project is consistent with the overall objectives of the County. Every effort has been made to utilize existing information and recommendations, as well as incorporate Granite’s experience in the vicinity of Cache Creek to prepare this application.

The Project proposes mining of approximately 313± acres of two parcels totaling 390± acres with extraction of approximately 30,000,000 tons of sand and gravel over 30 years. Various mining methods and depths are proposed throughout the Project site as well as a variety of end uses.

GRANITE CONSTRUCTION COMPANY ESPARTO FACILITY RECLAMATION PLAN

INTRODUCTION

This Reclamation Plan has been prepared in accordance with the Yolo County Surface Mining Reclamation Ordinance and the Surface Mining and Reclamation Act (SMARA) of 1975, to address the reclamation of Mined Lands proposed as part of Granite's Esparto Facility. Part A of this Reclamation Plan is formatted to follow Section 10-5.601 of the Yolo County Surface Mining Reclamation Ordinance, Application Contents. Part B of this Reclamation Plan addresses the specific requirements of SMARA as they pertain to the reclamation of the proposed project.

PART A: YOLO COUNTY SURFACE MINING RECLAMATION ORDINANCE REQUIREMENTS

Commencing with Yolo County Surface Mining Reclamation Ordinance, Section 10-5.601:

1.0 DESCRIPTION OF RECLAMATION PLAN

(a) A narrative description of the proposed use of mined lands after reclamation has been completed and the manner in which reclamation will be accomplished, including the following information:

(1) The consistency of the proposed reclaimed use with this chapter, the General Plan, zoning, and applicable specific plans;

This Reclamation Plan proposes reclaimed uses that include Prime Agriculture, open space/dry pasture, and open water lake with shoreline and oak woodland habitat. Detailed descriptions of the manner in which reclamation will be accomplished is provided in this Reclamation Plan and its supporting documents including the Soils Evaluation Report and Reclamation Plan (Appendix A of the Application Package), and Habitat Restoration and Landscape Visual Screening Plan (Appendix E of the Application Package). The reclaimed land uses proposed are consistent with the overall goals and objectives of the Yolo County General Plan and Off-Channel Mining Plan for Lower Cache Creek.

The proposed reclaimed land uses are also consistent with the Yolo County Zoning Ordinance. The proposed reclaimed land uses are consistent with the land uses in the surrounding area, which are predominantly mining and agriculture. Additionally, this Project application includes a request for a Zoning Ordinance Amendment and Zone change from A-P (Sand and Gravel Reserve) to A-P (Sand and Gravel) and from A-1

(Sand and Gravel Reserve) to A-1 (Sand and Gravel), which will allow mining and processing with approval of a Conditional Use Permit.

The EIR prepared for this project will evaluate land use, zoning and General Plan consistency in more detail.

(2) The manner by which contamination will be controlled in the reclaimed use; (SMARA §2772(c)(8)(A))

All mine operations and reclamation work will be in conformance with applicable state and federal requirements for preventing releases of materials that could result in contamination, and for reporting and mitigating releases if they should occur. Fine-grain wash sediments will be placed in settling ponds during mine operations in accordance with RWQCB requirements for protection of water quality. As part of mine closure and final reclamation, equipment and materials will be removed from the site. Fine-grain wash sediments contained in settling ponds will be allowed to dry and then covered with topsoil and then revegetated or returned to prime agricultural use. Other reclaimed areas that are not used for prime agriculture or occupied by open water/lake habitat will be covered with soil and seeded and/or planted to stabilize the ground surface and to provide for beneficial post-reclamation use. Revegetation of disturbed ground surfaces will minimize erosion. Final grading is designed to retain storm water drainage and agricultural tail water onsite.

(3) The manner in which affected streambed channels and streambanks will be rehabilitated to a condition minimizing erosion; (SMARA §2772(c)(8)(B))

The proposal is for an off-channel mining permit. The proposed Mined Lands do not include any stream channel or stream bank, so this item is not applicable to the proposed Mined Lands.

The proposal includes implementation of Yolo County's Test 3 line for Cache Creek, which will require submittal and approval of a Flood Hazard Development Permit and bank stabilization plans. This permit will need to be approved prior to any work taking place in the channel boundary. Mining and processing activities will maintain a minimum 200-foot setback off the Test 3 line.

(4) The effect that proposed reclamation will have on future mining, both on-site and in the surrounding area; (SMARA §2772(c)(9))

The proposed reclamation and end uses of the site would not prevent future mining either on site or in the surrounding area.

(5) A time schedule of reclamation activities, showing the beginning date, completion dates for each proposed phase, and the final completion date, supported by a statement indicating that reclamation will be initiated at the

earliest possible time on those portions of the site that will not be subject to further disturbance by mining; (SMARA §2772(c)(6))

Table 1 provides a time schedule for reclamation activities. Reclamation will be initiated as early as possible on those portions of the site that will not be subject to further disturbance by mining.

**TABLE 1
RECLAMATION PHASING SCHEDULE**

Phase	Begin Mining (years)	Begin Reclamation (years)	Complete Reclamation (years)
Phase 1A (Plant site)	<1	<1	32
Phase 1B (Settling ponds)	2	4	32
Phase 2 (Open water)	9	9	32
Final Reclamation Completion Date:			32

Notes:

1. Schedule estimates assume maximum production and sales through the life of the Project.
2. Site development and land dedication may take one (1) to two (2) years prior to commencement of mining and processing.
3. Reclamation will be initiated at the earliest possible time on portions of the site that will not be subject to further disturbance by mining.

(6) Separate sections demonstrating compliance of the proposal with each minimum performance standard set forth in the Regulations and Article 5 of this chapter;

Pursuant to Yolo County Surface Mining Reclamation Ordinance, Article 5, Section 10-5.501, a discussion of the following minimum acceptable standards is incorporated into this reclamation plan commencing with Section 10-5.502:

Sec. 10-5.502. Aesthetics.

Visual screens and berms will be used to shield views of active mining operations and minimize aesthetic impacts. At closure, there will be no permanent piles of mine waste, topsoil or overburden left on site. Equipment and other remnants of mining will be removed. Berms established at the beginning of operations for visual screening and noise abatement will be contoured during final reclamation to conform visually to the surrounding topography. Slopes above the groundwater mark will be graded to 2:1 or flatter. Reclamation areas will be revegetated, and an open water lake with shoreline habitat will provide additional aesthetic benefit to the site.

Sec. 10-5.503. Backfilled excavations: Groundwater flow impacts.

The area of backfilled off-channel excavations extending beneath the ground water table is minimized in the proposed project design to the extent consistent with efficient resources recovery. The only areas where backfill will occur beneath the ground water table are in the bottom portions of the settling basins (see Exhibit A, Mining Plan).

The backfilled settling ponds will neither penetrate fifty (50) feet or one-half (1/2) into the saturated thickness of the shallow aquifer. Drilling logs indicate that the aquifer is expected to be approximately 200 feet in depth. No additional analysis is therefore required.

Sec. 10-5.504. Backfilled excavations: Improvements. (SMARA §3704(a))

Not applicable; the project does not propose improvements, including the construction of buildings, roadways, or other public facilities, in backfilled areas. If such improvements are proposed at a later time, a geotechnical investigation will be prepared and a report on the results and recommendations of the investigation shall be submitted to the Yolo County Community Development Agency prior to the issuance of building permits. The recommendations of the geotechnical investigation would be fully implemented.

Sec. 10-5.505. Backfilled excavations: Inspections.

If, following a strong seismic event, the Yolo County Community Development Agency (YCCDA) performs an inspection and determines that damages to backfilled mining areas and slopes requires repair to meet the intended use of the reclaimed land, the landowner will perform the required repairs.

Sec. 10-5.506. Bank stabilization maintenance.

The Financial Assurance Estimate (Reclamation Plan Appendix A) includes adequate funding for maintenance during the mining and reclamation period of bank stabilization features.

The condition of flood protection structures and the integrity of the land within the approved setback zone separating the mining areas and the stream channel (i.e., 200 feet as proposed), will be inspected annually by a Registered Civil Engineer and reported to the YCCDA. The annual report will include recommendations for remedial action if erosion problems are identified.

If, upon inspection, the YCCDA determines observable damage requires repair to meet the intended performance of the separator, the property owner will perform the required repairs.

Sec. 10-5.507. Drainage. (SMARA §3706(a)-(e))

Drainage plans designed in accordance with Sec. 10-5.507 of the Yolo County Surface Mining Reclamation Ordinance are submitted as part of this proposal (see Exhibit B, Reclamation Plan). Upon completion of operations, grading and revegetation will occur to minimize erosion and to convey storm water runoff from reclaimed mining areas to interior basins. Final grading will be established to provide positive drainage toward the interior basins sufficient to prevent water pockets or undue erosion. Because storm water will be retained in interior basins, there will be no impact on flooding on surrounding properties. Grading during operations and following reclamation is designed to prevent discharges into the wet pit/open water habitat area. Only the pit slopes will drain toward the wet pit/open water habitat.

Sec. 10-5.508. Erosion control. (SMARA §2772(c)(8), 3705(i), 3706)

All slopes will be regraded and seeded as soon as practical upon achieving final grades. The timing for reclamation, the seed mix, and reseeding to take maximum advantage of seasons is described in Section 3.7 of the Habitat Restoration and Landscape Visual Screening Plan, which includes a specification to seed prior to November 1 wherever practical. Phasing of mining will occur to minimize the length of exposed mining slopes.

Sec. 10-5.509. Fence row habitat.

Negligible fence row habitat occurs at the site (see Figure 3, Existing Conditions Aerial Photograph). The reclamation plan will return approximately 74 acres of the site to prime agriculture use that will reestablish habitat similar to the existing prime agricultural areas onsite. Reclamation in areas that are not returned to prime agriculture will improve the wildlife habitat value compared to existing agricultural uses due to the planting and seeding of open space and dry pasture habitat with grasses, trees and shrubs to provide oak woodland, riparian woodland, and open water habitat. The improved habitat over approximately 75 percent of the mined lands far exceeds the habitat value of the negligible existing fence line habitat. Locations of the oak woodland, riparian woodland and open water habitat, species to be planted, and densities, area provided in the Habitat Restoration and Landscape Visual Screening Plan.

Sec. 10-5.510. Fencing.

The mining site will be fenced with a 42-inch minimum four strand barbed wire fence, the equivalent, or other type approved by Yolo County, prior to the commencement of excavation, during excavation, and during reclamation. Signs will be installed at the project site boundaries and access road indicating that the excavation area is restricted. Additional security gates will be provided at

vehicular routes. Fencing and gates will be maintained throughout the life of the project.

Sec. 10-5.511. Field drainage.

Reclaimed agricultural surfaces will be graded to provide adequate field gradients to allow surface/furrow irrigation of crops and allow for adequate storm water drainage.

Sec. 10-5.512. Field releveling.

A Licensed Land Surveyor or Registered Civil Engineer will be retained to resurvey areas reclaimed to agriculture after the first two (2) crop seasons have been completed. Areas where settling has occurred shall be relevelled to the field grade specified in the reclamation plan (Exhibit B).

Sec. 10-5.513. Floodplain development.

Implementation of the Cache Creek Test 3 line will conform to all applicable requirements of the Yolo County Flood Ordinance, the Federal Emergency Management Agency (FEMA), and the State Reclamation Board. Please see Application Package Appendix C, Hydraulic Study, for more detail.

Sec. 10-5.514. Habitat management plan compliance.

The Yolo Natural Heritage Program (formerly the Habitat Conservation Plan) is still under development.

Sec. 10-5.515. Habitat plan referral.

A Habitat Restoration and Landscape Visual Screening Plan is included in the project application submitted to Yolo County. A copy of the plan shall be sent to the California Department of Fish and Game, U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and other interested parties for review and comment to ensure that the project does not conflict with other existing habitat enhancement efforts.

Sec. 10-5.516. Lowered elevations for reclaimed agricultural fields.

The final distance between lowered surfaces reclaimed to agriculture and the average high groundwater will not be less than five (5) feet.

Sec. 10-5.517. Mercury bioaccumulation in wildlife.

Yolo County commissioned a sampling and analysis program to assess bioaccumulation of mercury pursuant to Section 10-5.517 of the Yolo County

Surface Mining Reclamation Ordinance. This sampling was completed by the County in the fall of 1997.

Sec. 10-5.518. Mining in reclaimed lands.

Once the reclamation plan or any portion thereof has been completed, no further surface mining operations will occur unless the surface mining permit and reclamation plan are amended.

Sec. 10-5.519. Motorized watercraft prohibition.

The use of motorized recreational watercraft will be prohibited.

Sec. 10-5.520. Operational areas. (SMARA §3705)

The site will be prepared for plantings in accordance with recommendations of the Soils Evaluation Report and Reclamation Plan, and Habitat Restoration and Landscape Visual Screening Plan. Operational areas and haul roads that are not required for future use of the site will be ripped, resoiled and prepared for planting as described in these plans.

Sec. 10-5.521. Permanent stockpiles. (SMARA §3704(e))

When reclamation is complete, there will be no permanent piles of mine waste and/or overburden. Berms established for visual screening and noise abatement will be contoured to conform visually to the surrounding topography. Please refer to Exhibit B, Reclamation Plan.

Sec. 10-5.522. Phasing plans. (SMARA §2772(c)(6),(c)(8))

The proposed Project is divided into two major phases distinguished by the mining and reclamation objectives. Phase 1 consists of development of the processing plant site and excavation and construction of settling ponds which will ultimately be reclaimed to agricultural uses. Phase 2 consists of the excavation of an area proposed to be reclaimed to a lake with surrounding shoreline habitat and sloped oak woodland habitat areas. The areas of these phases are shown in Exhibit A, Mining Plan, and Exhibit B, Reclamation Plan. Table 1 (above) provides an estimated time schedule for each phase of reclamation activities. Slopes will be reclaimed as soon as possible to reduce erosion potential and ensure the establishment of habitat. Reclaimed areas will be maintained by Granite and monitored for five years or until success criteria are met, to ensure habitat and revegetation success. The following provides a description of each phase.

Phases 1A and 1B (Open Space/Dry Pasture and Prime Agriculture)

Phase 1, which consists of Phases 1A and 1B, includes development of a processing plant site, construction of a plant, and mining and constructing a series of five (5) settling ponds designed with enough capacity to contain all of the process wash fines for the entire Project. Collectively, the five settling ponds are designed to hold all the fines for the processing of approximately 30,000,000 tons of aggregate at a projected wash loss rate of 12%. The ponds will accept fines and will ultimately be overlaid with soils for reclamation. Approximate reclamation grades are depicted in Exhibit A, Mining Plan, and Exhibit B, Reclamation Plan, prepared by Cunningham Engineering. The Phase 1A area currently is primarily open space grassland, and will be reclaimed to open space/dry pasture. The Phase 1B area is currently prime agricultural land, and will be reclaimed to prime agriculture.

The first two of the five settling ponds will be sequentially mined and then reclaimed with the settlement of wash fines as part of Phase 1A. These two settling ponds will total approximately 8 acres northwest of the proposed plant site. Excavated sand and gravel from the first (smaller) settling pond will be stockpiled in a surge pile adjacent to the plant site. As the stripping of overburden material and excavation of the second pond begins, materials stockpiled in the surge pile will be processed through the plant and wash fines will be pumped into the first pond. The second interim pond is designed with enough capacity to handle fines during the mining and construction of the first settling pond in Phase 1B.

Phase 1A ponds may be used until reclamation of the plant site. At the start of plant site reclamation, they will be allowed to dry and overburden and topsoil will be placed on top of the wash fines for reclamation to open space/dry pasture. Predominantly "C" Horizon soils shall be placed atop wash fines, and "A" Horizon soils shall be placed atop "C" Horizon soils. Soils placed for reclamation will be ripped to minimize compaction and seeded. The reclamation of the Phase 1A settling ponds will be completed after 30 years of operation.

Reclamation of the plant site portion of Phase 1A will occur at the end of the mine life and will be completed after stockpiled product is sold. Upon completion of mining, processing, and sales operations, the plant will be removed and the plant site will be regraded to a more natural topography. Stockpiled C-Horizon and A-Horizon soils will be evenly spread across the site to create approximately 38 acres of open space and pasture. The plant site's final reclamation grades are designed to drain northerly toward an interim plant pond, easterly toward a retention basin at the northeast side of the plant site, and southwesterly toward a retention basin at the southwest corner of the plant site. This will keep surface drainage at the plant site from entering open water mining areas and from leaving the site.

Phase 1B includes the mining of and reclamation of approximately 80 acres on the north end of the site. As mining progresses across the Phase 1B area, three settling ponds will be sequentially constructed across the mining area and used to deposit wash fines. These three ponds are sized to accommodate disposal of wash fines from the time that the Phase 1A ponds reach capacity to the end of the mine life. The three ponds will be separated by north-south trending levees. Below the ground water level, the levees will be in-situ native soil and gravel left in place under the mining plan, with levee side slopes of 2:1 above water, and 1.5:1 slopes from five feet below the average low groundwater level to the bottom. Above the ground water level, the levees will be constructed with compacted primarily "C" horizon soils placed in compacted lifts to form 2:1 side slopes and an approximately 16-foot wide levee top.

Reclamation in the Phase 1B area will begin as soon as practical and will be conducted sequentially for the duration of the mine life until the entire area has been reclaimed. Each of the three ponds will be sequentially reclaimed with the settlement of wash fines and the placement of topsoil and overburden material. The final elevation of the reclaimed ponds can only be approximated based on drill-log data and the projected 12 percent wash loss rate.

As each of the Phase 1B ponds reaches its estimated wash fines design capacity, it will be allowed to dry and overburden and topsoil will be placed on top of the wash fines for reclamation to prime agriculture. A minimum of three feet of predominantly "C" Horizon soils shall be placed atop wash fines and graded for drainage, and a minimum of 20 inches of "A" Horizon soils will be placed atop "C" Horizon soils. Soils placed for reclamation will be ripped to minimize compaction. Phase 1B is expected to yield approximately 74 acres of prime agricultural land upon final reclamation. The reclaimed agricultural surfaces will be graded to provide adequate field gradients to allow surface/furrow irrigation of crops and allow for adequate storm water drainage. The northeastern corner of Phase 1B will contain a retention basin for agricultural tail-water and surface water return.

Phase 2(Lake/Open Water, Shoreline and Oak Woodland)

Phase 2 consists of excavating an approximately 165-acre area with reclamation to an open-water lake with surrounding shoreline and oak woodland habitat areas. The shoreline will be enhanced with varying slope angles and revegetation and land features to maximize the open space habitat potential of the lake. Perimeter slopes will be excavated at a slope angle of 2:1 or flatter. Wash fines from materials processed during Phase 2 mining operations would be contained in Phase 1B settling ponds.

Minimizing Disturbance to Agricultural Lands

Phase 1A will be developed as part of initial operations. Phase 1B and Phase 2 will be developed over the mine life following Phase 1A, in a manner that will minimize the area of disturbed agricultural lands during these phases. Agriculture in the areas of Phase 1B and Phase 2 will be allowed to continue where practical while Phase 1A is being developed. Phase 1B will be developed in three sequential stages, with agriculture being allowed to continue where practical in the undeveloped stages of Phase 1B until they are needed. In Phase 2, agriculture will be allowed to continue where practical in undeveloped areas as the Phase 2 mining progresses.

Sec. 10-5.523. Planting plans. (SMARA §3703(b), 3705)

The reclamation proposal provides better habitat potential than what currently exists without the project. A combination of reclamation end uses, including agricultural fields, an open water lake with adjacent shoreline and oak woodland habitat, and open space and pasture provide higher quality habitat for a number of species, including special-status species.

Site-specific plantings are addressed in the Habitat Restoration and Landscape Visual Screening Plan.

Sec. 10-5.524. Post-reclamation groundwater monitoring.

Monitoring during the mining and reclamation period will be conducted as required by the project permit. Groundwater monitoring will continue for ten (10) years after the completion of reclamation.

Sec. 10-5.525. Prime farmland conversion. (SMARA §3707)

The Soils Evaluation Report and Reclamation Plan discusses the reclamation of prime agricultural lands in detail. The project proposes to return approximately 74 acres of the site's 104 acres of prime agricultural lands to prime agricultural use. An additional 38 acres will be reclaimed to dry pasture. Where prime agricultural land is impacted and the reclamation plan does not provide for an agricultural end use, impacts to these lands will be mitigated in accordance with the requirements of Yolo County.

Sec. 10-5.526. Repair of damage due to natural disaster.

The cost of implementing recommendations for repair of reclaimed land caused during earthquakes or other natural events will be met through application of contingency costs provided in the attached Financial Assurance Estimate (Reclamation Plan Appendix A).

Sec. 10-5.527. Recreational and habitat uses of permanent wet pits.

The Habitat Restoration and Landscape Visual Screening Plan has been developed to account for fluctuations in the groundwater table.

Sec. 10-5.528. Sewage storage prohibition.

Off-channel wet pits will not be used for the storage and treatment of sewage effluent, or for landfill purposes.

Sec. 10-5.529. Shallow depths.

The Habitat Restoration and Landscape Visual Screening Plan has been developed to include valuable wildlife habitat as a beneficial use of the water lost from wet pits due to evaporation.

Sec. 10-5.530. Slopes. (SMARA §3704(d)(f))

Slopes will not exceed the angles allowed in the ordinance or recommended in the Slope Stability Study prepared by Wallace Kuhl & Associates (Application Package Appendix I).

Sec. 10-5.531. Soil ripping. (SMARA §3704(d)(f))

Soil ripping of areas to be reclaimed to agricultural use is discussed in the Soils Evaluation Report and Reclamation Plan.

Sec. 10-5.532. Use of overburden and fine sediments in reclamation. (SMARA §3711)

In-channel mining is not proposed so there will be no in-channel sediment fines. Overburden and processing fines from the proposed off-channel mining will be used to support reclamation activities as described in other sections of this reclamation plan and its attachments. The slopes around the wet pit will be reclaimed through the application of topsoil, planting and seeding as described in the Habitat Restoration and Landscape Visual Screening Plan. Topsoil that will be placed within the drainage area of the wet pit will be sampled and analyzed for pesticides and herbicides (EPA Methods 8140 and 8150) prior to placement to assure that concentrations are below primary drinking water Maximum Contaminant Levels.

Sec. 10-5.533. Wetland habitat.

Reclamation of Phase 2 includes an open-water lake with wetland habitat included at the lake perimeter. The shoreline will be scalloped with varying slope angles and land features to benefit the habitat potential of the lake. Wetland and

other vegetation will provide continuous habitat value around the lake. Please see Exhibit B, Reclamation Plan. Specific habitat restoration around the open water lake is discussed in the Habitat Restoration and Landscape Visual Screening Plan.

Sec. 10-5.534. Exceptions.

No exceptions are requested at this time.

- (7) **A signed statement that the person submitting the application accepts responsibility for implementing the approved reclamation plan;** (SMARA §2772(c)(10))

A signed statement of reclamation responsibility is included at the beginning of this reclamation plan.

- (8) **The acreages of proposed reclaimed uses, such as agriculture, wetlands, groundwater recharge, etc.;**

Agriculture:	±74 acres.
Habitat/ Wetlands:	±44 acres.
Open water:	±157 acres.
Open space / Dry Pasture:	±38 acres.

- (9) **The methods to be used for on-site and off-site surface water drainage and erosion control after reclamation has been completed, including provisions for ensuring flood protection of the site for the one-hundred (100) year event;** (SMARA §3706)

Upon the completion of operations, grading and revegetation shall minimize erosion and convey storm water runoff from reclaimed mining areas to interior basins (please refer to Exhibit B, Reclamation Plan). All mining slopes will be reclaimed as soon as practical to the required ultimate condition.

The applicant also proposes implementation of a segment of the Test 3 line for Cache Creek as a net benefit to Yolo County, which will ensure flood protection for a 100-year event (see Exhibit A, Mining Plan).

- (10) **A discussion of the maximum amount of mined lands to be disturbed at any one time;**

The maximum amount of disturbance at any one time is estimated at 75 acres for active mining, 75 acres for settling ponds, and 40 acres for the processing plant site, for a total of 190 acres.

- (11) **A description of whether any portion of the project site is currently under a Land Conservation Contract (Williamson Act) and/or Agricultural Preserve,**

including any lands for which a Notice of Nonrenewal has been filed and the date of expiration. Proposed mined lands that meet the definition of “prime farmlands” as defined under the Williamson Act shall also be identified;

All parcels within Yolo County that are currently zoned Agricultural Preserve (A-P) are subject to Williamson Act Contract provisions. The Project is consistent with uses specified “compatible uses” within the existing Williamson Act Contract. Where otherwise applicable, the Project is consistent with the requirements of State law respecting the use of contracted lands (e.g., Government Code Section 51238.2). Assessor Parcel Number 048-220-221 is currently under a Williams Act Contract (No. 69-331); however, a Notice of Non Renewal was filed by the previous landowner on November 25, 2003.

2.0 DESCRIPTION OF SURFACE MINING PLAN

(b) A narrative description of the type of surface mining proposed to be employed, including the following information:

(1) The name and address of the proposed surface mine operator and the names and addresses of any persons designated by the operator to act as an agent for the applicant through the permit process; (SMARA §2772(c)(1))

<u>Owner / Operator:</u>	<u>Agent</u>
Granite Construction Company	N/A
4001 Bradshaw Road	
Sacramento, CA 95827	
Contact: Yasha Saber, Project Manager	

(2) The anticipated quantity and type of minerals for which the proposed surface mining operation will be conducted, including the estimated maximum annual production with calculations presented in both tons mined and in tons sold; (SMARA §2772(c)(1))

Mine production is estimated at approximately 1,000,000 tons per year, with a 12% assumed wash loss. This would result in approximately 870,000 tons sold per year. The Project may occasionally produce and sell up to 20% more material in any given year (up to 1,044,000 tons); however, average sales over any 10-year period will not exceed 870,000 tons per year.

Total mined volume over the life of the project is estimated at approximately 30 million tons, with approximately 26.1 million tons sold.

(3) The proposed dates for the initiation and termination of the proposed surface mining operation; (SMARA §2772(c)(1))

The proposal is to install equipment and facilities on the site and begin operations as soon as possible after all necessary approvals are obtained. The proposal requests a 30-year permit, thus the estimated date of termination is 30 years from the date of project mining commencement.

(4) The maximum anticipated depth of the proposed surface mining operation;

The maximum anticipated depth is 75 feet below ground surface (bgs).

(5) Evidence that all owners of a possessory interest in the lands included in the application have given authority to the applicant to conduct surface mining as proposed and to implement the reclamation plan as proposed; (SMARA §2772(c)(7))

Not applicable. The Applicant is the sole owner of a possessory interest in the land.

(6) The acreage of the lands that will be affected by the surface mining operations (separately identifying buffer and setback areas), as well as acreage and legal descriptions of the original parcels; (SMARA §2772(c)(5))

The acreage of lands affected by surface mining operations is as follows:

Phase 1A:	38 acres
Phase 1B:	69 acres
Phase 2:	195 acres
Setbacks:	11 acres

The 390± acre site consists of two (2) parcels with Assessors Parcel Numbers 048-220-221 and 048-220-151.

Please see Reclamation Plan Appendix B for the Site Legal Description.

(7) A description of the general geology of the region, including a detailed description of the geology of the area in which surface mining is to be conducted; (SMARA §2772(c)(5))

The Project site is located within the Great Valley geomorphic province of California. The Great Valley is a large, elongate northwest-trending structural trough, generally constrained to the west by the Coast Ranges and to the east by the foothills of the Sierra Nevada (Norris and Webb, 1990). The Great Valley consists of two valleys lying end-to-end, with the Sacramento Valley to the north and the San Joaquin Valley to the south. The Sacramento and San Joaquin Valleys have been filled to their present elevations with thick sequences of sediment derived from both marine and continental sources. The

sedimentary deposits range in thickness from relatively thin deposits along the eastern valley edge to more than 25,000 feet in the south central portion of the Great Valley (Norris and Webb, 1990). The sedimentary geologic formations of the Great Valley province vary in age from Jurassic to Quaternary, with the older deposits being primarily marine in origin. Younger sediments are continentally derived and were typically deposited in lacustrine, fluvial, and alluvial environments with their main source being the Sierra Nevada.

The California Division of Mines and Geology, *Geologic Map of the Santa Rosa Quadrangle, California*, shows the site to be underlain by Natural Levee and Channel Deposits and the Modesto/Riverbank Formation. The Cenozoic to Holocene (less than 11,000 years old) Natural Levee and Channel Deposits consist of unconsolidated clay, silt, sand, and gravel deposited by the existing (active) stream and river systems. The Pleistocene (approximately 1.8 million years old) Modesto/Riverbank Formation consists of semi-consolidated alluvial deposits of sand, silt, clay, and gravel. (Wallace Kuhl, 2007)

The State Department of Conservation has evaluated available mineral resource information for the areas along Cache Creek and assigned areas into Mineral Resource Zones (MRZ) classifications. The MRZ classifications are used by the State to define the potential for an area to contain mineral deposits important to the State. The identification of these zones is a guideline to assist local jurisdictions in making land use decisions with consideration given to the importance of mineral resources to the market region, and the discouragement of uses that would inhibit harvesting of those resources.

The Project site is located within the MRZ-2 zone. The MRZ-2 zone is defined as:

MRZ-2: Areas where adequate information indicates that significant mineral deposits are present, or where it is determined that a high likelihood for their presence exists. In addition, there are two economic requirements that must be met if land is to be classified as MRZ-2: (1) the deposit must be composed of material that is suitable as a marketable commodity; and (2) the deposit must meet a threshold value (gross selling price) equal to at least \$5,000,000 (1978 dollars).

(8) The names and addresses of the owners of all surface interests and mineral interest in the lands to be mined; (SMARA §2772(c)(5))

Surface and mineral interests are owned by:

Granite Construction Company
4001 Bradshaw Road
Sacramento, CA 95827

3.0 SITE-SPECIFIC TECHNICAL STUDIES

(c) Site-specific technical studies, performed by qualified professionals in the appropriate area of expertise, shall provide specific proposals for inclusion in the reclamation plan to address the following potential environmental impacts:

(1) A biological analysis to evaluate the feasibility of proposed revegetation efforts, including detailed plans describing planting methods, appropriate planting times, species to be used, irrigation requirements, erosion control, weed control, and proposed success rates for plant cover and density. The analysis shall also include cross-sections for those areas proposed to be revegetated, including slopes, visual screens, and wildlife habitat;

Please refer to the Habitat Restoration and Landscape Visual Screening Plan (Application Package Appendix E).

(2) If the proposed reclamation plan includes agriculture as an end use, then a soil analysis shall be submitted to evaluate the methods and feasibility of restoring those portions of the mined site to agricultural productivity, including discussions of current and reclaimed soil conditions and classifications, the types of crops grown on the lands proposed for reclamation and their historic yields for a minimum of five (5) years, and projected production of reclaimed agricultural lands. The analysis shall also include detailed plans for the removal and replacement of topsoil and overburden, including cross-sections of the areas to be reclaimed to agriculture, the depth of soils replaced, field irrigation slope grades, detention basins, and the relationship between finished field elevations and the groundwater level for the site; and

Please refer to the Soils Evaluation Report and Reclamation Plan (Application Package Appendix A).

(3) A geotechnical study to evaluate the proposed final slopes to ensure that they will be stable once mining has been completed and that the slopes possess an adequate factor of safety. Measures shall be included within the study to ensure slope stability and maintenance.

Please refer to the Slope Stability Evaluation (Application Package Appendix I).

4.0 SITE PLAN

(d) A site plan submitted in the form prescribed by the Planning Director, including all property proposed to be included in the reclamation plan, drawn to a scale of one inch equals one-hundred feet (1" = 100'), or other scale acceptable to the Director for larger holdings. Small-scale, reproducible copies shall be provided along with all site plans submitted. Site plans shall show the following information:

- (1) All property lines, including the boundaries of the parcels proposed for mining and reclamation; the boundaries of any ownerships, leases, and/or other entitlements vested in the surface mining operator which allow surface mining and reclamation to be conducted on-site; and all Assessor parcel numbers for properties included in the application; (SMARA §2772(c)(5))**

Mining will occur on Assessor Parcel Nos. 048-220-221 and 048-220-151. Granite owns both of these parcels, including mineral rights. Property lines are shown in Figure 4, Assessor Parcel Map.

- (2) The location of all streams, roads, railroads, and utility facilities within, or adjacent to, the lands to be reclaimed; (SMARA §2772(c)(5))**

There are no railroads on or adjacent to the lands to be reclaimed. Cache Creek is the only stream on or adjacent to lands to be reclaimed. Roads and utilities on or adjacent to the areas to be reclaimed are described in Section 2.3 of the Project Description (Tab 4). Cache Creek, roads and utilities are shown on Exhibits A and B, Mining and Reclamation Plans.

- (3) The location and condition of any previously mined areas within the site, specifically designating those portions of the site, if any, where mining was completed prior to January 1, 1976, and which is claimed to be exempt from the requirements of this chapter; (SMARA §2776)**

The site was previously mined; however, no exemptions are claimed.

- (4) The existing and proposed topography of all reclaimed lands, including the location of the control cross-sections submitted pursuant to subsection (e) of this section; (SMARA §2772(c)(5))**

See Exhibit B, Reclamation Plan.

- (5) The location of all development proposed as a part of the reclaimed end use, including settling basins, drainage conveyances, equipment, fences, and other man-made structures;**

Reclamation end use settling basins, fences, and drainage conveyances, including the Test 3 line implementation, are shown in Exhibits A and B, Mining and Reclamation Plan. The reclamation end uses include agriculture and open space, with no development.

- (6) The depiction of separate reclamation phases;**

Reclamation will occur as soon as practical in areas that will not be subject to further disturbance. Reclamation will occur in phases 1A, 1B and 2, as described previously in

this Reclamation Plan pursuant to Section 10-5.522 of the Yolo County Surface Mining Reclamation Ordinance. The area of these phases is shown in Exhibit B, Reclamation Plan.

- (7) The locations for the permanent storage of overburden and waste material in any proposed berms;**

At closure, there will be no permanent piles of mine waste, soil and/or overburden. Berms established for visual screening and noise abatement will be contoured to conform visually to the surrounding topography. Please refer to Exhibit B, Reclamation Plan.

- (8) The proposed points of ingress and egress, access roads, driveways, and parking areas proposed as apart of the reclaimed end use; and**

The reclamation end uses include agriculture and open space, with no development. Ingress, egress and access roads are shown in Exhibit A, Mining Plan. No driveways or parking areas are proposed as part of the reclaimed end use.

- (9) The extent of any borrow areas, where topsoil and overburden material are excavated to be used in the reclamation of mined lands.**

No topsoil or overburden borrow areas are proposed. Topsoil and overburden that will be removed from areas to be mined will be adequate to complete reclamation as described in this Reclamation Plan.

5.0 CONTROL CROSS-SECTIONS

- (e) Graphic depictions of control cross-sections located as follows and including the following information:**

- (1) At least three (3) control cross-sections within the area to be reclaimed, with two (2) of the cross-sections perpendicular to one another;**
- (2) In no event may the interval between the control cross-sections exceed twelve-hundred (1,200) feet; and**
- (3) The cross-sections shall identify both the existing and proposed reclaimed elevations, and shall identify the angle of reclaimed slopes.**

Control cross sections and their locations are shown in Exhibit A, Mining Plan, and Exhibit B, Reclamation Plan.

6.0 CERTIFICATE FROM LICENSED LAND SURVEYOR OR REGISTERED CIVIL ENGINEER

- (f) **A certificate from a licensed land surveyor or registered civil engineer certifying that the site plans and control cross-sections were prepared by or under the direct supervision of the surveyor or engineer;**

See Exhibit A, Mining Plan, and Exhibit B, Reclamation Plan, for a certificate from a licensed land surveyor or registered civil engineer.

7.0 FINANCIAL ASSURANCE ESTIMATE

- (g) **An estimate of the financial assurances necessary to implement the proposed reclamation plan, or phases thereof, prepared in accordance with Article 7 of this title and including the following information:**

- (1) **An estimate of the equipment usage and manhours necessary to complete reclamation. Estimates for equipment usage shall be substantiated (e.g. the Caterpillar Performance Handbook or similar reference document) and labor requirements explained;**
- (2) **An estimate of indirect costs, such as supervision, contingency, mobilization, profit, and overhead;**
- (3) **The acreages of each type of area proposed in the reclamation plan (e.g., agriculture, slopes, roads, habitat, etc.), referenced to a site plan; and,**
- (4) **An estimate of the amounts of soil, subsoil, wash sediments, and overburden to be used in reclamation, including the average distance from the soil stockpiles to the areas being reclaimed.**

Please see Reclamation Plan Appendix A, Financial Assurance Estimate.

8.0 LAND SURVEY / RECORD OF SURVEY

- (h) **A Land Survey or Record of Survey for all parcels included in the application which has a basis of bearing in the California Coordinate System (NAD 27 or NAD 83);**

A Record of Survey is attached as Exhibit C.

9.0 INITIAL ENVIRONMENTAL ASSESSMENT

- (i) **An initial environmental assessment describing the potential impacts of approving the proposed reclamation plan; and,**

An initial environmental assessment is included in the application package to Yolo County.

10.0 DISCRETIONARY PERMIT APPROVALS

- (j) **A list of all other applicable discretionary permits required by other public agencies.**

<u>Permit / Approval</u>	<u>Responsible Agency / Department</u>
Conditional Use Permit (Mining / Processing)	Yolo County
Reclamation Plan / Financial Assurance	Yolo County / State Mining Geology Board
Zoning Code Amendments	Yolo County
Zoning Change	Yolo County
Building Permit	Yolo County
Hazardous Materials Business Plan	Yolo County
Flood Hazard Development Permit	Yolo County
Waste Discharge Requirement	Central Valley RWQCB
Water Quality Certification	Central Valley RWQCB
Spill Prevent Control Countermeasures Plan	State Water Quality Control Board
Authority to Construct / Permit to Operate	Yolo-Solano Air Quality Management District

PART B: SMARA REQUIREMENTS

11.0 STATUTORY REQUIREMENTS

§2770.5. Whenever surface mining operations are proposed in the 100-year flood plain for any stream, as shown in Zone A of Flood Insurance Rate Maps issued by the Federal Emergency Management Agency, and within one mile, upstream or downstream, of any state highway bridge, the lead agency receiving the application for the issuance or renewal of a permit to conduct the surface mining operations shall notify the Department of Transportation that the application has been received. The Department of Transportation shall have a period of not more than 45 days to review and comment on the proposed surface mining operations with respect to any potential damage to the state highway bridge from the proposed surface mining operations. The lead agency shall not issue or renew the permit until the Department of Transportation has submitted its comments or until 45 days from the date the application for the permit was submitted, whichever occurs first.

HECRAS analysis was run for Cache Creek which illustrates the 100 year flood plain. As per County requirements all mining and plant locations will be protected from 100-year flood events.

§2772. (a) The reclamation plan shall be filed with the lead agency, on a form provided by the lead agency, by any person who owns, leases, or otherwise controls or operates on all, or any portion of any, mined lands, and who plans to conduct surface mining operations on the lands.

(c) The reclamation plan shall include all of the following information and documents:

(1) The name and address of the surface mining operator and the names and addresses of any persons designated by the operator as an agent for the service of process.

<u>Owner / Operator:</u>	<u>Agent</u>
Granite Construction Company	N/A
4001 Bradshaw Road	
Sacramento, CA 95827	
Contact: Yasha Saber, Project Manager	

(2) The anticipated quantity and type of minerals for which the surface mining operation is to be conducted.

Total mined volume over the life of the project is estimated at approximately 30 million tons, with approximately 26.1 million tons sold.

(3) The proposed dates for the initiation and termination of surface mining operation.

The proposal is to install equipment and facilities on the site and begin operations as soon as possible after all necessary approvals are obtained. The proposal requests a 30-year permit, thus the estimated date of termination is 30 years from the date of project approval.

(4) The maximum anticipated depth of the surface mining operation.

The maximum anticipated depth is 75 feet below ground surface (bgs).

(5) The size and legal description of the lands that will be affected by the surface mining operation, a map that includes the boundaries and topographic details of the lands, a description of the general geology of the area, a detailed description of the geology of the area in which surface mining is to be conducted, the location of all streams, roads, railroads, and utility facilities within, or adjacent to, the lands, the location of all proposed access roads to be constructed in conducting the surface mining operation, and the names and addresses of the owners of all surface interests and mineral interests in the land.

Regional Location

The Project site is located in the western portion of Yolo County approximately one and one-half miles north of the town of Esparto (see Figure 1, Regional Location Map, and Figure 2, Site Location Map). The regional topography consists of low rolling hills and broad alluvial plains formed at the base of the eastern flank of the California Coast Range. The predominant land-use for the region is agriculture, with gravel mining and processing to meet the regional demand for construction materials.

Project Location

The Project site is located approximately one and one-half miles north of the town of Esparto, directly adjacent to and west of County Road 87. The site has an existing street address of 26410 Fulton & Frank Lane, Esparto, California. The 390± acre site consists of two (2) parcels with Assessors Parcel Numbers 048-220-221 and 048-220-151. The site lies within Sections 7 and 18, Township 10 North, Range 1 West, Mount Diablo Base and Meridian. Cache Creek transects the southern portion of the site.

Site Legal Description

Please see Reclamation Plan Appendix B, Site Legal Description.

Geology

The Project site is located within the Great Valley geomorphic province of California. The Great Valley is a large, elongate northwest-trending structural trough, generally

constrained to the west by the Coast Ranges and to the east by the foothills of the Sierra Nevada (Norris and Webb, 1990). The Great Valley consists of two valleys lying end-to-end, with the Sacramento Valley to the north and the San Joaquin Valley to the south. The Sacramento and San Joaquin Valleys have been filled to their present elevations with thick sequences of sediment derived from both marine and continental sources. The sedimentary deposits range in thickness from relatively thin deposits along the eastern valley edge to more than 25,000 feet in the south central portion of the Great Valley (Norris and Webb, 1990). The sedimentary geologic formations of the Great Valley province vary in age from Jurassic to Quaternary, with the older deposits being primarily marine in origin. Younger sediments are continentally derived and were typically deposited in lacustrine, fluvial, and alluvial environments with their main source being the Sierra Nevada.

The California Division of Mines and Geology, *Geologic Map of the Santa Rosa Quadrangle, California*, shows the site to be underlain by Natural Levee and Channel Deposits and the Modesto/Riverbank Formation. The Cenozoic to Holocene (less than 11,000 years old) Natural Levee and Channel Deposits consist of unconsolidated clay, silt, sand, and gravel deposited by the existing (active) stream and river systems. The Pleistocene (approximately 1.8 million years old) Modesto/Riverbank Formation consists of semi-consolidated alluvial deposits of sand, silt, clay, and gravel. (Wallace Kuhl, 2007)

The State Department of Conservation has evaluated available resource information for the areas along Cache Creek and assigned areas into Mineral Resource Zone (MRZ) classifications. The MRZ classifications are used by the State to define the potential for an area to contain mineral deposits important to the State. The identification of these zones is a guideline to assist local jurisdictions in making land use decisions with consideration given to the importance of mineral resources to the market region, and the discouragement of uses that would inhibit harvesting of those resources.

The Project site is located within the MRZ-2 zone. The MRZ-2 zone is defined as:

MRZ-2: Areas where adequate information indicates that significant mineral deposits are present, or where it is determined that a high likelihood for their presence exists. In addition, there are two economic requirements that must be met if land is to be classified as MRZ-2: (1) the deposit must be composed of material that is suitable as a marketable commodity; and (2) the deposit must meet a threshold value (gross selling price) equal to at least \$5,000,000 (1978 dollars).

Streams, Roads, Railroads and Utilities

There are no railroads on or adjacent to the lands to be reclaimed. Cache Creek is the only stream on or adjacent to lands to be reclaimed. Roads and utilities on or adjacent to the areas to be reclaimed are described in Section 2.3 of the Project Description (Tab 4).

The location of Cache Creek, roads and utilities are shown in Exhibits A and B, Mining and Reclamation Plan.

Owners of Surface and Mineral Interests

Surface and mineral interests are owned by:

Granite Construction Company
4001 Bradshaw Road
Sacramento, CA 95827

(6) A description of, and a plan for, the type of surface mining to be employed, and a time schedule that will provide for the completion of surface mining on each segment of the mined lands so that reclamation can be initiated at the earliest possible time on those portions of the mined lands that will not be subject to further disturbance by the surface mining operation.

Mining activities would be initiated by the removal of topsoil and finer grained overbank deposits which overlie the marketable sand and gravel resources. This overburden would be removed using scrapers aided by a motor grader and a bull dozer, as needed. Soil will be cut in maximum depths in order to minimize traffic and limit compaction. The handling and transportation of soil will be minimized. Where feasible, all handling of topsoil will be accomplished when the soil is dry in order to avoid undue compaction. (Off-Channel Surface Mining Ordinance Sec. 10-4.432)

The top layer of the deposit that contains the most organic-rich soil ("A"-horizon) would be removed first and segregated from deeper subsoils ("B" and "C"-horizon) in areas where these soil layers are present. If reclamation activities do not immediately require topsoil or other overburden sediments, these materials excavated from a potential mining or processing area would be stored in stockpiles located in nearby areas on the site so as to minimize haul distances and re-handling. Topsoil, subsoil, and subgrade materials in stockpiles will not exceed forty (40) feet in height, with slopes no steeper than 2:1 (horizontal:vertical). Stockpiles, other than aggregate stockpiles, will be seeded with a vegetative cover to prevent erosion and leaching. (Off-Channel Surface Mining Ordinance Sec. 10-4.433)

Slopes on stockpiled soils will be graded to a 2:1 slope for long-term storage to prevent use by bank swallows. At no time during the active breeding season (May 1 through July 31) will slopes on stockpiles exceed a slope of 1:1, even on a temporary basis. Stockpiles will be graded to a minimum 1:1 slope at the end of each work day where stockpiles have been disturbed during the active breeding season. (Off-Channel Surface Mining Ordinance Sec. 10-4.433)

Upon completion of overburden removal in any active mining area, sand and gravel above groundwater would be excavated using scrapers and support equipment. Scraper haul distances will be minimized by use of overland conveyor systems.

Excavation of sand and gravel below groundwater would be performed by hydraulic excavators, drag lines, and/or dredges (including clam shell, cutter head, and suction dredges). Groundwater generally occurs at an average depth of 40 feet below ground surface (bgs).

The mining plan was developed to maximize the efficient use of on-site aggregate resources. The maximum estimated depth of mining is approximately 75 feet bgs. The total quantity applied for is approximately 30,000,000 tons of mined aggregate and 26,100,000 of saleable aggregate (after a 12% estimated wash loss).

Mining, stockpile, and berm slopes above groundwater, and to five (5) feet below the average summer low groundwater level will be maintained at 2:1. Slopes extending from five (5) feet below the groundwater level to maximum mining depth will be excavated at 1.5:1 (except along County Road 87 which will be 2:1 or flatter from top of slope to bottom) to both provide a stable slope and increase recharge potential. Slopes steeper than 2:1 below the summer low groundwater level have been evaluated by a slope stability study prepared by a Registered Civil Engineer, pursuant to the requirement of Section 10-4.431 of the Off-Channel Surface Mining Ordinance (see Application Package Appendix I, Slope Stability Study). Slopes adjacent to the West Adams canal and slopes extending 500 linear feet south along County Road 87 from the canal will be no steeper than 3:1 until they reach five (5) feet below the summer low groundwater level.

The proposed Project is divided into two major phases distinguished by the mining and reclamation objectives. Phase 1 consists of development of the processing plant site and excavation and construction of settling ponds which will ultimately be reclaimed to agricultural uses. Phase 2 consists of the excavation of an area proposed to be reclaimed to a lake with surrounding shoreline habitat and sloped oak woodland habitat areas. Within each phase, reclamation will be completed at the earliest practical time in areas that will not be subject to further disturbance by surface mining activities. The areas of these phases are shown in Exhibit A, Mining Plan, and Exhibit B, Reclamation Plan. Table 1, above, provides an estimated time schedule for each phase of mining and reclamation activities. Additional details of each phase are provided in the response to Yolo County Ordinance Sec. 10-5.522 in Part A of this Reclamation Plan.

(7) A description of the proposed use or potential uses of the mined lands after reclamation and evidence that all owners of a possessory interest in the land have been notified of the proposed use or potential uses.

The mining and processing areas on the project site have a variety of proposed compatible end uses. The proposal provides for restoration of approximately 74 acres of prime agricultural land, establishment of approximately 201 acres of open water and habitat, and approximately 38 acres of open space and pasture land.

Granite's submittal of this project proposal and signed statement of reclamation responsibility serves as evidence that Granite, as the owner of a possessory interest in the land, understands the proposed and potential use of the property.

(8) A description of the manner in which reclamation, adequate for the proposed use or potential uses will be accomplished, including both of the following:

(A) A description of the manner in which contaminants will be controlled, and mining waste will be disposed.

(B) A description of the manner in which affected streambed channels and streambanks will be rehabilitated to a condition minimizing erosion and sedimentation will occur.

Plant Site (Open Space/Pasture)

Upon completion of mining, processing, and sales operations, the plant will be removed and the plant site will be regraded to a more natural topography. Stockpiled C-Horizon and A-Horizon soils will be evenly spread across the site to create approximately 38 acres of open space and pasture.

The plant site's final reclamation grades are designed to drain northerly toward an interim plant pond, easterly toward a retention basin at the northeast side of the plant site, and southwesterly toward a retention basin at the southwest corner of the plant site. This will keep surface drainage at the plant site from entering open water mining areas and from leaving the site.

Contaminants will be controlled by proper storage and containment. This information will be included in the Emergency Response Plan required by Section 25505 of the California Health and Safety Code.

Phases 1A & 1B (Dry Pasture / Prime Agriculture)

Phase 1A is currently dry pasture with low agricultural value and Phase 1B is currently under row crops. Phase 1A will be returned to dry pasture and Phase 1B will be returned to agriculture.

Phases 1A and 1B will be the first phases completed under the proposed mining plan, but reclamation activities in Phase 1B will continue throughout the life of the Project. A portion of Phase 1A, and all of Phase 1B will be used as settling ponds to provide capacity for wash fines. The settling ponds are designed to hold all the fines for the processing of approximately 30 million tons of aggregate at an assumed wash loss rate of 12%. The exact final elevation of the reclaimed ponds can only be approximated based on drill-log data and projected wash loss rates.

The settling ponds created by harvesting the sand and gravel material from Phases 1A and 1B will be sequentially reclaimed with the settlement of wash fines. A minimum of 36 inches of C-horizon soil recovered from the site will be placed on top of the fines and graded for drainage. The upper surface of this C-horizon will be scarified as necessary to allow for a functional transition to the upper A-horizon soil. No less than 20 inches of A-horizon soil will be placed on top of the C-horizon soil to complete reclamation.

Phase 1A is designed to handle the fine material that is produced from mining and processing the sand and gravel material in the interim plant ponds and the first pond in Phase 1B. Phase 1B is designed to handle the remaining fine material from Phase 1B and Phase 2 excavations. The plans show the agriculture areas as being reclaimed to near original ground elevations. "C"-Horizon and "A"-Horizon soils will be placed on top of the fines to create approximately 74 acres of agricultural ground in Phase 1B.

Phase 1B final reclamation grades are designed for agricultural uses, and the northeastern corner of Phase 1B will contain a retention basin for agricultural tail-water and surface water return.

Grading and revegetation is designed to minimize erosion and convey storm water runoff from reclaimed mining areas to existing outlets or interior basins. Reclaimed agricultural surfaces will be graded to provide adequate field gradients to allow surface/furrow irrigation of crops and allow for adequate storm water drainage. The northeastern corner of Phase 1B will be graded for use as a retention basin for agricultural tail-water and surface water return.

Phase 2 (Lake / Open Water Habitat)

Historically this land has been used for a variety of agricultural uses including row crops and orchards. Post mining reclamation of this phase will be a lake with varying depths, seasonally fluctuating water levels, and diverse shorelines with habitat areas. The lake will have an intricate shoreline with changing slopes to provide maximum habitat potential, with slopes of 2:1 or flatter. The slopes will be revegetated in accordance with the proposed Reclamation Plan and will consist of native plant species.

Slopes will be reclaimed as soon as possible to reduce erosion potential and ensure the establishment of habitat.

This area will be maintained by Granite and monitored for five years to ensure habitat and revegetation success.

Contaminant Control and Mine Waste Disposal

All mine operations and reclamation work will be in conformance with applicable state and federal requirements for preventing releases of materials that could result in contamination, and for reporting and mitigating releases if they should occur. Fine-grain wash sediments will be placed in settling ponds during mine operations in accordance

with RWQCB requirements for protection of water quality. As part of mine closure and final reclamation, equipment and materials will be removed from the site. Fine-grain wash sediments contained in settling ponds will be allowed to dry and then covered with topsoil and the revegetated or returned to prime agricultural use. Other reclaimed areas that are not used for prime agriculture or occupied by open water/lake habitat will be covered with soil and seeded and/or planted to stabilize the ground surface and to provide for beneficial post-reclamation use. Revegetation of disturbed ground surfaces will minimize erosion. Final grading is designed to retain storm water drainage and agricultural tailwater onsite.

Streambed and Streambank Rehabilitation

The proposal is for an off-channel mining permit. The proposed Mined Lands do not include any stream channel or stream bank, so this item is not applicable to the proposed Mined Lands.

The applicant also proposes implementation of a segment of the Test 3 (stream influence boundary) line for Cache Creek as a net benefit to the County, which will require submittal and approval of a Flood Hazard Development Permit and bank stabilization plans. This permit will need to be approved prior to any work taking place in the 100 year floodplain. Mining and processing activities will maintain a minimum 200-foot setback off of the Test 3 line.

(9) An assessment of the effect of implementation of the reclamation plan on future mining in the area.

The proposed reclamation plan and end uses of the site will not prevent future mining in the area.

(10) A statement that the person submitting the reclamation plan accepts responsibility for reclaiming the mined lands in accordance with the reclamation plan.

A signed statement of reclamation responsibility is included at the beginning of this reclamation plan.

(11) Any other information which the lead agency may require by ordinance.

Part A of this reclamation plan addresses the specific requirements of the Yolo County Surface Mining Reclamation Ordinance.

§2773. (a) The reclamation plan shall be applicable to a specific piece of property or properties, shall be based upon the character of the surrounding area and such characteristics of the property as type of overburden, soil stability, topography, geology, climate, stream characteristics, and principal mineral commodities, and shall establish site-specific criteria for evaluating compliance with the approved reclamation plan, including topography, revegetation and sediment, and erosion control.

This Reclamation Plan is for proposed mining in the two parcels previously identified and is based on the site and surrounding area characteristics including overburden, soil and topographic conditions, geology, climate stream characteristics and the principal mineral commodity (aggregate). Site-specific criteria are provided in this Reclamation Plan for evaluating compliance including topography, seeding and planting preparation requirements, seeding and planting quantities, revegetation success performance standards, and provisions to retain drainage onsite to minimize erosion and sediment transport. Criteria for evaluating compliance with topography include the grading design and slope angles identified in Exhibit B, Reclamation Plan, and described in other sections of this Reclamation Plan. Revegetation success performance standards are described in Application Package Appendix E, Habitat Restoration and Landscape Visual Screening Plan.

(b) By January 1, 1992, the board shall adopt regulations specifying minimum, verifiable statewide reclamation standards. Subjects for which standards shall be set include, but shall not be limited to, the following:

- (1) Wildlife habitat.**
- (2) Backfilling, regarding, slope stability, and recontouring.**
- (3) Revegetation.**
- (4) Drainage, diversion structures, waterways, and erosion control.**
- (5) Prime and other agricultural land reclamation.**
- (6) Building, structure, and equipment removal.**
- (7) Stream protection.**
- (8) Topsoil salvage, maintenance, and redistribution.**
- (9) Tailing and mine waste management.**

These standards shall apply to each mining operation, but only to the extent that they are consistent with the planned or actual subsequent use or uses of the mining site.

The new statewide standards referred to in Section 2773 were adopted and affective on January 15, 1993 and follow in Sections 3703 through 3712 below.

§2773.1 (a) Lead agencies shall require financial assurances of each surface mining operation to ensure reclamation is performed in accordance with the surface mining operation's approved reclamation plan, as follows:

- (1) Financial Assurances may take the form of surety bonds executed by an admitted surety insurer, as defined in subdivision (a) of Section 995.120 of the Code of Civil Procedure, irrevocable letters of credit, trust funds, or other forms of financial assurances specified by the board pursuant to subdivision (e), which the lead agency reasonably**

determines are adequate to perform reclamation in accordance with the surface mining operation's approved reclamation plan.

A surety bond or irrevocable letter of credit will be provided once the Financial Assurance Estimate is approved.

(2) The financial assurances shall remain in effect for the duration of the surface mining operation and any additional period until reclamation is completed.

Bond will remain in place until reclamation is approved and bond is released by Yolo County.

(3) The amount of financial assurances required of a surface mining operation for any one year shall be adjusted annually to account for new lands disturbed by surface mining operations, inflation, and reclamation of lands accomplished in accordance with the approved reclamation plan.

A Financial Assurance Estimate for Phase 1A is attached as Reclamation Plan Appendix A. An updated Financial Assurance Estimate will be submitted to Yolo County annually.

(4) The financial assurances shall be made payable to the lead agency and the department. Financial assurances that were approved by the lead agency prior to January 1, 1993, and were made payable to the State Geologist shall be considered payable to the department for purposes of this chapter. However, if a surface mining operation has received approval of its financial assurances from a public agency other than the lead agency, the lead agency shall deem those financial assurances adequate for purposes of this section, or shall credit them toward fulfillment of the financial assurances required by this section, to the public agency, to the lead agency, and the department and otherwise meet the requirements of this section. In any event, if a lead agency and one or more public agencies exercise jurisdiction over a surface mining operation, the total amount of financial assurances required by the lead agency and the public agencies for any one year shall not exceed that amount which is necessary to perform reclamation of lands remaining disturbed. For purposes of this paragraph, a "public agency" may include a federal agency.

12.0 ARTICLE 9 RECLAMATION STANDARDS

§3703. Performance Standards for Wildlife Habitat.

Wildlife and wildlife habitat shall be protected in accordance with the following standards:

(a) Rare, threatened or endangered species as listed by the California Department of Fish and Game, (California Code of Regulations, Title 14, sections 670.2 – 670.5) or the U.S. Fish and Wildlife Service, (50 CFR 17.11 and 17.12) or species of special concern as listed by the California Department of Fish and Game in the Special Animals

List, Natural Diversity Data Base, and their respective habitat, shall be conserved as prescribed by the federal Endangered Species Act of 1973, 16 U.S.C. section 1531 et. seq., and the California Endangered Species Act, Fish and Game Code section 2050 et seq. If avoidance cannot be achieved through the available alternatives, mitigation shall be proposed in accordance with the provisions of the California Endangered Species Act, Fish and Game Code section 2050 et seq., and the federal Endangered Species Act of 1973, 16 U.S.C. section 1531 et seq.

A Biological Assessment has been prepared for the site by TRC (Application Package Appendix D). The report identifies special-status species that may occur at or near the site and appropriate mitigation measures. If necessary, required permits will be obtained prior to disturbance of the site.

(b) Wildlife habitat shall be established on disturbed land in a condition at least as good as that which existed before the lands were disturbed by surface mining operations, unless the proposed end use precludes its use as wildlife habitat or the approved reclamation plan establishes a different habitat type than that which existed prior to mining.

The reclamation proposal provides better habitat potential than what currently exists without the project. A combination of reclamation end uses, including agricultural fields, open water lakes with adjacent shoreline habitat and oak woodlands, and open space and pasture provide higher quality habitat for a number of species. Please refer to the Biological Assessment (Application Package Appendix D) and Habitat Restoration and Landscape Visual Screening Plan (Application Package Appendix E), for more detail.

(c) Wetland habitat shall be avoided. Any wetland habitat impacted as a consequence of surface mining operations shall be mitigated at a minimum of one to one ratio for wetland habitat acreage and wetland habitat value.

A Wetlands Delineation was prepared for the site by TRC. The proposed project will not impact wetlands. The wetland delineation is included as an attachment to Application Package Appendix D, Biological Assessment.

§3704. Performance Standards for Backfilling, Regrading, Slope Stability, and Recontouring.

Backfilling, regarding, slope stabilization, and recontouring shall conform with the following standards:

(a) Where backfilling is proposed for urban uses (e.g., roads, building sites, or other improvements sensitive to settlement), the fill material shall be compacted in accordance with the Uniform Building Code, published by the International Conference of Building Officials and as adopted by the lead agency, the local grading ordinance, or other methods approved by the lead agency as appropriate for the approved end use.

Not applicable; the proposal does not include backfilling for urban uses.

(b) Where backfilling is required for resource conservation purposes (e.g., agriculture, fish and wildlife habitat, and wildland conservation), fill material shall be backfilled to the standards required for the resource conservation use involved.

Backfill of agricultural areas will be performed in accordance with recommendations provided in the Soils Evaluation Report and Reclamation Plan (Application Package Appendix A) prepared by LFR, Inc., which conforms with standards and procedures required by SMARA and the County of Yolo. The Habitat Restoration and Landscape Visual Screening Plan (Application Package Appendix E) prepared by TRC provides standards for habitat areas.

(c) Piles or dumps of mining waste shall be stockpiled in such a manner as to facilitate phased reclamation. They shall be segregated from topsoil and topsoil substitutes or growth media salvaged for use in reclamation.

Wash fines will be pumped directly into settling ponds and will be kept segregated from topsoil and other growth media on site. A total of five settling ponds will be constructed and used sequentially in a manner that will facilitate phased reclamation as described in the response to Section 2172 (c)(6) above. With the exception of the washed fines, no other mining waste will occur.

(d) Final reclaimed fill slopes, including permanent piles or dumps of mine waste rock and overburden, shall not exceed 2:1 (horizontal:vertical), except when site-specific geologic and engineering analysis demonstrate that the proposed final slope will have a minimum slope stability factor of safety that is suitable for the proposed end use, and when the proposed final slope can be successfully revegetated.

Slopes will not exceed the angles recommended in the Slope Stability Study prepared by Wallace Kuhl & Associates (Application Package Appendix I). Final reclaimed fill slopes will not be steeper than 2:1.

(e) At closure, all fill slopes, including permanent piles or dumps of mine waste and overburden, shall conform with the surrounding topography and/or approved end use.

At closure, there will be no permanent piles of mine waste, soil and/or overburden. Berms established for visual screening and noise abatement will be contoured to conform visually to the surrounding topography. Please refer to Exhibit B, Reclamation Plan.

(f) Cut slopes, including final highwalls and quarry faces, shall have a minimum slope stability factor of safety that is suitable for the proposed end use and conform with the surrounding topography and/or approved end use.

Slopes will not exceed the angles recommended in the Slope Stability Study (Application Package Appendix I). These recommended slope angles are designed for a suitable factor of safety for the proposed end uses and surrounding topography and uses.

(g) Permanent placement of piles or dumps of mining waste and overburden shall not occur within wetlands unless mitigation acceptable to the regulatory agencies with jurisdiction over wetlands, which may include the lead agency, has been proposed to offset wetland impacts and/or losses.

Not applicable; no permanent placement of piles or dumps of mining waste and overburden will occur within wetland areas.

§3705. Performance Standards for Revegetation.

Revegetation shall be part of the approved plan, unless it is not consistent with the approved end use.

(a) A vegetative cover suitable for the proposed end use and capable of self-regeneration without continued dependence on irrigation, soil amendments or fertilizer shall be established on disturbed land unless an artificially maintained landscape is consistent with the approved reclamation plan. Vegetative cover or density, and species-richness shall be, where appropriate, sufficient to stabilize the surface against effects of long-term erosion and shall be similar to naturally occurring habitats in the surrounding area. The vegetative density, cover and species richness of naturally occurring habitats shall be documented in baseline studies carried out prior to the initiation of mining activities. However, for areas that will not be reclaimed to prior conditions, the use of data from reference areas in lieu of baseline site data is permissible.

Revegetation and vegetative cover is addressed in Application Package Appendix E, Habitat Restoration and Landscape Visual Screening Plan. Revegetation is proposed for reclaimed lands except where the end use is open water habitat or prime agriculture, where vegetative cover is not suitable. Seeding and planting in revegetated areas will use vegetative cover that is suited to the end use and capable of self-regeneration without dependence on irrigation, soil amendments or fertilization, once established. Vegetation cover and density and species richness are designed to be sufficient to provide suitable habitat and to stabilize the surface against erosion. Existing vegetation conditions are described in detail in Application Package Appendix D, Biological Assessment, which documents the absence of natural habitat on proposed Mined Lands.

(b) Test plots conducted simultaneously with mining shall be required to determine the most appropriate planting procedures to be followed to ensure successful implementation of the proposed revegetation plan. The lead agency may waive the

requirement to conduct test plots when the success of the proposed revegetation plan can be documented from experience with similar species and conditions or by relying on competent professional advice based on experience with the species to be planted.

All reclamation planting will be done in accordance with the recommendations contained in Application Package Appendix E, Habitat Restoration and Landscape Visual Screening Plan. Test plots are not proposed.

(c) Where surface mining activities result in compaction of the soil, ripping, disking, or other means shall be used in areas to be revegetated to eliminate compaction and to establish a suitable root zone in preparation for planting.

The site will be prepared for plantings in accordance with recommendations of the Soils Evaluation Report and Reclamation Plan (Application Package Appendix A), and Habitat Restoration and Landscape Visual Screening Plan (Application Package Appendix E). Reclamation described therein includes ripping to eliminate compaction and to establish a suitable root zone for planting.

(d) Prior to closure, all access roads, haul roads, and other traffic routes to be reclaimed shall be stripped of any remaining roadbase materials, prepared in accordance with subsection 3705(g), covered with suitable growth media or topsoil, and revegetated. When it is not necessary to remove roadbase materials for revegetative purposes, lead agencies may set a different standard as specified in section 3700(b) of this Article.

Upon closure, temporary access roads will be stripped of any road base materials and reclaimed if they are not intended to provide access to farming operations. Reclamation of roads will include topsoil placement and revegetation in accordance with the Soils Evaluation Report and Reclamation Plan (Application Package Appendix A), and Habitat Restoration and Landscape Visual Screening Plan (Application Package Appendix E). The existing paved access road will remain, as it will continue to provide entry to adjacent lands currently occupied by Granite's Capay Facility.

(e) Soil analysis shall be required to determine the presence or absence of elements essential for plant growth and to determine those soluble elements that may be toxic to plants, if the soil has been chemically altered or if the growth media consists of other than the native topsoil. If soil analysis suggests that fertility levels or soil constituents are inadequate to successfully implement the revegetative program, fertilizer or other soil amendments may be incorporated into the soil. When native plant materials are used, preference shall be given to slow-release fertilizers, including mineral and organic materials that mimic natural sources, and shall be added in amounts similar to those found in reference soils under natural vegetation of the type being reclaimed.

A Soils Evaluation Report and Reclamation Plan has been prepared by LFR and is attached as Application Package Appendix A.

(f) Temporary access for exploration or other short-term uses on arid lands shall not disrupt the soil surface except where necessary to gain safe access. Barriers shall be installed when necessary to gain safe access. Barriers shall be installed when necessary to prevent unauthorized vehicular traffic from interfering with the reclamation of temporary access routes.

Not applicable. The site is not located on arid lands.

(g) Native plant species shall be used for revegetation, except when introduced species are necessary to meet the end uses specified in the approved reclamation plan. Areas to be developed for industrial, commercial, or residential use shall be revegetated for the interim period, as necessary, to control erosion. In this circumstance, non-native plant species may be used if they are not noxious weeds and if they are species known not to displace native species in the area.

Species to be used for revegetation are addressed in Application Package Appendix E, Habitat Restoration and Landscape Visual Screening Plan.

(h) Planting shall be conducted during the most favorable period of the year for plant establishment.

Planting recommendations are included in Application Package Appendix E, Habitat Restoration and Landscape Visual Screening Plan.

(i) Soil stabilizing practices shall be used where necessary to control erosion and for successful plants establishment. Irrigation may be used when necessary to establish vegetation.

All slopes will be regraded and seeded as soon as practical upon achieving final grades. Recommendations for successful plant establishment are included in Application Package Appendix E, Habitat Restoration and Landscape Visual Screening Plan, and include irrigation for establishing vegetation.

(j) If irrigation is used, the operator must demonstrate that the vegetation has been self-sustaining without irrigation for a minimum of two years prior to release of the financial assurances by the lead agency, unless an artificially maintained landscape is consistent with the approved end use.

Revegetation monitoring is described in Application Package Appendix E, Habitat Restoration and Landscape Visual Screening Plan, and includes demonstration that vegetation success criteria are met.

(k) Noxious weeds shall be managed: (1) when they threaten the success of the proposed revegetation; (2) to prevent spreading to nearby areas; and (3) to eliminate fire hazard.

Noxious weeds will be controlled by a program of weed control described in Application Package Appendix E, Habitat Restoration and Landscape Visual Screening Plan.

(l) Protection measures, such as fencing of revegetated areas and/or the placement of cages over individual plants, shall be used in areas where grazing, trampling, herbivory, or other causes threaten the success of the proposed revegetation. Fencing shall be maintained until revegetation efforts are successfully completed and the lead agency authorizes removal.

The project site will be fenced until removal is authorized by Yolo County. Plantings will be protected as recommended in Application Package Appendix E, Habitat Restoration and Landscape Visual Screening Plan, which includes placement of cages over plants and other protection measures where grazing, trampling or herbivores are a threat to the success of proposed revegetation.

(m) Success of revegetation shall be judged based upon the effectiveness of the vegetation for the approved end use, and by comparing the quantified measures of vegetative cover, density, and species-richness of the reclaimed mined-lands to similar parameters of naturally occurring vegetation in the area. Either baseline data or data from nearby reference areas may be used as the standard for comparison. Quantitative standards for success and the location(s) of the reference area(s) shall be set forth in the approved reclamation plan. Comparisons shall be made until performance standards are met provided that, during the last two years, there has been no human intervention, including, for example, irrigation, fertilization, or weeding. Standards for success shall be based on expected local recovery rates. Valid sampling techniques for measuring success shall be specified in the approved reclamation plan. Sample sizes must be sufficient to produce at least an 80 percent confidence level. There are standard statistical methods in commonly available literature for determining an 80 percent confidence level on a site-by-site basis. Examples of such literature include, but are not limited to, D. Mueller-Dombois and H. Ellenberg, 1974, "Aims and Methods of Vegetation Ecology," John Wiley and Sons, Inc., or C.D. Bonham, 1988, "Measurements for Terrestrial Vegetation," John Wiley and Sons, Inc., and are available at many university libraries. The texts are also available at some local libraries through the Inter-Library Loan Program.

Performance standard recommendations and a monitoring program for comparison of revegetation to performance standards are contained in Application Package Appendix E, Habitat Restoration and Landscape Visual Screening Plan. Monitoring will continue on an annual basis through Yolo County and DMG. Monitoring will address the stability and success of the rehabilitated areas and compare these areas to recommended performance standards. If problems are identified, remedial measures (e.g., re-grading, re-seeding, etc.) will be undertaken and additional modifications may be recommended to achieve success.

§3706. Performance Standards for Drainage, Diversion Structures, Waterways, and Erosion Control.

(a) Surface mining and reclamation activities shall be conducted to protect on-site and downstream beneficial uses of 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.C. section 1251, et seq.

All mine operations and reclamation activity will be conducted to protect on-site and downstream beneficial uses of water. This will be accomplished through conformance with applicable state and federal requirements for preventing releases of materials that could impact beneficial uses of water, and for reporting and mitigating releases if they should occur. Fine-grain wash sediments will be placed in settling ponds during mine operations in accordance with RWQCB requirements for protection of water quality. As part of mine closure and final reclamation, equipment and materials will be removed from the site. Fine-grain wash sediments contained in settling ponds will be allowed to dry and then covered with topsoil and revegetated or returned to agricultural use. Other reclaimed areas that are not used for prime agriculture or occupied by open water/lake habitat will be covered with soil and seeded and/or planted to stabilize the ground surface. Revegetation of disturbed ground surfaces will minimize erosion. Surface grading during operations and following reclamation are designed to retain storm water drainage from Mined Lands onsite. Furthermore, reclaimed surface grades are designed to retain storm water drainage and agricultural tail water onsite.

Stormwater runoff from the proposed processing plant will be collected in an interim settling pond located north of the plant, and two retention ponds at the northeast and southwest corners of the plant site (please refer to Exhibits A and B, Mining and Reclamation Plan). These collection points will be reclaimed as low areas to collect storm water from the reclaimed Phase IA area. Phase IB reclamation will also include a low area to collect agricultural tail water from the reclaimed prime agriculture lands. The Phase 2 mining area will result in a lowered surface so there will be no runoff. Outside the Phase 2 mine area, grading will be away from the mining area so that there is no runoff directed into the lake.

Mining slopes will be reclaimed as soon as practical to the required ultimate condition to stabilize the surface and minimize erosion and sedimentation, which will protect water quality onsite.

(b) The quality of water, recharge potential, and storage capacity of ground water aquifers which are the source of water for domestic, agricultural, or other uses dependent on the water, shall not be diminished, except as allowed in the approved reclamation plan.

A water well monitoring network is in place for this project. The procedures for monitoring both water levels and quality are set forth in the Application Package

Appendix B, Hydrogeology Report of Findings, prepared by Wallace Kuhl & Associates. The project will not diminish beneficial uses of water.

(c) Erosion and sedimentation shall be controlled during all phases of construction, operation, reclamation, and closure of a surface mining operation to minimize siltation of lakes and watercourses, as required by the Regional Water Quality Control Board or the State Water Resources Control Board.

All operations will be in conformance with permits from the Regional Water Quality Control Board. Erosion will be controlled during all construction, operations and reclamation, and drainage from mined and reclaimed lands will be retained onsite so there will be no siltation to lakes or water courses offsite from mining areas. The area of runoff to the open lake in Phase 2 is minimized and slopes surrounding the lake will be reclaimed as soon as practical in areas not subject to additional disturbance, which will minimize siltation in the lake. The Test 3 line implementation will be constructed with a stable configuration in accordance with a Flood Hazard Development Permit. This permit will need to be approved prior to any work taking place in the 100 year floodplain. Mining and processing activities will maintain a minimum 200-foot setback off of the Test 3 line. These measures for controlling erosion and sedimentation are described in detail in other portions of this application.

(d) Surface runoff and drainage from surface mining activities shall be controlled by berms, silt fences, sediment ponds, revegetation, hay bales, or other erosion control measures, to ensure that surrounding land and water resources are protected from erosion, gulying, sedimentation and contamination. Erosion control methods shall be designed to handle runoff from not less than the 20 year/1 hour intensity storm event.

Drainage plans are shown on Exhibits A and B, Mining and Reclamation Plan. Surface runoff and drainage from mining activities will be controlled by grading, sediment ponds, retention basins, revegetation and other measures that will ensure surrounding lands and water resources are protected from erosion, gulying sedimentation and contamination, as described in other sections of this Reclamation Plan.

(e) Where natural drainages are covered, restricted, rerouted, or otherwise impacted by surface mining activities, mitigating alternatives shall be proposed and specifically approved in the reclamation plan to assure that runoff shall not cause increased erosion or sedimentation.

There are no natural drainages on the proposed Mined Lands. The only natural drainage is Cache Creek, which will be modified with the implementation of the Test 3 line. The Test 3 line implementation will be constructed with a stable configuration in accordance with a Flood Hazard Development Permit. This permit will need to be approved prior to any work taking place in the 100 year floodplain. Drainage from Mined Lands will be retained onsite. Therefore, there will be no increase in run-off from the site.

(f) When stream diversions are required, they shall be constructed in accordance with:

(1) the stream and lake alteration agreement between the operator and the Department of Fish and Game; and

(2) the requirements of the Federal Clean Water Act, Sections 301 (33 U.S.C. 1311) and Section 404 (33 U.S.C. 1344) and/or Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

There will be no stream diversions on the proposed Mined Lands, but the implementation of the Test 3 line will include construction of a stabilized bank on Cache Creek. These activities are covered under permits issued by CDFG, Corps of Engineers, and RWQCB to Yolo County for implementation of the Cache Creek Resource Management Plan. Prior to construction of the Test 3 line, a Flood Hazard Development Permit will be obtained from Yolo County to implement CDFG, Corps of Engineers, and RWQCB requirements. Construction will occur in accordance with requirements of the Flood Hazard Development Permit.

(g) When no longer needed to achieve the purpose for which they were authorized, all temporary stream channel diversions shall be removed and the affected land reclaimed.

Not applicable; see section above.

§3707. Performance Standards for Prime Agricultural Land Reclamation.

In addition to the standards for topsoil salvage, maintenance, and redistribution, the following standards shall apply to mining operations on prime agricultural lands where the approved end use is agriculture:

(a) Mining operations which will operate on prime agricultural lands, as defined by the U.S. Soil Conservation Service, shall return all disturbed areas to a fertility level as specified in the approved reclamation plan.

Application Package Appendix A, Soils Evaluation Report and Reclamation Plan, discusses the reclamation of prime agricultural lands in detail. The project proposes to return approximately 74 acres of the site's 104 acres of prime agricultural lands to prime agricultural use. An additional 38 acres of the site will be reclaimed to dry pasture. Where prime agricultural land is impacted and the reclamation plan does not provide for the same end use, impacts to these lands will be mitigated in accordance with the requirements of Yolo County.

(b) When distinct soil horizons are present, topsoil shall be salvaged and segregated by defined A, B, and C soil horizons. Upon reconstruction of the soil, the

sequence of horizons shall have the A atop the B, the B atop the C, and the C atop graded overburden.

In areas that contain prime soils, topsoil shall be salvaged and segregated by horizon. Reconstruction of the soil will follow the recommendations provided in Application Package Appendix A, Soils Evaluation Report and Reclamation Plan, prepared by LFR. These recommendations ensure the appropriate sequence in which soils will be placed during reclamation.

(c) Reclamation shall be deemed complete when productive capability of the affected land is equivalent to or exceeds, for two consecutive crop years, that of the premining condition or similar crop production in the area. Productivity rates, based on reference areas described in the approved reclamation plan, shall be specified in the approved reclamation plan.

Monitoring consistent with this section shall provide crop yields comparable to historic crop information furnished in Application Package Appendix A, Soils Evaluation Report and Reclamation Plan.

(d) Use of fertilizers or other soil amendments shall not cause contamination of surface or groundwater.

Agricultural tail water from reclaimed areas will be contained on-site and will not cause contamination of surface or groundwater.

§3708. Performance Standards for Other Agricultural Land.

The following standards shall apply to agricultural lands, other than prime agricultural lands, when the approved end use is agriculture.

In addition to the standards for topsoil salvage, maintenance, and redistribution, non-prime agricultural lands shall be reclaimed so as to be capable of sustaining economically viable production of crops commonly grown in the surrounding areas.

The project proposes reclamation of approximately 74-acres to prime agricultural use. The remainder of the site will be reclaimed to an open water lake with adjacent shoreline habitat, and open space/dry pasture land. The reclaimed dry pasture land will be reclaimed with revegetation success standards that will render the area capable of sustaining economically viable dry pasture similar to other pasture land in the surrounding areas. The recommended vegetation success standards are described in Application Package Appendix E, Habitat Restoration and Landscape Visual Screening Plan.

§3709. Performance Standards for Building, Structure, and Equipment Removal.

(a) All equipment, supplies and other materials shall be stored in designated areas (as shown in the approved reclamation plan). All waste shall be disposed of in accordance with state and local health and safety ordinances.

All equipment, supplies and other materials will be stored at the plant site shown in Exhibit A, Mining Plan, and Figure 5, Site Plan.

Waste generated by the mining and processing operation consists mostly of fine grained wash sediments which will be used to backfill selected areas on site primarily for reclamation to agricultural uses. Regular waste (refuse and garbage) will be hauled off the site periodically by Waste Management of Woodland.

(b) All buildings, structures, and equipment shall be dismantled and removed prior to final mine closure except those buildings, structures, and equipment approved in the reclamation plan as necessary for the end use.

All buildings, structures, and equipment will be removed in conjunction with final mine closure.

§3710. Performance Standards for Stream Protection, Including Surface and Groundwater.

(a) Surface and groundwater shall be protected from siltation and pollutants which may diminish water quality as required by the Federal Clean Water Act, sections 301 et seq. (33 U.S.C. section 1311), 404 et seq. (33 U.S.C. section 1344), the Porter-Cologne Act, section 13000 et seq., County anti-siltation ordinances, the Regional Water Quality Control Board or the State Water Resources Control Board.

The Project includes necessary measures to protect surface and ground water quality. All mine operations and reclamation activity will be conducted to protect on-site and downstream beneficial uses of water. This will be accomplished through conformance with applicable state and federal requirements for preventing releases of materials that could impact beneficial uses of water, and for reporting and mitigating releases if they should occur. Fine-grain wash sediments will be placed in settling ponds during mine operations in accordance with RWQCB requirements for protection of water quality. As part of mine closure and final reclamation, equipment and materials will be removed from the site. Fine-grain wash sediments contained in settling ponds will be allowed to dry and then covered with topsoil and the revegetated or returned to prime agricultural use. Other reclaimed areas that are not used for prime agriculture or occupied by open water/lake habitat will be covered with soil and seeded and/or planted to stabilize the ground surface. Revegetation of disturbed ground surfaces will minimize erosion. Surface grading during operations and following reclamation are designed to retain storm water drainage from Mined Lands onsite. Furthermore, reclaimed surface grades are designed to retain storm water drainage and agricultural tail water onsite.

(b) In-stream surface mining operations shall be conducted in compliance with Section 1600 et seq. of the California Fish and Game Code, section 404 of the Clean Water Act, and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

Not applicable; this project is an off-channel mining proposal.

(c) Extraction of sand and gravel from river channels shall be regulated to control channel degradation in order to prevent undermining of bridge supports, exposure of pipelines or other structures buried within the channel, loss of spawning habitat, lowering of ground water levels, destruction of riparian vegetation, and increased stream bank erosion (exceptions may be specified in the approved reclamation plan). Changes in channel elevations and bank erosion shall be evaluated annually using records of annual extraction quantities and benchmarked annual cross sections and/or sequential aerial photographs to determine appropriate extraction locations and rates.

Not applicable; this project is an off-channel mining proposal.

(d) In accordance with requirements of the California Fish and Game Code section 1600 et seq., in-stream mining activities shall not cause fish to become entrapped in pools or in off-channel pits, nor shall they restrict spawning or migratory activities.

Not applicable; this project is an off-channel mining proposal.

§3711. Performance Standards for Topsoil Salvage, Maintenance, and Redistribution.

When the approved reclamation plan calls for revegetation or cultivation of disturbed lands, the following performance standards shall apply to topsoil salvage, maintenance, and redistribution activities:

(a) All salvageable topsoil suitable for revegetation shall be removed as a separate layer from areas to be disturbed by mining operations. Topsoil and vegetation removal shall not precede surface mining activities by more than one year, unless a longer time period is approved by the lead agency.

Salvageable topsoil suitable for revegetation will be removed as a separate layer from areas to be disturbed.

(b) Topsoil resources shall be mapped prior to stripping and the location of topsoil stockpiles shall be shown on a map in the reclamation plan. If the amount of topsoil needed to cover all surfaces to be revegetated is not available on site, other suitable material capable of sustaining vegetation (such as subsoil) shall be removed as a separate layer for use as a suitable growth media. Topsoil and suitable growth media shall be maintained in separate stockpiles. Test plots may be required to determine the suitability of growth media for revegetation purposes.

A Soils Evaluation Report and Reclamation Plan has been prepared that identifies different soil types and their locations (Application Package Appendix A). The proposed location of topsoil stockpiles is shown on Figure 5, Site Plan. Topsoil (A-horizon soils) will be stockpiled separately from other growth media. Adequate topsoil is onsite to perform the proposed reclamation.

(c) Soil salvage operations and phases of reclamation shall be carried out in accordance with a schedule that: (1) is set forth in the approved reclamation plan; (2) minimizes the area disturbed; and (3) is designed to achieve maximum revegetation success allowable under the mining plan.

The responses to SMARA Section 2772(c)(6), above, provides a schedule and description of mining and reclamation activities. The goal is to minimize the acreage of disturbed mining areas at any one time while achieving the overall project objectives. Topsoil will only be removed as necessary to access new mining areas. Recommendations provided in Application Package Appendix A, Soils Evaluation Report and Reclamation Plan, and Appendix E, Habitat Restoration and Landscape Visual Screening Plan, are designed to achieve maximum revegetation success for agricultural and habitat areas.

(d) Topsoil and suitable growth media shall be used to phase reclamation as soon as can be accommodated by the mining schedule presented in the approved reclamation plan following the mining of an area. Topsoil and suitable growth media that cannot be utilized immediately for reclamation shall be stockpiled in an area where it will not be disturbed until needed for reclamation. Topsoil and suitable growth media stockpiles shall be clearly identified to distinguish them from mine waste dumps. Topsoil and suitable growth media stockpiles shall be planted with a vegetative cover or shall be protected by other equally effective measures to prevent water and wind erosion and to discourage weeds. Relocation of topsoil or suitable growth media stockpiles for purposes other than reclamation shall require prior written approval from the lead agency.

Topsoil and growth media will be used for reclamation as soon as it can be accommodated by the mining schedule. Where possible, soils being removed will be placed directly to reclamation areas. Where salvaged topsoil and growth media cannot be used immediately for reclamation, topsoil (A horizon) soil and growth media (B and C horizon) will be stockpiled in an area where it will not be disturbed until needed for reclamation. Topsoil will be stockpiled separate from salvaged B and C horizon growth media, and clearly identified. Topsoil and growth media stockpiles will have maximum heights of 40 feet and maximum side slopes of 2:1 (horizontal:vertical). Soil stockpiles will be seeded with an appropriate seed mixture to prevent water and wind erosion and to discourage weeds. Please refer to Application Package Appendix A, Soils Evaluation and Reclamation Plan, for more detail on topsoil handling and stockpiles. Relocation of topsoil and growth media for purposes other than reclamation will not occur without prior written approval from Yolo County.

(e) Topsoil and suitable growth media shall be redistributed in a manner that results in a stable, uniform thickness consistent with the approved end use, site configuration, and drainage patterns.

Recommendations regarding redistribution of topsoil and growth media are addressed in Application Package Appendix A, Soils Evaluation and Reclamation Plan, and Appendix E, Habitat Restoration and Landscape Visual Screening Plan.

§3712. Performance Standards for Tailing and Mine Waste Management.

State Water Resources Control Board mine waste disposal regulations in Article 1, Subchapter 1, Chapter 7 of Title 27, California Code of Regulations, shall govern mine waste and tailings, and mine waste disposal units shall be reclaimed in conformance with this article.

All mine waste disposal operations and reclamation will be in conformance with State Water Resources Control Board regulations and Regional Water Quality Control Board permit requirements.

§3713. Performance Standards for Closure of Surface Openings.

(a) Except those used solely for blasting or those that will be mined through within one year, all drill holes, water wells, and monitoring wells shall be completed or abandoned in accordance with each of the following:

- (1) Water Code sections 13700, et seq. and 13800, et seq.;**
- (2) the applicable local ordinance adopted pursuant to Water Code section 13803;**
- (3) the applicable Department of Water Resources report issued pursuant to Water Code section 13800; and**
- (4) Subdivisions (1) and (2) of sections 2511(g) of Chapter 15 of Title 23 regarding discharge of waste to land.**

Monitoring wells completed as part of this application were installed under permit and in compliance with Yolo County Ordinances. Any future well completion or abandonment will also be in accordance with Yolo County requirements.

(b) Prior to closure, all portals, shafts, tunnels, or other surface openings to underground workings shall be gated or otherwise protected from public entry in order to eliminate any threat to public safety and to preserve access for wildlife habitat.

Not applicable; underground operations are not proposed.

13.0 ARTICLE I SURFACE MINING AND RECLAMATION PRACTICE

§3500. Purpose. It is the purpose of this subchapter to establish state policy for the reclamation of mined lands and the conduct of surface mining operations in accord with the general provisions set forth in Public Resources Code, Division 2, Chapter 9, Section 2710 et seq. (Surface Mining and Reclamation Act of 1975, as amended by Statutes of 1980).

§3502. The Reclamation Plan.

(a) Objectives. Reclamation plans shall be developed to attain the objectives of Public Resources Code Section 2712(a)-(c).

This Reclamation Plan was developed to attain the objectives of PRC Section 2712(a)-(c).

(b) Reclamation Plan Elements. In addition to the information required by Public Resources Code Section 2772, the following elements shall be included in the reclamation plan:

(1) The environmental setting of the site of operations and the effect that possible alternate reclaimed site conditions may have upon the existing and future uses of surrounding lands.

The environmental setting of the site is described in Section 2.0 of the Project Description submitted to Yolo County, and in supporting technical appendices including: Appendix A, Soils Evaluation Report and Reclamation Plan; Appendix B, Ground Water Hydrology Report; Appendix C, Surface Water Hydrology Report; Appendix D, Biological Assessment; and Appendix G, Cultural Resource Inventory and Evaluation Report of the application package. The site is zoned for agriculture with a sand and gravel reserve designation, and is currently used primarily for agriculture. Surrounding land use is predominantly sand and gravel mining and agriculture. As described in other sections of this reclamation plan, the reclamation plan includes returning the site to open space and agriculture, including prime farmland. The reclaimed site conditions will not conflict with existing or future uses of surrounding lands. Effects on uses of surrounding lands will be evaluated in the EIR which will be prepared for the project and attached as an exhibit for submittal to the Office of Mine Reclamation (OMR).

(2) The public health and safety, giving consideration to the degree and type of present and probable future exposure of the public to the site.

The proposed mining and reclamation will not conflict with surrounding land uses and will not cause a significant public health and safety concern. Safety measures such as fencing, signs, and setbacks from public rights-of-way will be provided for public safety. The project will include measures to prevent water quality impacts, slope stability impacts, or other impacts that could impact public health and safety. Public safety issues

relative to the project will also be addressed in the project EIR and attached as exhibits for submittal to OMR.

(3) The designed steepness and proposed treatment of the mined lands' final slopes shall take into consideration the physical properties of the slope material, its probable maximum water content, landscaping requirements, and other factors. In all cases, reclamation plans shall specify slope angles flatter than the critical gradient for the type of material involved. Whenever final slopes approach the critical gradient for the type of material involved, regulatory agencies shall require an engineering analysis of the slope stability. Special emphasis on slope stability and design shall be necessary when public safety or adjacent property may be affected.

All project slopes will be at a minimum as specified in the Slope Stability Study prepared by Wallace Kuhl & Associates (Application Package Appendix I), which demonstrates that physical properties, slope material, water content, and other requirements have been considered, and that the slopes will have an adequate factor of safety.

(4) Areas mined to produce additional materials for backfilling and grading, as well as settlement of filled areas, shall be considered in the reclamation plan. Where ultimate site uses include roads, building sites, or other improvements sensitive to settlement, the reclamation plans shall include compaction of the fill materials in conformance with good engineering practice.

Application Package Appendix A, Soils Evaluation Report and Reclamation Plan, addresses settlement of areas to be reclaimed to agriculture, and provides recommendations to ensure performance criteria are met. The reclamation plan and post-reclamation land uses do not include any other areas with roads, building sites, or any other improvements sensitive to settlement. No areas will be mined for the sole purpose of producing additional materials for backfilling or grading.

(5) Disposition of old equipment.

All plant and mobile mining equipment will be removed from the site within one (1) year of site closure.

(6) Temporary Stream or watershed diversions.

Not applicable; no temporary stream or watershed diversions are proposed.

(c) Adequacy. In judging the adequacy of a particular reclamation plan in meeting the requirements described herein and within the Act, the lead agency shall consider the physical and land-use characteristics of the mined lands and their surrounding area pursuant to Public Resources Code Section 2773.

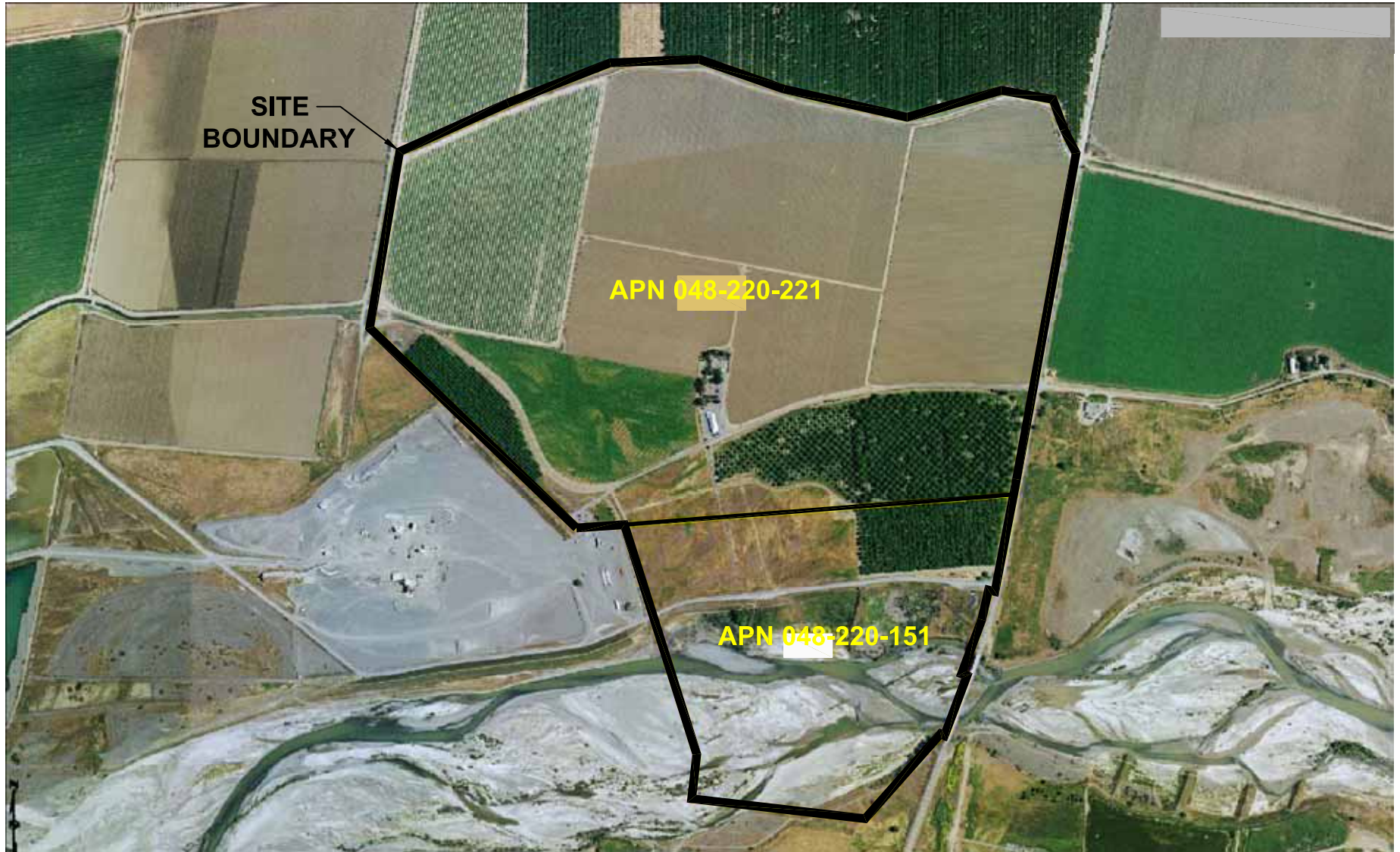
§3503. Surface Mining and Reclamation Practice.

The following are minimum acceptable practices to be followed in surface mining operations:

- (a) **Soil Erosion Control.**
 - (1) The removal of vegetation and overburden, if any, in advance of surface mining shall be kept to the minimum.
 - (2) Stockpiles of overburden and minerals shall be managed to minimize water and wind erosion.
 - (3) Erosion control facilities such as retarding basins, ditches, streambank stabilization, and diking shall be constructed and maintained where necessary to control erosion.
- (b) **Water Quality and Watershed Control.**
 - (1) Settling ponds or basins shall be constructed to prevent potential sedimentation of streams at operations where they will provide a significant benefit to water quality.
 - (2) Operations shall be conducted to substantially prevent siltation of ground-water recharge areas.
- (c) **Protection of Fish and Wildlife Habitat.** All reasonable measures shall be taken to protect the habitat of fish and wildlife.
- (d) **Disposal of Mine Waste Rock and Overburden.** Permanent piles or dumps of mine waste rock and overburden shall be stable and shall not restrict the natural drainage without suitable provisions for diversion.
- (e) **Erosion and Drainage.** Grading and revegetation shall be designed to minimize erosion and to convey surface runoff to natural drainage courses or interior basins designed for water storage. Basins that will store water during periods of surface runoff shall be designed to prevent erosion of spillways when these basins have outlet to lower ground.
- (f) **Resoiling.** When the reclamation plan calls for resoiling, coarse hard mine waste shall be leveled and covered with a layer of finer material or weathered waste. A soil layer shall then be placed on this prepared surface. Surface mines that did not salvage soil during their initial operations shall attempt, where feasible, to upgrade remaining materials. The use of soil conditioners, mulches, or imported topsoil shall be considered where revegetation is part of the reclamation plan and where such measures appear necessary. It is not justified, however, to denude adjacent areas of their soil, for any such denuded areas must in turn be reclaimed.

(g) Revegetation. When the reclamation plan calls for revegetation the available research addressing revegetation methods and the selection of species having good survival characteristics, for the topography, resoiling characteristics, and climate of the mined areas shall be used.

This section, (a) through (g) inclusive, is addressed in detail by responses to Sections 3703 through 3713 of the Article 9 Standards, which are the most recently adopted standards for reclamation.



SCALE (FEET)



REFERENCE:

Aerial photo taken May 2006.



PROJECT: 150633

FACILITY:

ESPARTO FACILITY
YOLO COUNTY, CALIFORNIA

**EXISTING CONDITIONS
AERIAL PHOTOGRAPH**

FIGURE 3

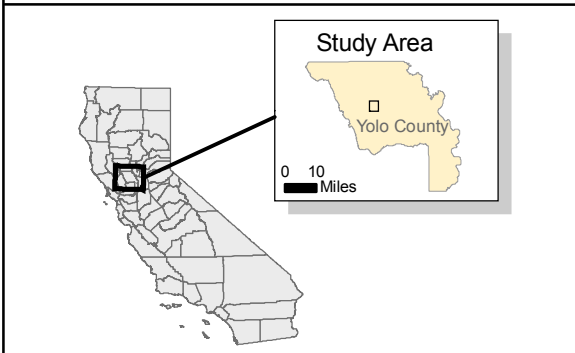
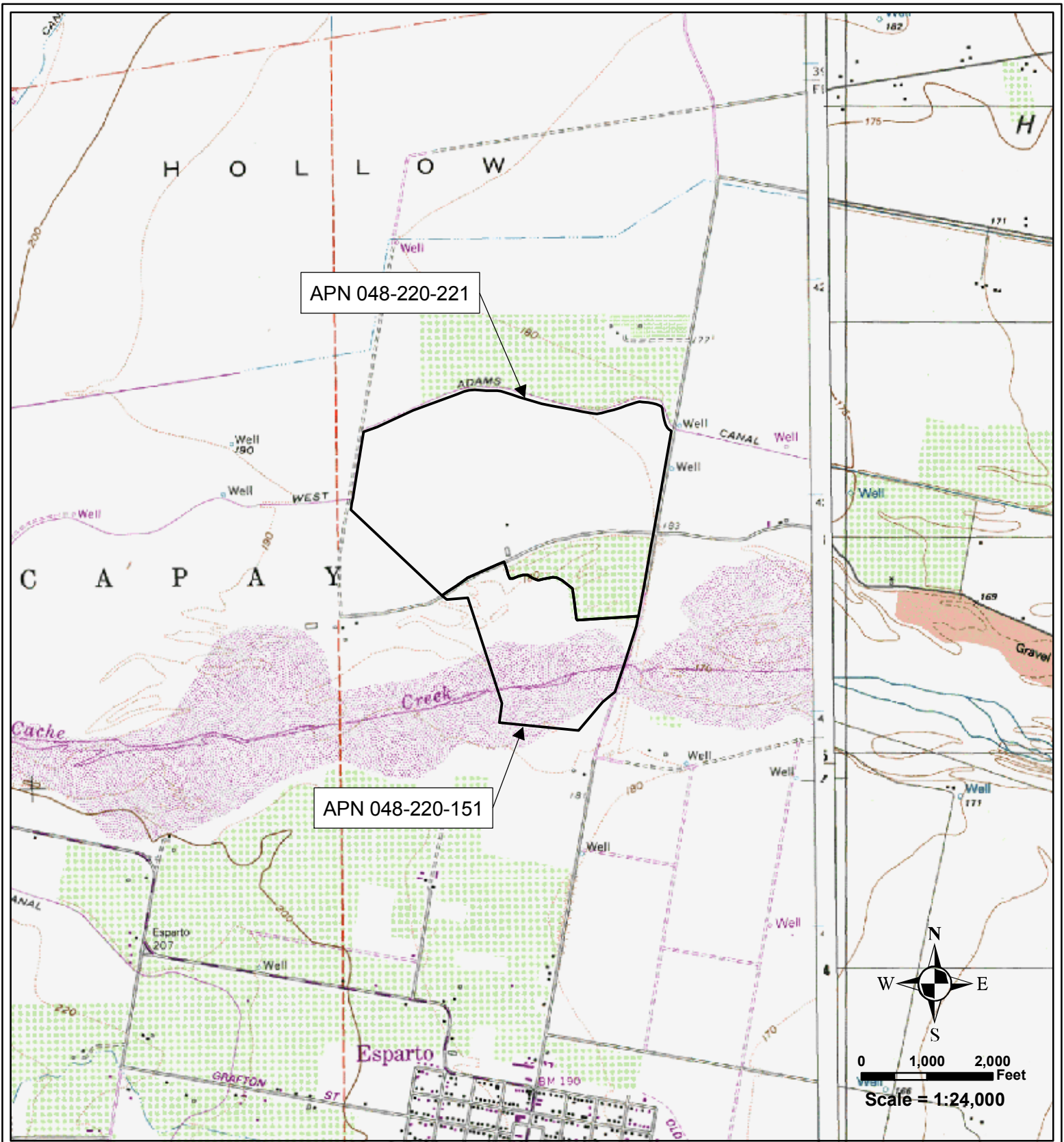
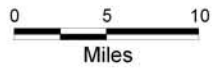
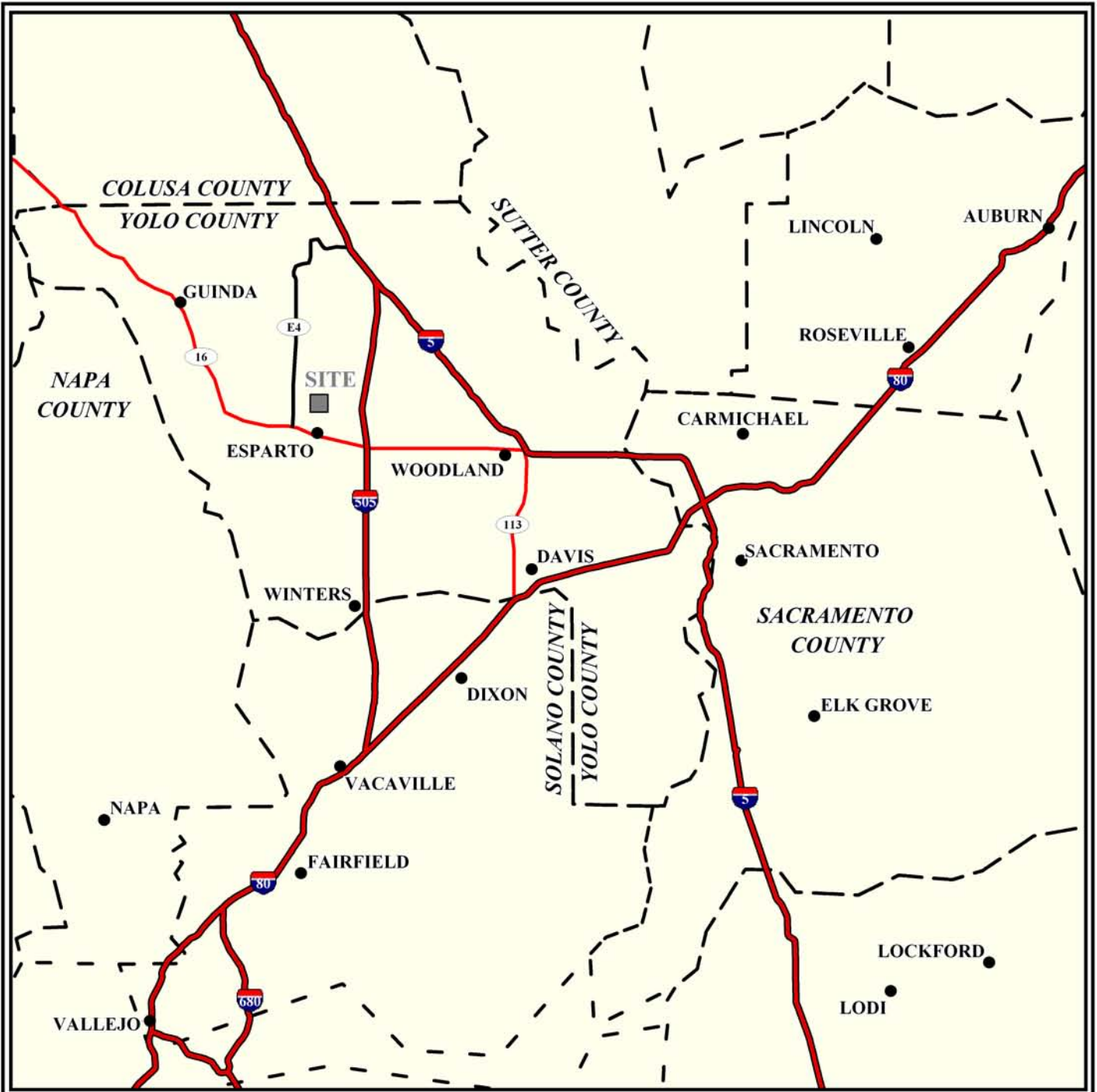


Figure 2
Site Location Map



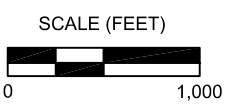
PROJECT: 150633

PROJECT NAME: ESPARTO FACILITY
YOLO COUNTY, CALIFORNIA

REGIONAL LOCATION MAP

FIGURE 1

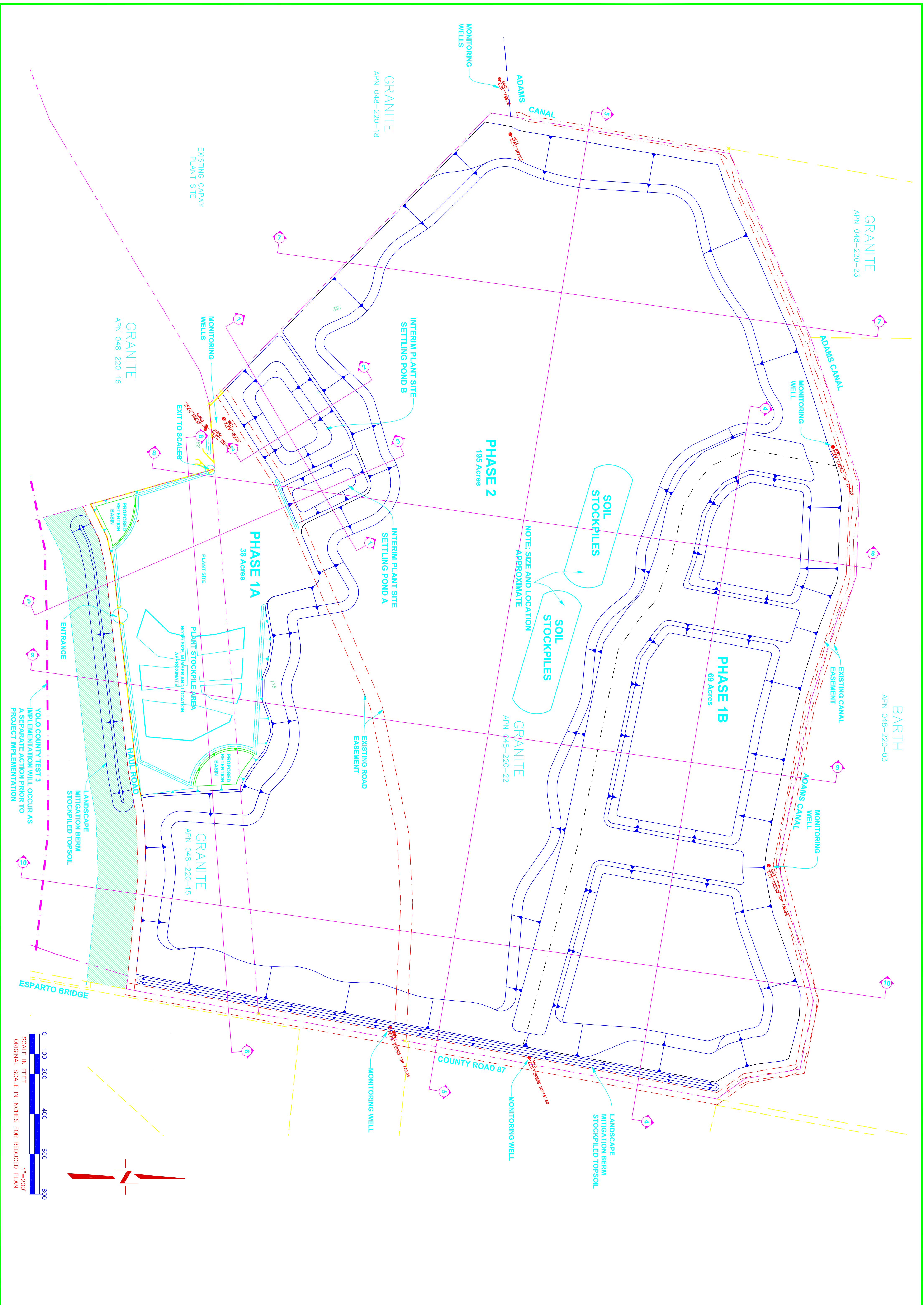
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PROJECT: 150633
 FACILITY:
 ESPARTO FACILITY
 YOLO COUNTY, CALIFORNIA

ASSESSOR'S PARCEL MAP

FIGURE 4



**FIGURE-5
SITE PLAN**

GRANITE

NO.	DATE	REVISIONS	BY	APPD.	DESIGNED BY

CHECKED BY _____
SCALE _____

California Surface Mining and Reclamation Act

FINANCIAL ASSURANCE COST ESTIMATE

Granite Construction Company
Esparto Facility
Ca. Mine I.D. No:

Lead Agency:

Yolo County
Parks and Resources Department
120 West Main Street, Suite C
Woodland, CA 95695

Owner / Operator:

Granite Construction Company
4001 Bradshaw Rd.
Sacramento, CA 95827

2007/2008

Introduction

This Financial Assurance Estimate (FAE) is submitted to Yolo County as the SMARA Lead Agency in accordance with SMARA §2773.1 for purposes of providing assurance for completion of reclamation for the Esparto Facility, an aggregate sand and gravel operation owned and operated by Granite Construction Company, in accordance with the approved Reclamation Plan.

The format and calculations provided follow the State Mining and Geology Board's Financial Assurance Guidelines. All typical tasks to be considered are therefore listed regardless of applicability of the particular site. Reclamation task applicability is addressed under "Applicability" for each subtask. Equipment rates used in this Financial Assurance Estimate utilize Caltrans "Labor Surcharge Equipment Rental Rates." Labor Rates are reflective of California Prevailing Wages obtained from the California Division of Labor Statistics & Research.

Current Site Status

The location of the Esparto Facility is found on Figure 1, Regional Location Map. The site is currently undisturbed and used primarily for agriculture and an on-site residence. An existing on-site haul road provides access to Granite's neighboring Capay Facility and will not be affected by the Project or reclamation.

Granite Construction Company has submitted an application to Yolo County for a Conditional Use Permit and Reclamation Plan for the Esparto Mining and Reclamation Project. The site will not be disturbed prior to project approval. Expected Phase 1A surface disturbances are shown in Figure 2, Esparto Facility Phase 1A Conditions Map.

Reclamation Goal

The Esparto Facility reclamation plan proposes reclaimed uses that include Prime Agriculture, Open Space/Dry Pasture, and Open Water Lake with Shoreline Habitat. This Financial Assurance Estimate pertains only to Phase 1A reclamation, which will be reclaimed to Open Space/Dry Pasture.

FAE Scope

This FAE is calculated for reclamation of Phase 1A of the proposed Esparto Facility. Phase 1A reclamation encompasses removal of the plant site and reclamation of two excavated interim plant settling ponds. Granite will remove the aggregate processing plant upon completion of its mining activities.

Reclamation Objective: Open Space and Grazing

Please note: Equipment rates used in this Financial Assurance Estimate utilize Caltrans "Labor Surcharge Equipment Rental Rates". Labor Rates are reflective of California Prevailing Wages obtained from the California Division of Labor Statistics & Research.

1.0 PRIMARY RECLAMATION ACTIVITIES

Task 1.1 General Grading. (Phase 1A Excavation Surfaces and Plant Site)

Applicability:

General grading of excavation surfaces, processing areas and roads will be necessary to prepare the site for open space/dry pasture use. On-site haul roads and maintenance roads are temporary and will be constructed concurrent with mining in their appropriate phases.

Method:

A Cat 160H Grader will be used for any final grading of approximately 38 acres. Any compacted areas will be ripped using dozer.

Calculation Basis and Other Miscellaneous Information:

D8R Dozer Ripping Rate: 2 acres/hour (2 mph ripping speed at 40,000 lb drawbar pull in second gear). Cat 160H Motor Grader: Effective blade width:12 ft; Overlap: 2ft; Avg speed: 5 mph; Production Rate: 5 acres/hour.

A. Equipment List

Equipment	Quantity	\$/Hour	# of Hours	Cost (\$)
Caterpillar D8 Dozer	1	\$140	19	\$2,660
Water Truck	1	\$39	19	\$741
Caterpillar 160H Grader	1	\$79	8	\$632

Total Equipment Cost for this Task: \$4,033

B. Labor List

Labor Category	Quantity	\$/Hour	# of Hours	Cost (\$)
Operating Engineer	1	\$50	19	\$955
Operating Engineer	1	\$50	8	\$402
Truck Driver	1	\$39	19	\$744
Supervisor	1	\$70	19	\$1,330

Total Labor Cost for this Task: \$3,431

C. Materials List

Item	Quantity	\$/Unit	Cost (\$)
N/A			\$0

Total Material Cost for this Task: \$0

D. Direct Cost for this Task

Equipment Cost + Labor Cost + Materials Cost: \$7,464

Task 1.2 Grade excavation slopes to meet final reclamation slope angle(s).

Applicability:

General grading of excavation slopes is mostly accomplished concurrent with mining using Caterpillar Scrapers. The Phase 1A excavation areas will be used as settling ponds for the plant site and will gradually be filled with wash fines to approximate final reclamation grades.

Method:

Haul material with Caterpillar Scraper to reclamation area. Contour slopes with 160H Grader to fine grade.

Calculation Basis and Other Miscellaneous Information:

7.6 acres x 2 ft avg. depth = approx. 24,500 cu. yds. Cat 160H Motor Grader: Effective blade width:12 ft; Overlap: 2ft; Avg speed: 5 mph; Production Rate: 5 acres/hour. Cat 623F Scraper Production Rate: 300 cu. yds/hr (2,000 LF one-way haul w/ 6% rolling resistance; Caterpillar Performance Handbook Ed. 28)

A. Equipment List

Equipment	Quantity	\$/Hour	# of Hours	Cost (\$)
Caterpillar 623F Scraper	2	\$160	41	\$13,120
Caterpillar 160H Grader	1	\$79	2	\$158
Water Truck	1	\$39	41	\$1,599
Total Equipment Cost for this Task:				<u>\$14,877</u>

B. Labor List

Labor Category	Quantity	\$/Hour	# of Hours	Cost (\$)
Operating Engineer (Scraper)	2	\$50	41	\$4,121
Operating Engineer (Grader)	1	\$50	2	\$101
Truck Driver	1	\$39	41	\$1,606
Supervisor	1	\$70	41	\$2,870
Total Labor Cost for this Task:				<u>\$8,698</u>

C. Materials List (Ave. Quoted Cost Per)

Item	Quantity	\$/Unit	Cost (\$)
N/A			\$0
Total Material Cost for this Task:			<u>\$0</u>

D. Direct Cost for this Task

Equipment Cost + Labor Cost + Materials Cost: \$23,575

Task 1.3 Move and spread non-spec material, and replace stockpiled soil.

Applicability:

Approximately two feet of topsoil will be spread over Phase 1A for reclamation. Any compacted areas would be ripped using a D8R Dozer, as addressed in Task 1.1, above.

Method:

Stockpiled overburden and topsoil will be spread over Phase 1A surfaces using a self loading 623F Scraper. Final grading will be done using a Cat Grader, covered in Task 1.1 above.

Calculation Basis and Other Miscellaneous Information:

38 acres x 2 foot avg. depth = approx. 122,600 cu. yds. Cat 623F Scraper Production Rate: 300 cu. yds/hr (2,000 LF one-way haul w/ 6% rolling resistance; Caterpillar Performance Handbook Ed. 28)

A. Equipment List

Equipment	Quantity	\$/Hour	# of Hours	Cost (\$)
Caterpillar 623F Scraper	4	\$160	102	\$65,280
Water Truck	1	\$39	102	\$3,978
Caterpillar 160H Grader	1	\$79	8	\$632
Total Equipment Cost for this Task:				<u>\$69,890</u>

B. Labor List

Labor Category	Quantity	\$/Hour	# of Hours	Cost (\$)
Operating Engineer (Scraper)	4	\$50	102	\$20,400
Operating Engineer (Grader)	1	\$50	8	\$400
Truck Driver	1	\$39	102	\$3,978
Supervisor	1	\$70	102	\$7,140
Total Labor Cost for this Task:				<u>\$31,918</u>

C. Materials List (Ave. Quoted Cost Per)

Item	Quantity	\$/Unit	Cost (\$)
N/A			\$0
Total Material Cost for this Task:			<u>\$0</u>

D. Direct Cost for this Task

Equipment Cost + Labor Cost + Materials Cost: \$101,808

2.0 REVEGETATION

Task 2.1 Revegetate mined slopes (eastern interim plant settling pond).

Applicability:

Phase 1A reclamation includes removal of the plant site and surface grading for dry pasture use. One Phase 1A settling pond will maintain a few feet of freeboard for use as a stormwater retention basin. This task is limited to the revegetation of the retention basin slopes.

Method:

Revegetation tasks are aimed at controlling erosion on slopes. A revegetation mix persisting of hydroseed and straw mulch will be used.

Calculation Basis and Other Miscellaneous Information:

Assume 0.055 per sq foot, +/- 16 acres of slopes, includes labor and materials.

A. Equipment List

Equipment	Quantity	\$/Acre	# of Acres	Cost (\$)
Hydro Seeding and Straw Mulch Mix	1	\$2,400	1.5	\$3,600

B. Direct Cost for this Task

Total Cost: \$3,600

Task 2.2 Revegetate plant site.

Applicability:

Phase 1A consists of the plant site and interim plant settling ponds. The eastern (smaller) interim plant settling pond will be used as a retention basin for stormwater, and will not be revegetated. Two additional retention basins will be left at the southwest and northeast corner of the plant site for stormwater capacity in the event of a significant storm event. These retention basins will be revegetated for use as dry pasture. The western (larger) settling pond will be filled with wash fines to approximately final reclamation grades, covered with two feet of topsoil, and revegetated for use as dry pasture.

Method:

Revegetation tasks are aimed at broadcast seeding with seed mixes such that revegetation can occur when rainfall is sufficient. Excavation surfaces are left uncompacted to improve revegetation potential. Any compacted areas would be ripped, as covered in Task 1.1, above.

Calculation Basis and Other Miscellaneous Information:

Assumes cost of \$800 per acre, including labor and materials.

A. Equipment List

Equipment	Quantity	\$/Acre	# of Acres	Cost (\$)
Broadcast Seeding	1	\$800	36.5	\$29,200

B. Direct Cost for this Task

Total: \$29,200

3.0 PLANT STRUCTURES AND EQUIPMENT REMOVAL

Task 3.1 Remove any stationary equipment and all concrete footings.

Applicability:

Equipment associated with mining and processing, as well as concrete footings, will be removed. No permanent buildings, structures, or equipment exist on site that would require removal during reclamation.

Method:

All mobile equipment associated with mining and processing will be removed prior to final reclamation. The plant site will be disassembled and removed from the site. Concrete footings will be removed as part of reclamation. Ancillary structures such as scale house and truck scales are located on Granite's neighboring Capay facility and are therefore not included in this reclamation estimate. Extra parts will be hauled off-site.

Calculation Basis and Other Miscellaneous Information:

5 Concrete footings at 8 cu. yds/each. Demolition/removal costs are provided for concrete footings. Disposal costs are per dumpster including hauling and tipping fees. Concrete (10 cy dumpster) Misc. Material (30 cy dumpster). Laborers will prepare processing and ancillary equipment for removal. Crushing units will be removed using 9-axle lowbed truck at \$180/hr including driver. Pilot vehicles will be used for oversized 9-axle loads. All conveyors, pumps, parts from the bone yard, and similar equipment will be loaded onto flatbed truck with laborers, fork lift, and backhoe. Final plant site grading will be done with a Cat 160H Grader.

A. Equipment List

Equipment	Quantity	\$/Hr	# of Hours	Cost (\$)
Cat 436 Loader w/ Backhoe	1	\$32	16	\$512
Cat 988 Loader	1	\$181	24	\$4,344
Cat 980 Loader	1	\$128	24	\$3,072
Cat 330 Backhoe	1	\$110	16	\$1,760
Cat 160H Grader	1	\$79	16	\$1,264
Mechanic Truck (2.5 ton)	2	\$40	110	\$8,800
Gradall G1000 (Fork lift)	2	\$87	110	\$19,140
Manlift	3	\$36	110	\$11,880
Grove RT-9100 Crane	1	\$202	60	\$12,120
Lowbed - 9-axle w/ Driver	4	\$180	24	\$17,280
Pilot Car w/ Driver	4	\$41	24	\$3,936
Flatbed Truck	4	\$40	40	\$6,400
Total Equipment Cost for this Task:				\$90,508

B. Labor List

Quantity	\$/Hour	# of Hours	Cost (\$)
----------	---------	------------	-----------

Operating Engineer	5	\$50	40	\$10,000
Supervisor	1	\$70	110	\$7,700
Truckdriver (Flatbed)	4	\$29	40	\$4,640
Laborer	4	\$33	110	\$14,520
Total Labor Cost for this Task:				\$36,860

C. Disposal

Structure/Equipment	Type of Material	Volume Cu. Yds.	Unit Cost Basis	Disposal Cost (\$)	Cost (\$)
Foundation/Footings	Concrete	40	35	\$1,400	\$1,400
General Site Cleanup	Misc.	150	15	\$2,250	\$2,250
Total Material Cost for this Task:					\$3,650

D. Direct Cost for this Task

Equipment Cost + Labor Cost + Materials Cost: \$131,018

Task 3.2 Remove Temporary Wells.

Applicability:

There are no temporary wells located in Phase 1A. Therefore this task is not applicable.

Method:

N/A

Calculation Basis and Other Miscellaneous Information:

N/A

4.0 MISCELLANEOUS COSTS

Task 4.1 Grade Control Surveying.

Applicability:

General surveying is recommended to ensure that reclamation plan objectives are met. Detailed grade control surveying is not required for the proposed end use of open space/dry pasture.

Method:

Survey reclaimed surfaces to ensure that reclamation plan objectives are met.

Calculation Basis and Other Miscellaneous Information:

2 Man Crew, at \$1000/Day, includes labor, equipment and materials.

A. Equipment, Labor and Materials

	Quantity	\$/Day	# of Days	Cost (\$)
Survey Crew	1	\$1,000	1	\$1,000

B. Direct Cost for this Task

Equipment Cost + Labor Cost + Materials Cost: \$1,000

Task 4.2 Maintain sediment ponds and associated drainage facilities until site is adequately revegetated to control erosion.

Applicability:

Remnant settling (sediment) ponds will be constructed at the north side of Phase 1A. Limited fine-grading, maintenance and monitoring of these ponds will be required as part of reclamation.

Method:

Settling (sediment) ponds will be maintained as necessary using a Caterpillar Motor Grader. Rice wattles will be installed to minimize erosion.

Calculation Basis and Other Miscellaneous Information:

Cat 160H Motor Grader: Effective blade width:12 ft; Overlap: 2ft; Avg speed: 5 mph; Production Rate: 5 acres/hour

A. Equipment List

Equipment	Quantity	\$/Hour	# of Hours	Cost (\$)
Caterpillar 160H Grader	1	\$79	4	\$316
Pickup Truck	1	\$19	4	\$76
Total Equipment Cost for this Task:				\$316

B. Labor List

Labor Category	Quantity	\$/Hour	# of Hours	Cost (\$)
Landscape Labor	2	\$27	8	\$432
Operating Engineer	1	\$50	4	\$201
Truck Driver	1	\$29	4	\$116
Supervisor	1	\$70	8	\$560
Total Labor Cost for this Task:				\$1,309

C. Materials List

	Quantity	\$/unit	Cost (\$)
Haybales	10	\$7	\$70
Rice Wattles	100	\$18	\$1,800
Total Material Cost for this Task:			\$1,870

D. Direct Cost for this Task

Equipment Cost + Labor Cost + Materials Cost: \$3,495

Task 4.3 Install erosion control materials.

Applicability:

The Phase 1A plant site will be graded for positive drainage toward two retention basins at the southwest and northeast corner of the plant site, as well as one interim settling pond which will be used as an additional stormwater retention basin at the northwest corner of the plant site. Erosion control materials (rice wattles) will be installed at the top of slope perimeters of the retention basins.

Method:

Install Rice wattles on slopes to control erosion.

Calculation Basis and Other Miscellaneous Information:

Approx. 700 lf of 25 foot rice wattle sections x 2 rows of wattles x .01 hr/ft efficiency. Assume supervisor assists laborers.

A. Equipment List

Equipment	Quantity	\$/Hour	# of Hours	Cost (\$)
Flatbed Truck	1	\$40	8	\$320
Total Equipment Cost for this Task:				\$320

B. Labor List

Labor Category	Quantity	\$/Hour	# of Hours	Cost (\$)
Landscape Labor (.01 hr/ft)	2	\$27	8	\$432
Truck Driver	1	\$29	8	\$232
Supervisor	1	\$70	8	\$560
Total Labor Cost for this Task:				\$1,224

C. Materials List

	Quantity	\$/unit	Cost (\$)
Rice Wattles	56	\$18	\$1,008
Total Material Cost for this Task:			\$1,008

D. Direct Cost for this Task

Equipment Cost + Labor Cost + Materials Cost: \$2,552

Task 4.4 Channel Maintenance.

Applicability:

The Test 3 bank line will be maintained per Yolo County plans to minimize erosion.

Method:

Install bank erosion protection along creek using a Caterpillar 330 excavator.

Calculation Basis and Other Miscellaneous Information:

Approx. 800lf of creek bank erosion maintenance x 13lf/hr erosion material placement. A supervisor assists labors and operators.

A. Equipment List

Equipment	Quantity	\$/Hour	# of Hours	Cost (\$)
Cat 988 Loader	1	181	30	\$5,430
Cat 330 Backhoe	1	\$110	60	\$6,600
Total Equipment Cost for this Task:				<u>\$12,030</u>

B. Labor List

Labor Category	Quantity	\$/Hour	# of Hours	Cost (\$)
Operating Engineer	2	\$50	60	\$6,000
Laborer	2	\$33	60	\$3,960
Truck Driver	3	\$29	240	\$20,880
Supervisor	1	\$70	60	\$4,200
Total Labor Cost for this Task:				<u>\$35,040</u>

C. Materials List

	Quantity	\$/unit	Cost (\$)
Rice Wattles	200	\$20	\$4,000
Total Material Cost for this Task:			<u>\$4,000</u>

D. Direct Cost for this Task

Equipment Cost + Labor Cost + Materials Cost: \$51,070

5.0 MONITORING

Applicability:

Monitoring of Phase 1A surfaces, slopes and drainage for effective erosion control and revegetation will be completed as required by the reclamation plan.

Method:

Monitor for successful revegetation, slope stability, erosion control, and maintenance.

Calculation Basis and Other Miscellaneous Information:

Assume \$500 per site visit and \$1,000 for preparation of closure report by consultant.

Monitoring Task	\$/Visit	#Visits/Year	# of Monitoring Years	Cost (\$)
Revegetation Monitoring / Maintenance Year 1	\$500	2	5	\$5,000
Closure Report	\$1,000	1	1	\$1,000
Total Monitoring Costs:				\$6,000

6.0 SUMMARY OF COST

Direct Costs:

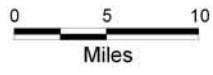
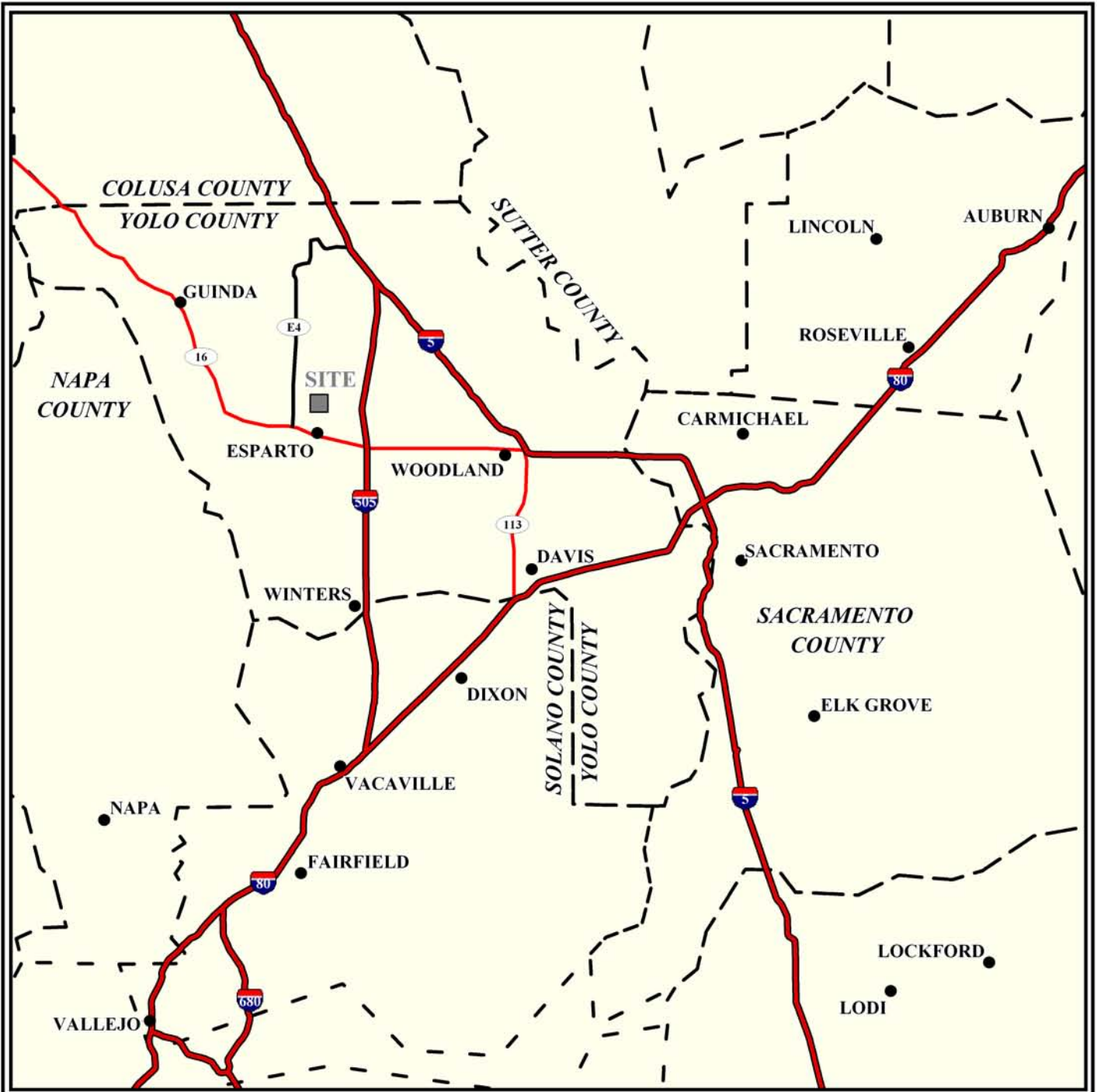
Total of all Primary Reclamation Activities Costs	\$132,848
Total of all Revegetation Costs	\$32,800
Total of all Plant Structures and Equipment Removal Costs	\$131,018
Total of all Miscellaneous Costs	\$58,117
Total of all Monitoring Costs	\$6,000
<i>Total of Direct Costs</i>	\$360,783

Indirect Costs:

Contingencies (10%)	\$36,078
Profit and Overhead (10%)	\$36,078
Mobilization (5%)	\$18,039
<i>Total of Indirect Costs</i>	\$90,196

<i>Total of Direct and Indirect Costs</i>	\$450,978
Lead Agency Administrative Cost*	<i>Calculated at 5% of Direct Costs</i> \$18,039

Total Estimated Cost of Reclamation **\$469,018**



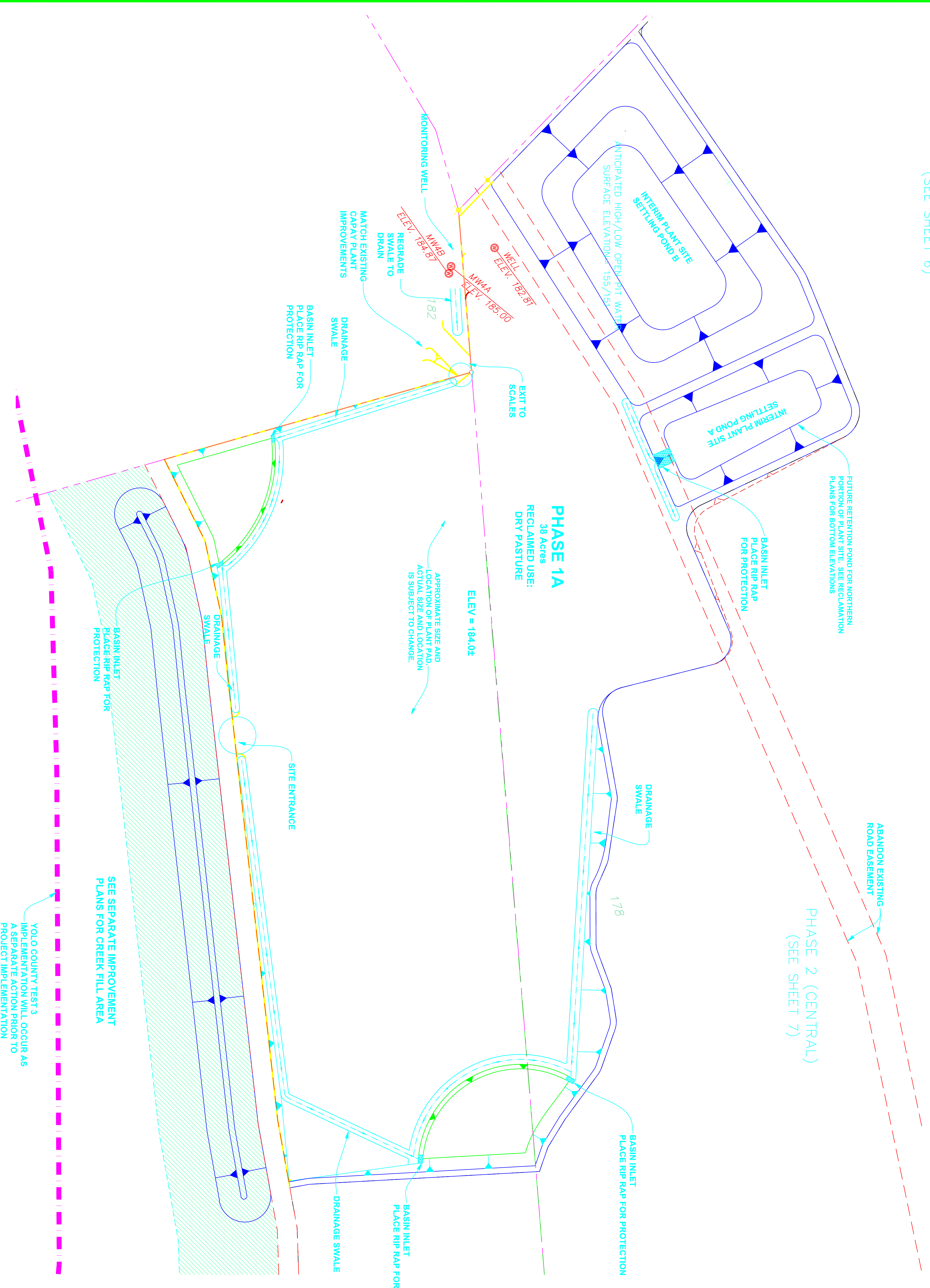
PROJECT: 150633

PROJECT NAME: ESPARTO FACILITY
YOLO COUNTY, CALIFORNIA

REGIONAL LOCATION MAP

FIGURE 1

PHASE 2 (WEST)
(SEE SHEET 6)



PHASE 2 (CENTRAL)
(SEE SHEET 7)

PHASE 1A
38 Acres
RECLAIMED USE:
DRY PASTURE

ELEV = 184.0±

APPROXIMATE SIZE AND
LOCATION OF PLANT PAD
ACTUAL SIZE AND LOCATION
IS SUBJECT TO CHANGE.

SEE SEPARATE IMPROVEMENT
PLANS FOR CREEK FILL AREA

YOLO COUNTY TEST 3
IMPLEMENTATION WILL OCCUR AS
A SEPARATE ACTION PRIOR TO
PROJECT IMPLEMENTATION

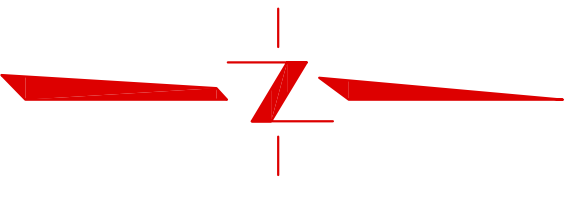
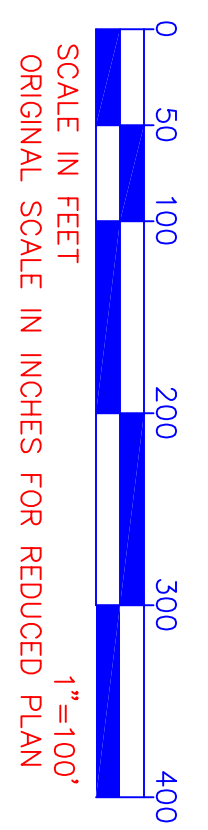


FIGURE-2
ESPARTO FACILITY PHASE 1A CONDITION MAP

GRANITE

NO.	DATE	REVISIONS	BY	APPD.	DESIGNED BY

DESIGNED BY _____
DRAWN BY _____
CHECKED BY _____
SCALE _____

LEGAL DESCRIPTION

EXHIBIT "A"

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE UNINCORPORATED AREA OF THE COUNTY OF YOLO, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL ONE

PARCEL 1, AS SHOWN ON THAT CERTAIN PARCEL MAP NO. 4715, FILED FOR RECORD, DECEMBER 05, 2006, IN THE OFFICE OF THE COUNTY RECORDER OF YOLO COUNTY, IN BOOK 2006 OF PARCEL MAPS, AT PAGE 217 OFFICIAL RECORDS.

PORTION APN: 048-220-141

PARCEL TWO

PARCEL B, AS SHOWN ON THAT CERTAIN PARCEL MAP NO. 3013, FILED FOR RECORD, OCTOBER 30, 1980, IN THE OFFICE OF THE COUNTY RECORDER OF YOLO COUNTY, IN BOOK 5 OF PARCEL MAPS AT PAGE 72 OFFICIAL RECORDS.

EXCEPTING THEREFROM ANY PORTION OF SAID LAND AS GRANTED TO THE COUNTY OF YOLO BY DEEDS, RECORDED DECEMBER 15, 1976 IN BOOK 1222, PAGE 691, AND BOOK 1222, PAGE 693, OF OFFICIAL RECORDS.

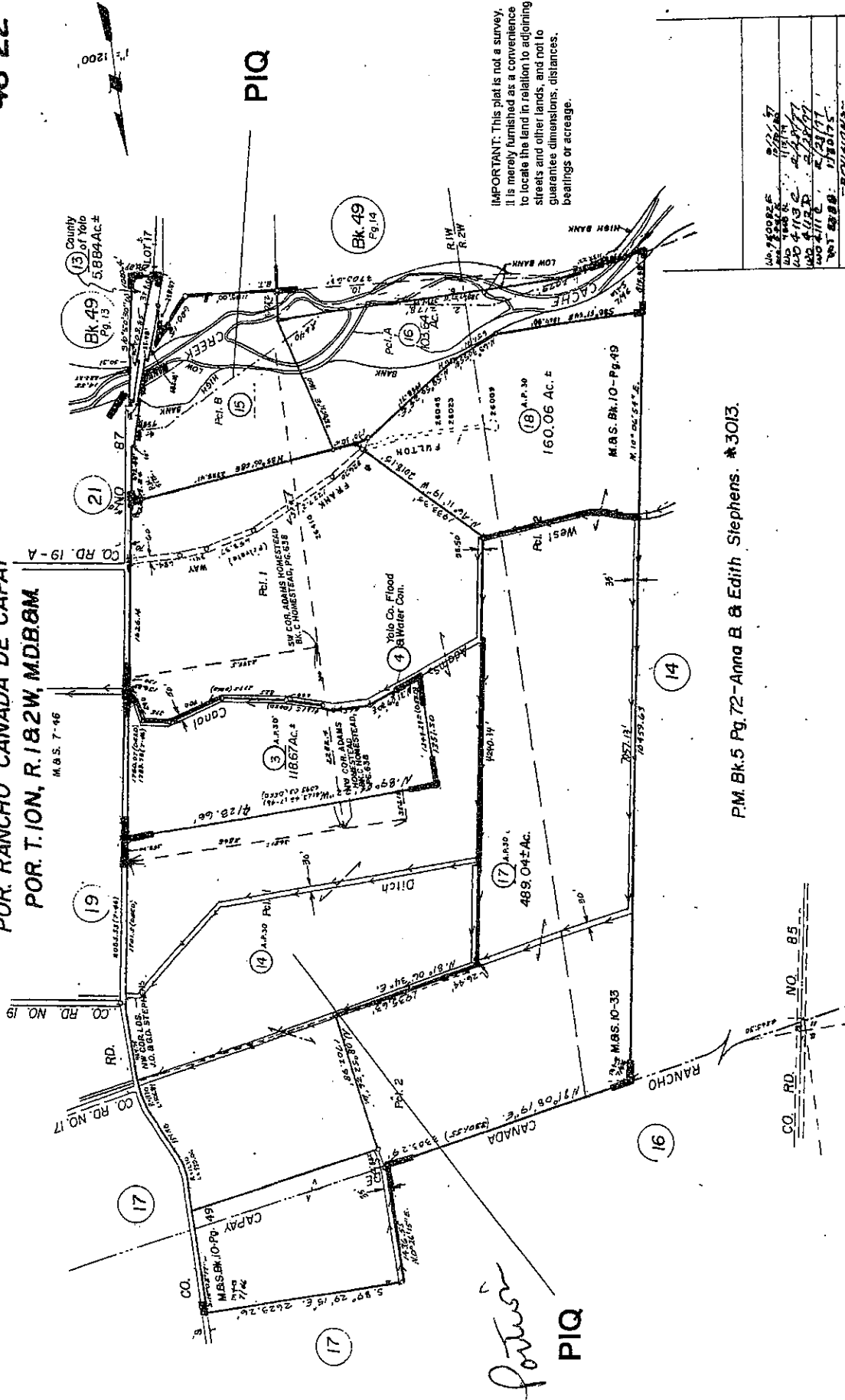
ALSO EXCEPTING THEREFROM ANY PORTION OF SAID LAND LYING WITHIN COUNTY ROAD 87.

APN: 048-220-151

CAUTION - These maps ARE NOT to be used for legal descriptions.

48-22

POR. RANCHO CAÑADA DE CAPAY
 POR. T. ION, R. 1&2W, MDB&M.



IMPORTANT: This plat is not a survey. It is merely furnished as a convenience to locate the land in relation to adjoining streets and other lands, and not to guarantee dimensions, distances, bearings or acreage.

P.M. Bk. 5 Pg. 72 - Anna B & Edith Stephens. *3013.

Assessor's Map Bk. 48, Pg. 22
 County of Yolo, Calif.

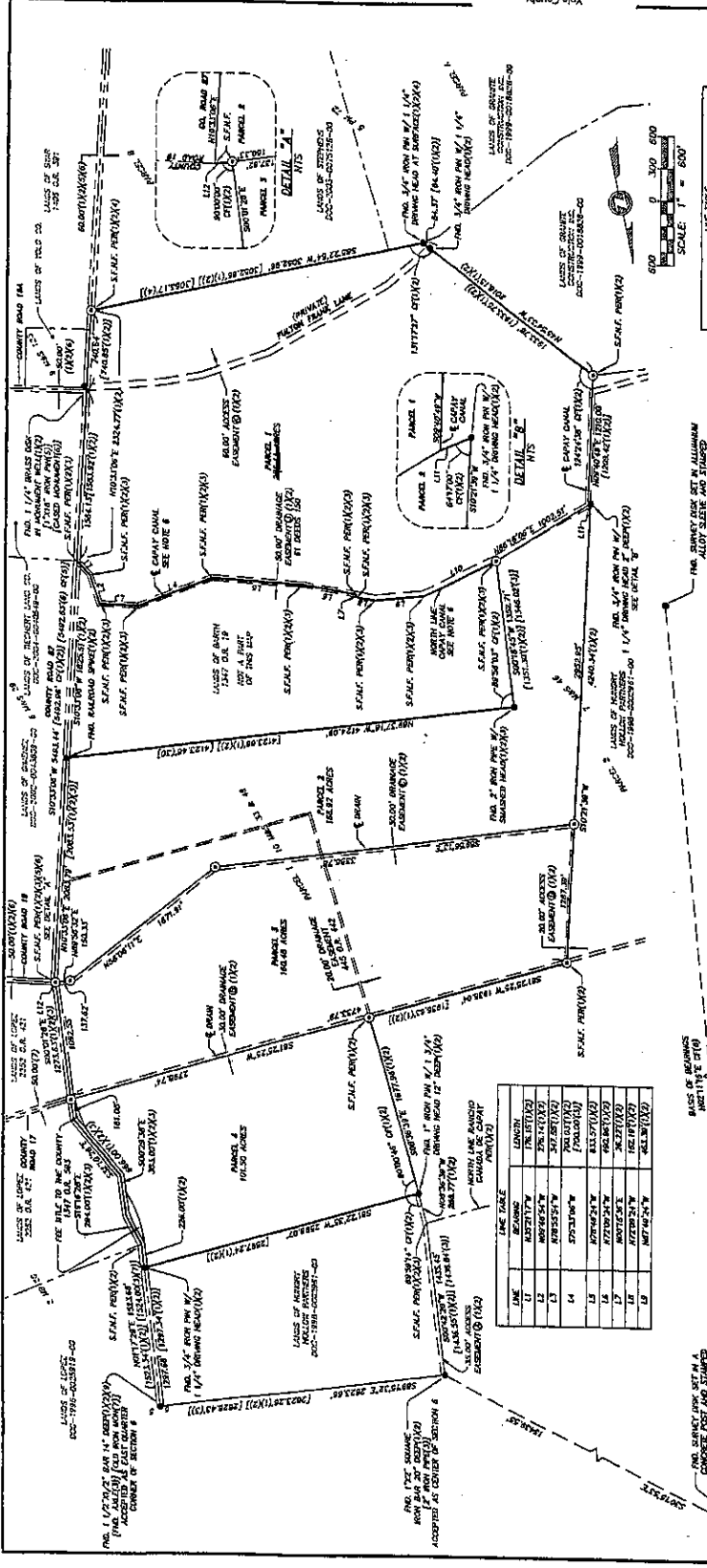
M.B. Bk. 1 Pg. 8 - Bonyng Tract
 M.B.S. Bk. 10, Pg. 33 - George D. Stephens Ppty
 M.B.S. Bk. 10, Pg. 49 - F. Stephens
 M.B.S. Bk. 7, Pg. 46 - Frank & Fulton Stephens.

(formerly 21-62)

NOTE - Assessor's Block Numbers Shown in Ellipses
 Assessor's Parcel Number Shown in Circles

Map 75002E	2/2/47
Map 75002E	1/1/47
Map 75002E	2/2/47
Map 75002E	2/2/47
Map 75002E	2/2/47
Map 75002E	2/2/47
Map 75002E	2/2/47
Map 75002E	2/2/47
Map 75002E	2/2/47
Map 75002E	2/2/47

Porter
 PIQ



LINE	BEARING	LENGTH	REMARKS
10	S 71° 30' 00" W	21.20	TO CORNER OF SECTION 6
11	S 71° 30' 00" W	21.20	TO CORNER OF SECTION 6
12	N 83° 30' 00" E	12.71	TO CORNER OF SECTION 6

SCALE 1" = 600'

THE BEARING AND DISTANCE FOR THIS LINE WAS OBTAINED FROM THE NATIONAL GEODETIC SURVEY DATA SHEETS FOR THE YEAR 1983.

LEGEND OF SYMBOLS AND ABBREVIATIONS

○ INDICATES FOUND MONUMENT AS NOTED

● INDICATES YOLO COUNTY OFFICIAL RECORDS

() INDICATES INFORMATION PER RECORD DATA

Y.C.R. INDICATES CALCULATED FROM

O.R. INDICATES YOLO COUNTY OFFICIAL RECORDS

DOC. INDICATES DOCUMENT NUMBER, YOLO COUNTY RECORDS

S.C.A.F. INDICATES SEARCHED FOR NOTHING FOUND

W/ INDICATES WITH

⊙ INDICATES EASMENT OCCUPYER PER 10, 14 & 49 AND BOOK 807 OFFICIAL RECORDS PAGE 205

NOTES

1. ALL DISTANCES ARE GROUND, AND SHOWN IN FEET AND DECIMALS THEREOF.
2. THE SUM OF THE INDIVIDUAL PARTS OF A GIVEN LINE MAY NOT EQUAL OVERALL QUANTITY DUE TO ROUNDING.
3. NO OTHER EASMENTS OR OTHER ENCUMBRANCES AFFECTING THIS PROPERTY PER OLD REPUBLIC TITLE COMPANY, UNDER NO. 371501302-2 IS DATED MARCH 24, 2006. THERE MAY BE EASMENTS OR OTHER ENCUMBRANCES THAT AFFECT SUBJECT PROPERTY WHICH ARE NOT SHOWN HEREON.
4. ALL MONUMENT DIMENSIONS PER THIS SURVEY ARE OUTSIDE DIMENSION.
5. ALL AREAS SHOWN IS GROSS.
6. BOUNDARY ALONG CARRY CANAL WAS ESTABLISHED USING RECORD ANGLES AND DISTANCES PER BOOK 10 OF MAPS AND SURVEYS AT PAGES 33 AND 49.

BASIS OF BEARINGS

THE GRID BEARING OF NORTHWESTERLY, AS SHOWN HEREON FOR THE LINE BETWEEN NE CORNERS "CHM 17" AND "THORPE" IS BASED ON THE NATIONAL GEODETIC SURVEY DATA SHEETS. THIS WAS USED AS THE BASIS OF BEARINGS FOR THIS SURVEY.

RECORD DATA

- (1) BOOK 10 OF MAPS & SURVEYS AT PAGE 49, Y.C.R.
- (2) BOOK 10 OF MAPS & SURVEYS AT PAGE 33, Y.C.R.
- (3) BOOK 7 OF MAPS & SURVEYS AT PAGE 46, Y.C.R.
- (4) BOOK 5 OF PARCEL MAPS AT PAGE 72, Y.C.R.
- (5) BOOK 6 OF MAPS & SURVEYS AT PAGE 28, Y.C.R.
- (6) BOOK 9 OF MAPS & SURVEYS AT PAGE 121, Y.C.R.
- (7) BOOK 2 OF MAPS AT PAGE 20, Y.C.R.
- (8) NATIONAL GEODETIC SURVEY DATA SHEETS
- (9) CORNER RECORD FILED WITH THE YOLO COUNTY SURVEYOR ON FEBRUARY 16, 1977 BY GENE ANDERSON L.S. 3984

PARCEL MAP NO. 4715

FULION STEPHENS

BEGING A PORTION OF PROJECTED SECTION 6 AND 7 TOWNSHIP 10 NORTH RANGE 1 WEST AND A PORTION OF THE RANCHO CANADA DE CAPAY

10 NORTH, RANGE 2 WEST MOUNT Diablo BASE & MERIDIAN

YOLO COUNTY, CALIFORNIA

L.M. CIVIL ENGINEERING

LAURENCE AND WITTE

1100 COMSTOCK AVENUE, SUITE 100, YACHTS, CALIFORNIA 94599

SEPTEMBER 27, 2006

DETAIL 1

SECTION 6

TO CORNER OF SECTION 6

TO CORNER OF SECTION 6

TO CORNER OF SECTION 6

DETAIL 2

SECTION 6

TO CORNER OF SECTION 6

TO CORNER OF SECTION 6

TO CORNER OF SECTION 6

Book of Maps
Page 219

Yolo County

Parcel Map No. 4715

Sheet 3 of 3

