



**PLANNING DEPARTMENT
LAND USE AGENCY**

County Administration Center
810 Court Street ▪ Jackson, CA 95642-2132
Telephone: (209) 223-6380
Website: www.co.amador.ca.us
E-mail: [planning @amadorgov.org](mailto:planning@amadorgov.org)

APPLICATION REFERRAL

TO: Ione Band of Miwok Indians** Buena Vista Band of Me-Wuk Indians**
CHP Amador CA Division of Mine Reclamation
Environmental Health Department Transportation and Public Works Department
Building Department Waste Management/Air District
Surveying Department County Counsel
Undersheriff Amador Transit
Amador Water Agency Caltrans, District 10
Cal Fire ACTC
CDFW, Region 2

DATE: March 7, 2019

FROM: Chuck Beatty, Planning Director

PROJECT: Request from Pilgrim Rock Quarry for a Use Permit and Reclamation Plan for an open-pit rock quarry to produce aggregate materials in an “R1A,” Single Family Residential and Agricultural District on approximately 369 acres, with operations occurring on approximately 120 acres, and an anticipated production level of 1.65 million tons per year, to be extracted over approximately 40 years. Rock resources will initially be blasted and subsequently quarried, crushed, and screened to produce aggregate mixtures available for direct customer pick up. End use of the site following reclamation is proposed to be grazing land.

LOCATION: The site is located 1 mile south of Highway 16 near the end of Moriah Heights Rd., and ½ mile east of the Sacramento County line (APNs 001-130-008 & 001-140-041).

REVIEW: As part of the preliminary review process, this project application is being sent to State, tribal, and local agencies for review and comment. The Amador County Technical Advisory Committee (TAC) will review the application for completeness during its regular meeting on **Wednesday, March 27, 2019, at 3:30 p.m.** in Conference Room “A” of the County Administration Building, 810 Court Street, Jackson, California.

At this time staff anticipates that a **Mitigated Negative Declaration** will be adopted for the project per CEQA Guidelines. Additional TAC meetings may be scheduled to review a CEQA Initial Study, prepare mitigation measures and/or conditions of approval, and make recommendations to the Planning Commission at a later date. Notification of further TAC meetings and agendas will be made via the TAC email distribution list (contact planning@amadorgov.org to be added to the list).

**In accordance with Public Resources Code Section 21080.3.1, this notice constitutes formal notification to those tribes requesting project notification. This notification begins the 30-day time period in which California Native American tribes have to request consultation.



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APPLICATION PROCEDURE FOR USE PERMIT

A Public Hearing before the Planning Commission will be scheduled after the following information has been completed and submitted to the Planning Department Office:

_____ 1. Complete the following:

Name of Applicant RA HOME INVESTMENTS LLC / John Kinne Manager

Mailing Address 1101 FULTON AVE SUITE 204 SACTO 95825

Phone Number 209 418 9153 916 752-8155

Assessor Parcel Number 001130008000 001140041000

Use Permit Applied For:

- _____ Private Academic School
- _____ Private Nonprofit Recreational Facility
- _____ Public Building and Use(s)
- _____ Airport, Heliport
- _____ Cemetery
- _____ Radio, Television Transmission Tower
- _____ Club, Lodge, Fraternal Organization
- _____ Dump, Garbage Disposal Site
- _____ Church
- _____ OTHER ROCK QUARRY

- _____ 2. Attach a letter explaining the purpose and need for the Use Permit.
- _____ 3. Attach a copy of the deed of the property (can be obtained from the County Recorder's Office).
- _____ 4. If Applicant is not the property owner, a consent letter must be attached.
- _____ 5. Assessor Plat Map (can be obtained from the County Surveyor's Office).
- _____ 6. Plot Plan (no larger than 11" X 17") of parcel showing location of request in relation to property lines, road easements, other structures, etc. (see Plot Plan Guidelines). Larger map(s) or plans may be submitted if a photo reduction is provided for notices, Staff Reports, etc. The need is for easy, mass reproduction.
- _____ 7. Planning Department Filing Fee: \$ _____
Environmental Health Review Fee: \$ _____
Public Works Agency Review Fee: \$ _____
- _____ 8. Complete an Environmental Information Form.
- _____ 9. Sign Indemnification Form.

SURFACE MINING AND RECLAMATION ACT OF 1975
 ARTICLE 1. GENERAL PROVISIONS. SECTION 2710 et seq.
 ARTICLE 2. DEFINITIONS. SECTION 2725 et seq.
 ARTICLE 3. DISTRICT COMMITTEES. SECTION 2740 - 2741.
 ARTICLE 4. STATE POLICY FOR THE RECLAMATION OF MINED LANDS. SECTION 2755 et seq.
 ARTICLE 5. RECLAMATION PLANS AND THE CONDUCT OF SURFACE MINING OPERATIONS.
 SECTION 2770 et seq., as amended.

CCR TITLE 14 (REGISTER 85, NO. 18-5-4-85)
 CHAPTER 8. MINING AND GEOLOGY
 SUBCHAPTER 1. STATE MINING AND GEOLOGY BOARD
 ARTICLE 1. SURFACE MINING AND RECLAMATION PRACTICE. SECTION 3500 et seq.
 ARTICLE 9. RECLAMATION STANDARDS. SECTION 3700 et seq.

PROJECT Pilgrim Rock Quarry

SCH#/CUP# _____ LEAD AGENCY Amador County Planning Dept.

CHECKLIST BY: K. Williams, PG DATE _____ updated 6/27/05 by LGM

YES NO ? N/A

Mining Operation and Closure

_____	X	SMARA 2770.5	100-year flood, Caltrans contact.
X	_____	SMARA 2772(c)(1)	Name and address of operator/agent.
X	_____	SMARA 2772(c)(2)	Quantity & type of minerals to be mined.
X	_____	SMARA 2772(c)(3)	Initiation and termination date.
X	_____	SMARA 2772(c)(4)	Maximum anticipated depth of mining.
X	_____	SMARA 2772(c)(5)	Size, legal description, including map with boundaries, topography, geology, streams, channel cross-sections, topsoil stockpiles, roads, equipment storage, RR, utilities within or adjacent to mine.
X	_____	SMARA 2772(c)(6)	Mining plan and time schedule that provides for completion of mining on each segment so that reclamation can be concurrent or phased ASAP.
X	_____	SMARA 2772(c)(9)	Impact of reclamation on future mining.
X	_____	CCR 3502(b)(2)	Public health and safety (exposure).
_____	X	CCR 3713(b)	All portals, shafts, tunnels, or openings, gated or protected from public entry , but preserve access for wildlife.
X	_____	CCR 3502(b)(5)	Disposition of old equipment.
X	_____	CCR 3709(a)	Equipment stored in designated area and waste disposed of according to ordinance.
X	_____	CCR 3709(b)	Structures and equipment dismantled and removed.
X	_____	CCR 3713(a)	Drill holes, water wells, monitoring wells completed or abandoned in accordance with laws.

YES NO ? N/A

X _____ SMARA 2772(c)(7)

X _____ SMARA 2772(c)(8)

_____ X CCR 3707(a)

X _____ CCR 3707(c)

_____ X CCR 3708

End Land Use

Description of proposed subsequent use or potential use.

Description of reclamation measures adequate for proposed end use.

Return prime ag to prime ag, unless exempted.

Productivity rates equal pre-project or similar site for two consecutive years. Rates set forth in plan.

Other ag capable of sustaining crops common to area.

Geotechnical Requirements

X _____ CCR 3502(b)(3)

Final slopes: consider physical properties and landscaping. Stability analysis for final slopes that approach critical gradient.

X _____ CCR 3704(f)

Final cut slopes have minimum factor of safety for end use and conform with surrounding topography

X _____ CCR 3502(b)(4)

Disposition of fill materials considered. Foundation fills for end use in conformance with current engineering technology.

X _____ CCR 3704(a)

For urban use, fill compacted in accordance with UBC, local grading ordinance, or other methods approved by the lead agency.

X _____ CCR 3704(b)

For resource conservation, compact to standard for that end use.

X _____ CCR 3704(d)

Final reclamation fill slopes not exceed 2:1, except when allowed by site-specific engineering analysis, and can be revegetated.

X _____ CCR 3704(e)

At closure, final landforms of fills conform with surrounding topography or end use

Hydrology and Water Quality

X _____ CCR 3710(a)

Surface and groundwater protected in accordance with Porter-Cologne and Clean Water Acts (RWQCB/SWRCB).

X _____ CCR 3706(b)

Water quality, recharge, and groundwater storage that is accessed by others shall not be diminished, except as allowed by plan.

X _____ CCR 3503(b)(2)

Substantially prevent siltation of groundwater recharge areas.

YES NO ? N/A

Environmental Setting and Protection of Fish and Wildlife Habitat

X _____	CCR 3502(b)(1)	Environmental setting and impact of reclamation on surrounding land uses. (Identify sensitive species, wildlife habitat, sensitive natural communities, e.g. wetlands, riparian zones, etc.)
X _____	CCR 3705(a)	Vegetative cover, suitable to end use, self-sustaining. Baseline studies documenting cover, density and species richness.
X _____	CCR 3503(c)	Protection of fish and wildlife habitat (all reasonable measures).
X _____	CCR 3703(a)	Sensitive species conserved or mitigated.
_____ _____	CCR 3703(b)	Wildlife habitat at least as good as pre-project, if approved end use is habitat
_____ _____ X	CCR 3703(c)	Wetlands avoided or mitigated at 1:1 minimum.
_____ _____ X	CCR 3704(g)	Piles or dumps not placed in wetlands without mitigation.
_____ _____ X	CCR 3710(d)	In-stream mining not cause fish to be trapped in pools or off-channel pits, or restrict migratory or spawning activities.
_____ _____ X	CCR 3713(b)	All portals, shafts, tunnels, or openings, gated or protected from public entry, but <u>preserve access for wildlife.</u>

Resoiling and Revegetation

X _____	CCR 3503(f)	Resoiling (fine material on top plus mulches).
X _____	CCR 3704(c)	Mine waste stockpiled to facilitate phased reclamation and separate from growth media.
X _____	CCR 3711(a)	All salvageable topsoil removed. Topsoil and vegetation removal not proceed mining by more than one year.
X _____	CCR 3711(b)	Topsoil resources mapped prior to stripping, location of stockpiles on map. Topsoil and growth media in separate stockpiles.
X _____	CCR 3711(c)	Soil salvage and phases set forth in plan, minimize disturbance, designed to achieve reveg success.
X _____	CCR 3711(d)	Topsoiling phased ASAP. Topsoil stockpiles not be disturbed until needed. Topsoil stockpiles clearly identified and planted with vegetation or otherwise protected.
X _____	CCR 3711(e)	Topsoil redistributed in stable site and consistent thickness.
X _____	CCR 3707(b)	Segregate and replace topsoil by horizon.
_____ _____ X	CCR 3705(e)	Soil altered or other than native topsoil, requires soil analysis. Amend if necessary.
X _____	CCR 3707(d)	Fertilizers and amendments not contaminate water.

YES	NO	?	N/A		
X				SMARA 2773(a)	Site-specific sediment and erosion control criteria for monitoring compliance with approved reclamation plan.
X				CCR 3503(a)(3)	Erosion control facilities constructed and maintained where necessary.
X				CCR 3503(b)(1)	Settling ponds used where they will provide significant benefit to water quality.
X				CCR 3503(e)	Grading and revegetation to minimize erosion and convey surface runoff to natural drainage courses or interior basins. Spillway protection.
X				CCR 3706(c)	Erosion and sedimentation controlled during all phases of construction, operation, reclamation, and closure of surface mining operation to minimize siltation of lakes and water courses per RWQCB/SWRCB.
X				CCR 3706(d)	Surface runoff and drainage controlled to protect surrounding land and water resources. Erosion control methods designed for not less than 20 year/1 hour intensity storm event.
X				CCR 3706(e)	Altered drainages shall not cause increased erosion or sedimentation.
X				SMARA 2773(a)	Sediment and erosion control monitoring plan specific to property.
X				SMARA 2772(c)(8)(A)	Description of contaminant control and mine waste disposal.
X				CCR 3503(d)	Disposal of mine waste and overburden shall be stable and not restrict natural drainage without suitable provisions for diversion.
X				CCR 3503(a)(2)	Overburden stockpiles managed to minimize water and wind erosion.
			X	CCR 3712	Mine waste and tailings, and mine waste disposal units governed by SWRCB/IWMB (Article 1, Subchapter 1, Chapter 7, Title 27, CCR).
			X	CCR 3710(b)	In-stream mining conducted in accordance with Fish and Game Code Section 1600 et seq, Section 404 of the Clean Water Act,, and Section 10 of the Rivers and Harbors Act of 1899.
			X	SMARA 2772(c)(8)(B)	Rehabilitation of streambanks/beds to minimize erosion.
			X	CCR 3502(b)(6)	Temporary stream and water diversions shown.
			X	CCR 3710(c)	In-stream channel elevations and bank erosion evaluated annually using extraction quantities, cross-sections, aerial photos.
X				CCR 3706(a)	Mining and reclamation to protect downstream beneficial uses.
			X	CCR 3706(f)(1)	Stream diversions constructed in accordance with Fish and Game Code
			X	CCR 3706(f)(2)	Stream diversions constructed in accordance with Federal Clean Water Act and Rivers and Harbors Act of 1899.
			X	CCR 3706(g)	All temporary stream diversions eventually removed.

YES NO ? N/A

X	SMARA 2773(a)	Revegetation plan specific to property. Monitoring plan.	
X	CCR 3503(a)(1)	Removal of vegetation and overburden preceding mining kept to a minimum.	
X	CCR 3503(g)	Revegetation and plant survival (use available research).	
X	CCR 3705(a)	Vegetative cover, suitable to end use, self-sustaining. Baseline studies documenting cover, density and species richness.	
	X	CCR 3705(b)	Test plots if success has not been proven previously.
X	CCR 3705(c)	Decompaction of site.	
X	CCR 3705(d)	Roads stripped of roadbase materials, resoiled and revegetated, unless exempted.	
X	CCR 3705(f)	Temporary access not bladed. Barriers installed.	
X	CCR 3705(g)	Use native plant species, unless exotic species meet end use.	
X	CCR 3705(h)	Plant during correct season.	
X	CCR 3705(i)	Use soil stabilizing practices and irrigation, when necessary to establish vegetation.	
	X	CCR 3705(j)	If irrigated, demonstrate self-sustaining without for two year minimum.
X	CCR 3705(k)	Weeds managed.	
	X	CCR 3705(l)	Plant protection measures, fencing, caging.
	X	CCR 3705(m)	Success quantified by cover, density and species-richness. Standards proposed in plan. Sample method set forth in plan and sample size provide 80 percent confidence level, as minimum.

Administrative Requirements

X	SMARA 2772(c)(10)	Applicant statement accepting responsibility for reclamation per the reclamation plan.	
X	SMARA 2773.1	Performance (financial) assurances.	
X	SMARA 2774(b)	Annual inspection.	
X	SMARA 2776	All mining operations since 1/1/76 included in reclamation plan.	
	X	SMARA 2777	Amended reclamation plans required prior to substantial deviations to approved plans.

Public Resources Code

	X	21151.7	EIR required for cyanide heap leaching.
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LAND USE AGENCY

500 ARGONAUT LANE • JACKSON, CA 95642-9534 • (209) 223-6380

- BUILDING DEPARTMENT
- ENVIRONMENTAL HEALTH DEPARTMENT
- PLANNING DEPARTMENT



ENVIRONMENTAL INFORMATION FORM

(To be completed by applicant; use additional sheets as necessary.)
Attach plans, diagrams, etc. as appropriate.

GENERAL INFORMATION

Project Name: Pilgrim Rock Quarry

Date Filed: _____ File No. _____

Applicant/ Developer	<u>R.A. Home Investments LLC</u>	Landowner	<u>R. A. Home Investments, LLC</u>
Address	<u>1101 Fulton Avenue, Suite 204</u> <u>Sacramento, California 95825</u>	Address	<u>1101 Fulton Avenue, Suite 204</u> <u>Sacramento, California 95825</u>
Phone No.	<u>209-418-9153</u>	Phone No.	<u>209-418-9153</u>

Assessor's Plat Number(s) 001130008000 and 001140041000

Existing Zoning District R1A, 40 Acre Minimums

Existing General Plan A-G

List and describe any other related permits and other public approvals required for this project, including those required by city, regional, state, and federal agencies: Caltrans Encroachment, Amador County Public Works Grading Water Resources Waste Discharge Permit, Amador County Air District Air Permit, Hazardous Materials Storage Permit.

WRITTEN PROJECT DESCRIPTION (Include the following information where applicable, as well as any other pertinent information to describe the proposed project): The following items are addressed on the

1. Site Size
2. Square Footage of Existing/Proposed Structures
3. Number of Floors of Construction
4. Amount of Off-street Parking Provided (provide accurate detailed parking plan)
5. Source of Water
6. Method of Sewage Disposal
7. Attach Plans
8. Proposed Scheduling of Project Construction
9. If project to be developed in phases, describe anticipated incremental development.
10. Associated Projects
11. Subdivision/Land Division Projects: Tentative map will be sufficient unless you feel additional information is needed or the County requests further details.
12. Residential Projects: Include the number of units, schedule of unit sizes, range of sale prices or rents and type of household size expected.
13. Commercial Projects: Indicate the type of business, number of employees, whether neighborhood, city or regionally oriented, square footage of sales area, and loading facilities.
14. Industrial Projects: Indicate type, estimated employment per shift, and loading facilities.

- 15. Institutional Projects: Indicate the major function, estimated employment per shift, estimated occupancy, loading facilities, and community benefits to be derived from the project.
- 16. If the project involves a variance, conditional use permit, or rezoning application, state this and indicate clearly why the application is required.

Are the following items applicable to the project or its effects? Discuss below all items checked "yes" (attach additional sheets as necessary).

- | | | |
|--------------------------|--------------------------|---|
| YES | NO | The following items are addressed on the attached CEQA Document. |
| <input type="checkbox"/> | <input type="checkbox"/> | 14. Change in existing features or any lakes or hills, or substantial alteration of ground contours. |
| <input type="checkbox"/> | <input type="checkbox"/> | 15. Change in scenic views or vistas from existing residential areas, public lands, or roads. |
| <input type="checkbox"/> | <input type="checkbox"/> | 16. Change in pattern, scale, or character of general area of project. |
| <input type="checkbox"/> | <input type="checkbox"/> | 17. Significant amounts of solid waste or litter. |
| <input type="checkbox"/> | <input type="checkbox"/> | 18. Change in dust, ash, smoke, fumes, or odors in the vicinity. |
| <input type="checkbox"/> | <input type="checkbox"/> | 19. Change in lake, stream, or ground water quality or quantity, or alteration of existing drainage patterns. |
| <input type="checkbox"/> | <input type="checkbox"/> | 20. Substantial change in existing noise or vibration levels in the vicinity. |
| <input type="checkbox"/> | <input type="checkbox"/> | 21. Site on filled land or on slope of 10 percent or more. |
| <input type="checkbox"/> | <input type="checkbox"/> | 22. Use or disposal of potentially hazardous materials, such as toxic substances, flammables, or explosives. |
| <input type="checkbox"/> | <input type="checkbox"/> | 23. Substantial change in demand for municipal services (police, fire, water, sewage, etc.). |
| <input type="checkbox"/> | <input type="checkbox"/> | 24. Substantially increase fossil fuel consumption (electricity, oil, natural gas, etc.). |
| <input type="checkbox"/> | <input type="checkbox"/> | 25. Relationship to a larger project or series of projects. |

ENVIRONMENTAL SETTING

- 26. Describe the project site as it exists before the project, including information on topography, soil stability, plants and animals, and any cultural, historical or scenic aspects. Describe any existing structures on the site, and the use of the structures. Attach photographs of the site. Snapshots or polaroid photos will be accepted.
- 27. Describe the surrounding properties, including information on plants and animals and any cultural, historical, or scenic aspects. Indicate the type of land use (residential, commercial, etc.), intensity of land use (one family, apartment houses, shops, department stores, etc.), and scale of development (height, frontage, setback, rear yard, etc.). Attach photographs of the vicinity. Snapshots or polaroid photos will be accepted (cannot be returned).
- 28. Describe any known mine shafts, tunnels, air shafts, open hazardous excavations, etc. Attach photographs of any of these known features. Snapshots or polaroid photos will be accepted (cannot be returned).

Certification: I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date 1-18-2019

John Kevin Manager
(Signature)

For R A Home Inc. LLC

INDEMNIFICATION

Project: Pilgrim Rock Quarry

In consideration of the County's processing and consideration of the application for the discretionary land use approval identified above (the "Project") the Owner and Applicant, jointly and severally, agree to defend, indemnify, and hold harmless the County of Amador from any claim, action, or proceeding against the County to attack, set aside, void or annul the Project approval, or any action relating related to the Project approvals as follows:

1. Owner and Applicant shall defend, indemnify, and hold harmless the County and its agents, officers or employees from any claim, action, or proceeding against the County or its agents, officers or employees (the "County") to attack, set aside, void or annul the Project approval, or any prior or subsequent determination regarding the Project, including but not limited to determinations related to the California Environmental Quality Act, or Project condition imposed by the County. The Indemnification includes, but is not limited to, damages, fees, and or costs, including attorneys' fees, awarded against County. The obligations under this Indemnification shall apply regardless of whether any permits or entitlements are issued.

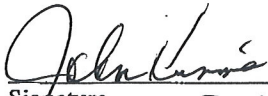
2. The County may, within its unlimited discretion, participate in the defense of any such claim, action, or proceeding if the County defends the claim, action, or proceeding in good faith.

3. The Owner and Applicant shall not be required to pay or perform any settlement by the County of such claim, action, or proceeding unless the settlement is approved in writing by Owner and Applicant, which approval shall not be unreasonably withheld.

IN WITNESS WHEREOF, by their signature below, Owner and Applicant hereby acknowledge that they have read, understand, and agree to perform the obligations under this Indemnification.

Applicant:

Owner (if different than Applicant):



Signature

Manager RA Home Inc LLC

Signature

1-18-2019

**MINE RECLAMATION PLAN
FOR
PILGRIM ROCK QUARRY
200 Highway 16
Plymouth, California**

Project No. E15056.001
January 2019



**YOUNGDAHL
CONSULTING GROUP, INC.**

Building Innovative Solutions



R.A. Home Investments, Inc.
1101 Fulton Avenue, Suite 204
Sacramento, California 95825

Project No. 15056.001
18 January 2019

Attention: Mr. John Kinne

Subject: **PILGRIM ROCK QUARRY RECLAMATION PLAN**
200 Highway 16, Plymouth, Amador County, California
APN's 001-130-008 and 001-140-041

References: 1. SWQ Quarry Proposal for Reclamation Plan, prepared by Youngdahl Consulting Group, Inc. dated, 13 December 2015, Project E15056.001.
2. Preliminary Reserve Estimate for 1 SWD Quarry, Prepared by Youngdahl Consulting Group, Inc., dated 13 March 2015, Project E15056.000.



Dear Mr. Kinne,

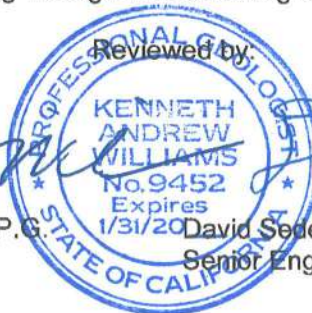
Youngdahl Consulting Group is pleased to have prepared the Pilgrim Rock Quarry reclamation plan. This reclamation plan was prepared to meet the requirements of the following State of California and Amador County regulations:

- Surface Mining and Reclamation Act (SMARA) of 1975, as amended (Public Resources Code, 2272 et. seq.);
- California Code of Regulations (CCR) Title 14, Chapter 8, Articles 1 and 9 (Surface Mining and Reclamation Standards); and
- Amador County Code for Quarry Excavations (Surface Mining and Reclamation Ordinance)

This reclamation plan was prepared under the direction of the registered professionals whose signatures and seal appear below. If you have any questions please call us at 916-933-0633. Thank you for selecting Youngdahl Consulting Group, Inc. to provide services for this project.

Sincerely,

Reviewed by:


Kenneth A. Williams, P.G.
Project Geologist
David Sederquist, C.E.G, C.HG
Senior Engineering Geologist/Hydrogeologist



Martha A. McDonnell, P.E.
Associate Engineer

Copies: 1 to Client
10 to Amador County Planning Department / Attn: Chuck Beatty

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1.0 INTRODUCTION AND SITE LOCATION

Youngdahl Consulting Group, Inc. (Youngdahl) provided geological and engineering services for preparation of this reclamation plan for the proposed Pilgrim Rock Quarry located at 200 California State Highway 16 in Amador County, California (Figure 1). The project will include blasting, quarrying, and crushing bedrock for construction aggregate resources. The Pilgrim Rock Quarry operation would entail the open-pit mining of rock to produce raw aggregate materials that would be available to the Sacramento metropolitan area market, which is anticipated to provide most of the demand for the quarry's rock products. End uses of the mined materials are expected to include building materials such as asphaltic concrete, riprap, road base, utility trench backfills, and decorative rocks. Rock products would be available for direct customer pick-up; the quarry operator would not deliver raw materials. The quarry pit would be excavated in five phases, with an average of about 13,200,000 tons of rock mined in each phase. Total material mined over the 40-year life span of the project would be approximately 66,000,000 tons removed from a final quarry footprint of 135 acres. Reclamation would be concurrent with each mining phase to return the site to a usable condition that would be suitable for agricultural end-use after quarry operations are terminated. This reclamation plan is organized into the following sections:

- Introduction and Site Location;
- Environmental Setting;
- Quarry Operations;
- Reclamation;
- Applicant's Statement of Responsibility;
- Lead Agency Certification;
- Financial Assurance Bond Estimate;
- References; and
- Limitations.

This introduction section presents the following information:

1.1 PILGRIM ROCK QUARRY REPRESENTATIVES

This report section presents property applicant, owner and operator information for the proposed Pilgrim Rock Quarry.

1.1.1 Applicant

The Pilgrim Rock Quarry reclamation plan applicant is:

RA Home Investments, LLC
1101 Fulton Avenue, Suite 204
Sacramento, California



John Kinne, Manager (209) 418-9153

1.1.2 Property Owner

The Pilgrim Rock Quarry western parcel (APN 001-130-008) and the eastern parcel (APN 001-140-041) are owned by the applicant above. (Figure 2)

1.1.3 Operator

The Pilgrim Rock Quarry operator is the applicant listed above.

1.2 SITE DESCRIPTION

This report section presents a general description of the site including: site location, Amador County tax assessor's parcel numbers (APNs), parcel grant deeds, township and range description, and latitude and longitude.

1.2.1 Site Location

The Pilgrim Rock Quarry site encompasses approximately 369 +/- acres comprised of two parcels; the western larger parcel being located at 200 South Highway 16 (APN 001-130-008), and the smallest being located in the 1700 block of Long Gate Road (APN 001-140-041), Plymouth, California, which is located approximately 5.5 miles southeast of the community of Rancho Murieta, Sacramento County and approximately 8.5 miles northwest of Lone, in Amador County, California. Figure 1 shows the site location and near vicinity.

Site topography is characterized by gently rolling terrain throughout the central, southern, eastern, and northern portions of the property. The western portion of the property is characterized by several drainages which drain to the northwest while the eastern portion of the project generally drains to the southwest. A major unnamed ridge trending in a northwest direction, borders the eastern property line, and is the high point of the project site. Various small northwest trending ridges generally slope down toward the drainages described above. The total vertical relief across the site ranges from 240 to 472 feet above mean sea level (amsl) Figure 5.

Presently, both parcels of the site are relatively undeveloped except for several unimproved ranch roads traversing the property and gated to prevent uncontrolled use. In total, the project proponents propose developing 143 of the 369 acres. Access to the site is through a deeded easement from Moriah Heights Road. The easement has been used to gain access to the project site for at least 30 years and will continue to be used for that purpose. Ingress and egress to the site will be clearly marked and documented for pre-mining and post-mining uses.

Nearly the entire site is undeveloped and densely covered by brush and isolated areas of oak and pine trees. Within the site, previously mined and previously disturbed areas, including old mine shafts and mine tailings, are primarily concentrated in the southern and southwestern portions of the site, and not within the proposed phases of the



proposed development. A few temporary structures and outbuildings are present in the northwestern portion of the site. Areas surrounding the study area are mainly relatively undeveloped densely vegetated rural residential properties intermittently used for cattle grazing or bee keeping. An existing quarry operation is contiguous to the northern boundary of the eastern 40 acres parcel and is owned and operated by Teichert Aggregates, Inc.

1.2.2 Amador County Tax Assessor's Parcel Numbers

The Pilgrim Rock Quarry is identified as Assessor Parcel Numbers (APN) 001-130-008 (western parcel) and APN 001-140-041 (eastern parcel). Figure 2 presents the Amador County tax assessor's parcel maps showing the location of the Pilgrim Rock Quarry property.

1.2.3 Parcel Grant Deeds

The proposed Pilgrim Rock Quarry grant deeds are recorded at the Amador County tax assessor's office in Book 1, Page No. 130, Parcel 8 and Book 1, Page No. 140, Parcel 41. The grant deeds for each parcel are attached in Appendix A of the CEQA Checklist.

1.2.4 Township And Range Description

The Pilgrim Rock Quarry is located on the United States Geological Survey (USGS) State of California, Carbondale and Irish Hill 7.5 minute topographic quadrangle maps. According to the USGS quadrangles, the western portion of the project is located in the northern and eastern half of Section 17, within Township 7 North by Range 9 East of the Mount Diablo Base and Meridian (MDBM). The eastern portion of the site lies within the northwest quarter of the northwest quarter of Section 16, within Township 7 North by Range 9 East of the MDBM.

1.2.5 Latitude and Longitude

The center-point of the Pilgrim Rock Quarry site is located at north latitude 38.4666° and west longitude -121.0044.

2 ENVIRONMENTAL SETTING

The environmental setting section of the report includes: physical resources, climate resources, biological resources, air quality, surrounding land uses, and reclamation potential.

2.1 PHYSICAL RESOURCES

The physical resources described herein include site topography, geology, groundwater, surface water, soil types, soil erosion potential, and geotechnical engineering properties.



2.1.1 Site Topography

The site topography predominantly consists of gently to steeply sloping and rolling terrain. Elevations range from approximately 245 to 450 feet amsl with approximately 205 feet of relief. In general, surface water flows over the rolling topography of the site and drains to within the proposed quarry area (Figure 5). A series of small shallow isolated historic mining remnant prospect pits (hallows) are found in the southeast quadrant of the site. Figure 5 shows the site topography.

2.1.2 Regional Geologic Setting

The site is situated within the foothills of the Western Sierra Nevada geomorphic province of California, at the eastern margin of the Amador Valley. The Geologic Map of the Sacramento Quadrangle 1:250,000, Map No. 1A shows that the site is underlain by the lone Formation (quartzose sandstone and kaolinite clay), Salt Springs Slate (slate derived from siltstone; including tuff, greywacke and petromict conglomerate, and schistose metavolcanic rock.), and Gopher Ridge Volcanics (bedded mafic or intermediate tuff and volcanic breccia) Formations. They are Tertiary (lone Formation) to Jurassic (Gopher Ridge Volcanics) in age as illustrated in Figure 3.

According to the Fault Activity Map of California and Adjacent Areas (Jennings, 2010) and the Peak Acceleration from Maximum Credible Earthquakes in California (CDMG, 1992), no active faults or Earthquake Fault Zones (Special Studies Zones) are located within the project site. No evidence of recent or active faulting was observed during our field study. The nearest mapped faults to the site are related to the Bear Mountains and Melones Fault Zones located 10 and 17 kilometers east of the site respectively. The nearest mapped active fault to the site is the Dunnigan Hills fault located about 72 kilometers to the west-northwest.

2.1.3 Site Geology

The site is generally underlain by highly foliated Gopher Ridge Volcanics and Salt Springs Slate with a thin veneer of lone Formation covering both in some areas. On the eastern 40-acre portion of the property, the underlying geology consists highly metavolcanic rock of the Gopher Ridge Volcanics rock unit. Overall, highly deformed volcanic breccia, which is gray to green colored, steeply dipping and moderately to slightly weathered, forms outcrop protrusions reminiscent of "headstones" typically found throughout the foothill counties to south of the site. On the eastern parcel an approximate contact between a foliated and highly deformed volcanic breccia and the massive meta-andesite tuff found west of the contact to just beyond the western limit of the planned quarry pit footprint (Figure 5B).

The Gopher Ridge Volcanic unit was classified using a rock mass classification system which uses rock structure rating and rock geomechanics classification system rating. Considering rock structure rating, the unit is a hard to very hard metamorphosed andesite that is massive to slightly folded/faulted. The joint pattern was on average moderate to blocky and becoming massive at depth. Anticipated groundwater flow is estimate to be none to negligible from tight or cemented joints. Using the geomechanics classifi-



cation system the estimated point load strength is 4 to 10 MPa, RQD 75%-100%, slightly rough surfaces between joints to healed fractures, and groundwater estimated less than 10 gallons per minute. The geomechanics rock mass rating is estimated to be good to very good rock to withstand the slopes modelled below.

Based on our field observations of the limited near-surface rock outcrops and subsurface cores obtained from exploratory drilling, the meta-andesite has an estimated rock mass rating, based on the Rock Mass Rating System (Bieniawski, 1989) of good rock to very good rock.

West of the planned quarry pit footprint limit, the meta-andesite becomes moderately weathered and slightly fractured and contacts highly fractured and weathered slate of the Salt Springs Formation. The slate appears as a saprolite (completely weathered materials) to at least 10 feet below the ground surface based on outcrop exposures and to depths of 50 feet based on our subsurface exploration of the site. The proposed footprint of the quarry has been designed to exclude exposures of slate bedrock and to include only meta-andesite.

2.1.4 Naturally Occurring Asbestos

The USEPA regulates two basic types of asbestiform minerals, chrysotile and amphibole. Chrysotile asbestos is most commonly associated with serpentinites. Amphibole asbestos is commonly found to be associated with faults, shear zones, and low to medium grade metamorphism of mafic rock (i.e. basalt). It can also be found in association with serpentinites, talc (soapstone).

Asbestos is classified by the USEPA as a known human carcinogen and has been identified as a potential health hazard. The western portion of nearby El Dorado County has, in recent years, been closely scrutinized regarding areas that potentially contain NOA. The California Geological Survey published a map in 2000 (Open File Report 2000-02) that qualitatively indicates the likelihood for NOA in Western El Dorado County. The map outlines rock types and geologic features more likely to contain asbestos. A study was completed on NOA in the Gopher Ridge Volcanics Formation on a project northwest of the site, with NOA found in 1 sample.

Prior to 2004, the nearest known exposures of rock containing trace concentrations of amphibole asbestos were located north of the site within the Copper Hill Volcanics Formation and within the Gopher Ridge Formation. It is Youngdahl's opinion that these traces of amphibole asbestos are associated with hydrothermal alteration of the metavolcanic rocks. We did not observe hydrothermally altered rocks at the project site or within the vicinity.

The California Department of Conservation, California Geological Survey, prepared Special Report 192 (SR 192) in 2006, titled "Relative Likelihood for the Presence of Naturally Occurring Asbestos in Eastern Sacramento County, California. The report indicates that the Gopher Ridge Volcanics unit to be within an area moderately likely to contain NOA." Youngdahl recommends that recommends a California Professional



Geologist inspect the site periodically to assess the site for the potential of NOA. The materials exposed during quarrying activities should also be tested according to California Air Resources Board (CARB) Rule 435 which includes one test per 1000 tons of aggregate produced.

One purpose of the subsurface investigation was to determine if natural occurring asbestos is present in quantities limiting the planned uses of the rock that will be quarried. These requirements include the California Air Resources Board ATCM, Title 17, Section 93105. As per the Appendix H of the CEQA Checklist, no NOA was detected.

2.1.5 Groundwater

Groundwater at the site generally occurs in unconfined sedimentary and fractured rock aquifers that underlie the site. Generally, the groundwater elevation varies throughout the year, with the shallowest elevations occurring at the end of the winter rainy season and the deepest elevations at the end of the dry summer/early fall seasons. Youngdahl did not encounter groundwater in any of the borings onsite; however Youngdahl performed a cursory review of domestic water well data obtained from the Department of Water Resources. Based on these records, groundwater varies between 90 and 350 feet bgs and is highly dependent on the geologic formation and the presence and geometry of fractures within the bedrock materials. Exploratory holes drilled in the Gopher Ridge Volcanics geologic unit within the quarry footprint did not encounter any groundwater at elevations of 222 feet AMSL. We do not anticipate significant quantities of groundwater above the planned quarry depth of 220 feet AMSL.

The excavation for the proposed quarrying activities will be conducted in a predominantly vertical direction from the existing ground surface elevation to approximately 180 feet below ground surface (bgs). This is measured from the northeast corner of the quarry footprint, with a maximum excavation depth at approximately 200 AMSL located at the bottom of Phase 4. The sedimentation basin will be excavated to 20 feet below this level. The excavation bottom will be well above local groundwater resources; therefore, the Pilgrim Rock Quarry operators do not anticipate encountering a saturated groundwater aquifer. The maximum excavation depth may be amended in the future to accommodate potentially salable materials discovered at greater depths. Groundwater elevations may fluctuate in the future depending on regional pumping of the aquifers or potential recharge of the groundwater from surrounding properties.

The Pilgrim Rock Quarry operators are planning to use recycled surface water and secondarily local groundwater extracted from the on-site production well identified as Department of Water Resources Well No. 07N09E17) to supplement quarry operations when surface water supplies are exhausted. This well was drilled with sedimentary layers of the Lone Formation geologic unit and the underlying aquifer is isolated from the aquifer within the pit footprint. All water pumped from the well will be recycled during quarrying and processing operations via a series of ditches and culverts that convey surface water to sedimentation basins. The existing groundwater well will continue to

supply water to meet the site needs upon completion of the site reclamation activities. The well may also be maintained as an "inactive" well in accordance with the requirements of the *California Well Standards*, Section 21 of Bulletin 74-90 if later deemed necessary by the operator.

2.1.6 Surface Water

Two minor drainages flow through the northern half of the site from southeast to northwest. In total, four watersheds contribute to surface water flowing across the site (Figure 12). The Pilgrim Rock Quarry site contains rolling topography that trends in a southeast-northwest direction. The seasonal drainage swales formed by the existing topography separate the Pilgrim Rock Quarry site into four hydrologic or drainage areas. Surface water run-on that enters the site within the drainage areas predominantly through shallow swales drains to the northwest. The drainage areas and their respective areas are illustrated in Table 1.

Watershed	Acreage
A	67.5
B	45.9
C	163.2
D	66.9
Total	343.5

Area B outlines the surface water watershed in the vicinity of the processing area. Areas B, C, and D contribute some water to Phases 1 through 3; and Areas C and D contribute to phases 4 and 5 (Phasing is discussed in Appendix A). The total area of drainage providing influence on the proposed area of development is approximately 343.5 acres as shown on Figure 8.

The surface quantity of surface water runoff was estimated in accordance with the Surface Mining and Reclamation Act (SMARA) Regulations in California Code of Regulations (CCR) Title 14, Division 2, Chapter 8, Subchapter 1, Article 9, Section 3706(d) and California Department of Water Resources Bulletin 195, and National Ocean and Atmospheric Administration (NOAA) precipitation maps. According to NOAA, the mean annual precipitation for the project site is 21 inches for Zone 1 (which is the Zone containing the project). Based on the rational method, it is estimated that the 100-year, 24-hour precipitation event will produce an average of 63.4 cubic feet per second (cfs) of flow for the Pilgrim Rock Quarry site drainage. Appendix B of the CEQA Checklist provides details of the peak flow calculations. This is an average of the 4 hydrologic or drainage areas; A, B, C, and D as illustrated on Figure 12.0. Drainage from each phase is controlled by a series of benches, drains, and sheet flow to sedimentation basins. Figures 7 through 11 provide the flow directions and gradients calculated to convey all surface drainage towards two sedimentation basins; One for Phases 1 through 3 and another for Phases 4 and 5. The estimates are based on a



maximum of two feet of freeboard being allowed for each basin. Capacities and calculations to size the basins are found in Appendix B of the CEQA Checklist. Bench drain details are found on Figure 16, Section D-D'.

The United States Department of Agriculture Soil Conservation Service/Natural Resources Conservation Service (USDA/NRCS) soil survey of Amador County, estimates that the undisturbed soil at the site and surrounding areas has the capacity to absorb 2 to 5 inches of rainfall, at which time the near surface soil will become saturated. As the near surface soil becomes saturated, then surface water runoff and infiltration will occur. Temporary roadways are proposed to divert surface water runoff to drain towards sedimentation basins (Figures 7 through 11) for collection and recycling within the quarry footprint.

2.1.6.1 Erosion Control Measures

The erosion control measures employed during construction of the Pilgrim Rock Quarry project will include silt fences, wattles, small rock-lined earth berms, and rock-lined ditches. At any time, erosion control Best Management Practices (BMP's) may be used during construction in the event that the site conditions warrant the use of these measures or the silt fence barrier does not function under the current site conditions. An erosion control measure includes rock and earth berms (check dams). Check dams will serve a variety of purposes such as providing soil stabilization by reducing flow velocity and encouraging sediment settlement. Berms may be used to form a barrier across a slope to intercept runoff and reduce velocity flow. In addition, the berm will reduce runoff as sheet flow and provide some sediment removal. For the minor eroded areas, filling the erosional feature with 3- to 8-inch clean rock is an option. This will serve as a filtering device as well as decrease runoff velocity. Erosion control measure details are provided on Figure 8.0. If the erosion control measures in Figure 8 are inadequate, California Department of Transportation (Caltrans) or California Stormwater Quality Association (CASQA) BMP's should be used. A Stormwater Pollution Prevention Plan (SWPPP) will need to be prepared according to applicable law at the time of approval.

2.1.7 Soil Types

The United States Department of Agriculture Soil Conservation Service/Natural Resources Conservation Service (USDA/NRCS) conducted soils mapping in the project area in 1992. Figure 3 presents a satellite photo overlain with the USDA/NRCS soil map of the area including the Pilgrim Rock Quarry site and near vicinity. The five soil units identified within the Pilgrim Rock Quarry phase area are described in the following as per USDA/NRCS: None of the soil types below are listed as prime farmland.

- **Auburn Very Rocky Silt Loam, 3-31 percent slopes (AsD):** The Auburn series consists of shallow, well drained soils that formed in material weathered from amphibolite schist, greenstone schist, and diabase. These soils are typically located on side slope or back slopes of hills ranging from 3 to 31 percent. The soil is well drained; slow to rapid runoff; and has very low storage capacity. Typically, the



surface layer and the upper part of the subsoil are approximately 14-inches thick and strong brown to yellowish red silt loam. The lower part of the subsoil to a depth of 24 inches is typically pale brown. Permeability of the soil is moderately high and runoff is very high, therefore the hazard for erosion is severe.

- **Mine Tailings and Riverwash (Mn):** The Mine Tailings and Riverwash series consists of gravelly coarse sand to extremely gravelly coarse sand and gravelly sand. The parent material is usually alluvium devoid of any significant amount of fines. Typically, this unit is found in drainage ways and runoff is very rapid. With little to no storage capability, this soil unit has high to very high transmissivity.
- **Mokelumne Sandy Loam, 2-5 percent slopes (MrB):** The Mokelumne series consists of moderately deep and well or moderately well drained soils formed in hillslope alluvium underlain by material weathered from sandstone and weakly consolidated clayey marine sediments. Mokelumne soils are on dissected terraces, hills, side slopes of terrace remnants and in swales. In general, the soil profile is approximately 5 feet thick above weathered bedrock. This soil being primarily clayey in nature having a low to moderately low transmissivity and could store up to 6.5 inches of water within the profile. Runoff potential is very high.
- **Red Bluff-Mokelumne Complex, 5-16 percent slope (RbD):** The Red Bluff-Mokelumne complex consists of 60% Red Bluff, 25% Mokelumne, and 15 % various soil types from the surrounding vicinity. The complex consists of soil derived from metamorphic and sedimentary rock. Generally, soil tends to be a gravelly loam/clay to a gravelly sandy loam or clay. The natural drainage features are well drained to moderately well drained with the runoff class being high to very high. At approximately 5 feet bgs a cemented horizon or bedrock may be encountered. Water storage ranges from very low to low. Water capacity is moderately high to very low. The water table is typically greater than 7 feet.
- **Red Bluff-Mokelumne-Mine Pits Complex (RmD):** Same as above with the exception of mine pits as follows. Mine pits have a highly variable profile to 5 feet bgs and are typically depressions.
- **Sedimentary Rock Land, (Sa):** This series is entirely unweathered sedimentary bedrock from ground surface to 5 feet bgs. It is excessively drained, very high runoff class, and very low to moderately high capacity, but no water storage observed in the profile.

2.1.8 Soil Erosion Potential

The erosion potential of the onsite soils are moderate to high based on information presented by the USDA/NRCS. The erosion potential of the soils within the proposed Pilgrim Rock Quarry area can be significantly reduced by applying standard grading methods, installing concrete-lined and erosion matt-lined drainage ditches, and by restoring the natural vegetation by hydro-seeding methods. The potential for sediment loading would be minimized through the use best management practices (BMP's).



Disturbed areas should be seeded as soon as possible to allow vegetation to become established prior to and during the rainy season. The reclamation plan provides for permanent BMP's and revegetation to be implemented concurrent with or following site excavation activities. The following erosion controls may be implemented to reduce the hazard of erosion during site excavation operations.

1. Prior to commencement of site work, fiber rolls or silt fence should be installed as necessary down slope of the proposed area of disturbance to disrupt migration of sediment from the site. Fiber rolls on slopes are intended to reduce sediment discharge from disturbed areas, reduce the velocity of water flow, and aid in the overall stability of slopes. The fiber rolls should remain in place until the excavation and reclamation activity is complete and vegetation becomes established.
2. All soil exposed in permanent slope faces should be hydro-seeded or hand seeded/strawed with an appropriate seed mixture as listed in Table 2.
3. Following seeding, jute netting or erosion control blankets should be placed and secured over soil slopes steeper than 2H:1V. Slopes within the pit footprint are precluded from this provision as they will be comprised of bedrock.
4. Surface water drainage ditches should be established as necessary to intercept and redirect concentrated surface water away from slope faces. Under no circumstances should concentrated surface water be directed over slope faces. The intercepted water should be discharged into the on-site collection structures.

2.1.9 Geotechnical Engineering Properties

The geotechnical engineering properties of the hard rock deposits that are proposed to be mined at the Pilgrim Rock Quarry will be determined by laboratory testing when the operation commences. In addition, the general properties can be inferred based on observation of the exposures and operations north of the project site operated by Tiechert, Inc. Past quarrying activities near the Pilgrim Rock Quarry site by other quarry operators in Lone, California have produced 1H:1V gradient slopes in similar deposits. These slopes have remained relatively stable. This reclamation plan will require that all quarried slopes be maintained at slope configurations having an overall maximum slope of 1V:1V, with 15-foot-wide benches placed at maximum intervals of 30 feet vertically as illustrated in Figures 7 through 11. Intermediate cut slopes will be at 0.5H:1V.

2.2 CLIMATE RESOURCES

The climate resources described herein include precipitation and temperature and are further described below.



2.2.1 Precipitation

The Pardee weather station is the nearest weather station to the Pilgrim Rock Quarry site, located approximately 14.5 miles to the southeast at an elevation of approximately 658 feet AMSL, which is higher than the elevation of the Pilgrim Rock Quarry site (245 to 450 feet AMSL). The average precipitation at this site is 17.5 inches. The wet season generally occurs during the months of October through April. The dry season generally occurs during the months of May through September.

2.2.2 Temperature

At the Pardee Weather Station, the mean annual temperature is approximately 61 degrees Fahrenheit (F) and ranges from an average low of approximately 46 degrees F during the month of January to an average high of 78 degrees F during the month of August.

2.3 BIOLOGICAL RESOURCES

A vegetation and wildlife assessment was prepared for the site and is included in Appendix C within the CEQA Checklist under separate cover. The assessment focused on evidence of special-status plants and wildlife, rare or sensitive vegetation communities, and jurisdictional waters or wetlands that could be affected by the proposed quarry operation. The analysis identified vegetation, special status plant species, wildlife, and special status wildlife species, which meets SMARA requirements under CCR Title 14, Div. 2, Chap. 8, Subchapter 1, Section 3703.

General conclusions of the vegetation and wildlife assessment were that there is a low potential for some rare species; those listed in Table 1 of the report (Appendix C) to occur in the proposed mine footprint. Only one rare plant species has been found in chaparral within the western parcel and could also be found in the eastern parcel. Highly endangered species such as the lone buckwheat and manzanita were not found on either property.

2.4 CULTURAL RESOURCES

An archeological assessment for the site entitled Pilgrim Rock Quarry Cultural Resources Assessment was conducted in February 2017 by Ric Windmiller, Consulting Archeologist. The findings of the report are presented as follows:

“An assessment of effect concluded that the proposed quarry will have no effect on historical resources, historical properties, unique archeological resources, tribal cultural resources or traditional cultural properties.”

General conclusions of the report are that there is a low potential for the project to encounter archeological resources. Mitigation measures include retaining a qualified archeologist to instruct quarry personnel how to be able to identify prehistoric and historic archeological resources. In addition, the archeologist will provide guidance on the protocol required in the event that archeological resources are encountered.



The archeologist will have stop work authority if archeological resources are encountered, but in the event of human remains are encountered, the County Coroner and Native American representative should be contacted. Work will stop until the human remains can be relocated by the appropriate entity. The report contains additional information and attached as Appendix D of the CEQA Checklist under separate cover.

2.5 AIR QUALITY

The quarry operation is located in the northwestern portion of the Amador Air District (AAD). Heavy equipment used to reclaim the site will be registered with the California Air Resources Board (CARB) and will have Tier 4 diesels or better. The principal potential pollutants anticipated at the Pilgrim Rock Quarry will be dust and emissions caused by the proposed quarrying activities as described in Appendix E within the CEQA Checklist under separate cover.

2.6 TRAFFIC

Upon closure of the quarry, and in accordance with Section 3705, subsection (d) of SMARA, all haul roads and access roads will be removed and prepared as described in Section 3705, subsection (g). Offsite road improvements are to remain in place post closure. Traffic improvements related to the proposed quarry are discussed in Appendix F of the CEQA Checklist under separate cover.

2.7 SURROUNDING LAND USES

The quarry is visible from the property to the north, south, and west. However, a dense growth of trees and brush obscures the view from each direction unless the observer is at or near the property line. The subject property and all the parcels located immediately adjacent to the parcels are zoned according to the General Plan as Agricultural General (40 Acre Density) and Zoning is R1A, Single Family Residential and Agricultural District. Throughout the Irish Hill quadrangle, the area was classified into Mineral Resource Zones (MRZs) with respect to the presence, absence, or likely occurrence of mineral deposits according to guidelines adopted by the California State Mining and Geology Board (1979, p. 23). Section I.1a of these guidelines requires that the State Geologist classify land into Mineral Resource Zones (MRZs). The Pilgrim Rock Quarry site is classified in the *California Division of Mines and Geology Open File Report* (OFR 91-03, 1991) as MRZ-3, which as per the *Report* is defined as "areas containing mineral deposits the significance of which cannot be evaluated from available data."

3 QUARRY OPERATION

The Pilgrim Rock Quarry operation will entail open-pit mining of rock to produce aggregate materials that will be used by the regional community to produce building materials such as asphaltic concrete, rip rap, road base, utility trench backfills, and



decorative rocks. Details of the quarry operation are found in the Quarry Operation Summary attached as Appendix A.

4 RECLAMATION PLAN ACTIVITIES

This proposed reclamation plan describes typical methods to be employed to meet or exceed local, state, and federal laws and regulations. The goal of this reclamation plan is to minimize wind and water erosion, and return the site to a usable condition that would be suitable for an agricultural zoned end use. The proposed reclamation goals include: drainage control, stabilizing soils, and re-vegetating the site. The proposed reclamation discussed herein includes: subsequent land uses, impacts on future quarries, reclamation schedule, post-quarrying topography, drainage impoundments, disposition of equipment, soil treatment and re-vegetation, irrigation, plant protection measures, erosion and sediment control, site security, reclamation performance standards, maintenance monitoring and remedial measures, and reporting.

4.1 SUBSEQUENT LAND USES

The proposed end use of the Pilgrim Rock Quarry site is cattle grazing agriculture land. The property is currently zoned as (R1-A) (Residential-Agricultural, 40-acre minimum). Cattle grazing will not commence until after the 2-year monitoring period has been successfully completed following final reclamation of a phase or at an earlier time as conditions dictate. Fencing will be established to separate cattle from the mining/reclamation operation.

4.2 RECLAMATION SCHEDULE

Phased reclamation of the Pilgrim Rock Quarry site will be implemented. Reclamation will be instituted in those areas of the site for which no further quarrying is planned after each phase is complete and contemporaneously with mining the next phase. All reclamation activities (except quarterly monitoring activities) will be completed within 2 years of the date when quarry activities are terminated, not including implementation of an interim management plan or administrative request for an extension of the termination date.

4.3 POST-PROJECT TOPOGRAPHY

The final quarry slopes will be graded with a maximum slope configuration of 1H:1V and the pit floors will be sloped at a gradient of 1-2 percent. The final proposed topography of the Pilgrim Rock Quarry site is shown on Figure 11.

Vegetated buffers are proposed to screen the majority of the site from public view and will be implemented over the existing topography along the perimeter of the site. Eucalyptus trees (or other appropriate vegetation) will be planted along the north, east, west, and south sides of the project site to screen the mining operation. These trees are expected to screen the view of Pilgrim Rock Quarry processing equipment, aggregate stockpiles, mining equipment, and mining excavations on the project site. The planting program would utilize native species of trees such as interior live oak (*quercus wilizenii*),



foothill pines (*pinus sabiniana*), blue oak (*quercus douglasii*) on a 1:1 removal:replacement ratio and chamis (*Adenostoma fasciculatum*) planted on the perimeter of the quarry. Infill grasses as per the seed mix in Table No 2. Drip irrigation would be installed as necessary to facilitate early plant growth and vitality, but will be removed after 1 to 2 years.

4.4 DRAINAGE IMPOUNDMENTS

During reclamation, the excavated areas will be graded to match existing drainage patterns. The site will be graded to drain internally to the sediment retention basin. Water accumulating within the pit retention basins will be used for dust control and irrigation for reclamation activities. Minimal surface water is expected to flow into the pit during the dry season. Shallow soils overlying the gopher ridge volcanic bedrock of the site are not expected to contribute to groundwater resources. Most of the groundwater resources are expected to be a result of surface water percolating within the fractures of the pit wall. Based on our experience drilling the site, we did not encounter water within our borings to a depth of 225 feet above mean sea level (amsl). The drilling log of the parcel east of the site and within the same geologic formation, indicated a yield of 10 gallons per minute (gpm) and was drilled to a depth 523 bgs (bgs) or -43 amsl. The drill log indicated 2.5 gpm at 118 feet bgs, 3.5 gpm at 337 feet bgs, and 5.5 gpm at 372 feet bgs. In addition, surface water collected at the termination of the project will partially percolate into the ground through the pit floor or remain as a cattle watering pond in the bottom of the pit. We don't anticipate a significant amount of water to accumulate in the pit based on limited measured groundwater resources from the adjacent well, the demand of the operation for dust control, processing, and irrigation.

4.5 EQUIPMENT REMOVAL AND DISPOSITION

The site will be maintained in an orderly manner. All associated equipment will be removed from the site following termination of mining activities, but not if the quarry has filed an interim management plan or reclamation activities are ongoing and have not yet terminated.

4.6 SOIL TREATMENT AND RE-VEGETATION

The topsoil at the Pilgrim Rock Quarry site is defined as the upper 6 inches of the in-place native soil. Before spreading topsoil over the quarry areas, the exposed surface will be scarified, if required, to facilitate root growth. The topsoil will then be spread over the prepared surface. The finished topsoil surface will then be hydro-seeded or planted with a mixture of the prescribed plant species via hand broadcasting or mechanical means. Straw mulch will then be placed over the hydro-seeded areas at a minimum application rate of one ton per acre. The straw will be punched or crimped into the on-site soil. A tackifier may be used to contain the straw on the surface.

4.7 IRRIGATION

The species selected for re-vegetating the quarried areas will be combination of native and non-native plant species. Supplemental irrigation will be provided approximately



twice per month for the first full season following installation. Irrigation can be eliminated for those months that receive at least 0.5 inches of rain.

4.8 EROSION AND SEDIMENT CONTROL

Erosion and sediment control will be achieved by implementation of the described drainage and re-vegetation plans. Straw mulching and reseeding will be performed according to the re-vegetation plan. Upon completion of the reclamation activities, the graded site will drain internally into the existing sediment retention basins.

4.8.1 Re-vegetation Plan

The re-vegetation plan is described below. SMARA Section 2773 and CCR Sections 3503, 3704, 3705, 3707, and 3711 require that the reclamation plan establish a re-soiling and re-vegetation plan for quarry sites. The re-soiling and re-vegetation plan is described in the following sections.

4.8.2 Topsoil Management

All topsoil will be stockpiled to the west of the Phase 1 area prior the commencement of quarry activities. Initially, all grasses and the top six inches of topsoil will be scraped off and placed in a stockpile. Vegetation from periodic cleaning around sediment retention basins will be collected and mixed in with the topsoil stockpile. The topsoil stockpile will be managed to prevent spreading of noxious weeds and overgrowth of vegetation that may pose a fire hazard. Refer to Figures 7-11 for the topsoil stockpile locations. The exact location of the topsoil stockpile will be determined by the operator.

The upper six inches of all areas that support vegetation will be salvaged and managed according to CCR 3711 (Sections a-e). In addition, all fines generated by mining activity can be either stockpiled or mixed with the topsoil stockpile for use in final reclamation. Stockpiles will be identified on a site map and flagged in the field for later use by the operator in final reclamation. The stockpiled topsoil and fines will be protected from wind and water erosion by seeding or mulching. Coarse gravel may be used in lieu of mulch if applied less than eight inches deep in order to prevent erosion of the piles.

The stockpiles will be covered with straw and punched in with a Caterpillar D-5 or equivalent. If the stockpiles experience uncontrolled erosion, then 4 to 6-inch diameter riprap will be placed in eroded areas to dissipate precipitation and prevent further erosion.

Vegetation collected around retention basins will be composted with the topsoil stockpile. Only one topsoil stockpile is proposed at this time. Collected vegetation will be mixed in with fines from the retention basins by being turned over periodically with a large loader to ensure mixing and composting. Noxious weeds will be prevented by use of natural herbicides consisting of vinegar, Epsom salt and natural biodegradable dish soap.



4.8.3 Seed and Planting Methodology

Seed will be hand broadcast at approximately 50 pounds of pure live seed per acre by mid-October of each year. The seed species will comprise that which is presented in Table 2 below. The seed species presented are for re-vegetating quarries to an annual rangeland. Hydraulic methods will be used if hand broadcasting is unsuccessful. The agitation tank will be cleaned and previous seeds removed before reseeding.

When the seeds are broadcast, the operator will note the area and will measure the area to determine the approximate length and width so that the area of reseeding can be calculated.

The application rate for this seed mix is 50 pounds per acre, and should be applied in the fall. The seed can be broadcast seeded. Before seeding, the site should be slightly disturbed such as with a light disc or dragged with a harrow. This will ensure good soil to seed contact for germination. The proposed site should also be fertilized at time of planting. The fertilizer should be a super phosphate, or ammonium phosphate-sulfate type. Fertilizer should be applied at a rate of 150 to 200 pounds per acre. The intent is to provide approximately 70 pounds of actual phosphorus and 35 pounds of sulfur per acre. Nitrogen in the fertilizer should be avoided as it will promote the growth of grasses rather than the legumes, and it is important to get legumes well-established. Once the clover (or other legumes) is established it will provide nitrogen fertilization for the grasses over time.

Noxious Weeds

Noxious weed controls will be employed for the *Centaurea solstitialis* (yellow star thistle) and *Centaurea maculosa* (spotted knapweed) at the onset of mining. In addition, an ongoing eradication plan will be in effect when the *Cortaderia jubata* (pampas grass), *Carduus pycnocephalus* (Italian thistle), *Silybum marianum* (milk thistle), and *Brasica nigra* (mustard) exceed the average number of plants naturally occurring on the site in a 30-foot by 30-foot area.

Common Name	Latin Name	Pounds PLS per acre (PLS= pure live seed)
California brome	<i>Bromus carinatus</i> "Cucamonga"	10



Slender wild oat	<i>Avena barbata</i>	10
Soft-chess brome	<i>Bromus hordeaceus</i>	10
Rose clover	<i>Trifolium hirtum</i>	6
Six-week fescue	<i>Vulpia microstachys</i>	6
Common vetch	<i>Vicia sativa</i>	4
Winter vetch	<i>Vicia villosa</i>	4
	Total	50

Determination of Re-vegetation Success

The re-vegetation will be deemed successful if it is determined that there is no significant overall loss of agricultural productivity from the 2016 condition. Measurement of the success of re-vegetation will use the methodology of the University of California Davis; Range Science Report; April 1991; "Estimating Grazing Capacity on California Annual Rangeland". According to the Range Science Report, information was gathered over 45 years at various locations in California to develop an estimating technique that considers environmental factors in estimating forage production for cattle grazing. The most important factors for estimating grazing is slope and canopy cover. Grazing capacity is based on: 1) productivity of a site, which is expressed as the relationship between forage production and canopy cover; 2) grazing use which is expressed as the relationship between slope and grazing pressure; and 3) a level of residual dry matter (RDM), which indicates allowable grazing pressure and utilization.



The existing site pasture has total animal units per month (AUM) of 27 between the dates of October 1 and May 1. The goal of re-vegetation success is for the site to attain total AUMs of 27 as a minimum. For areas of existing canopy and steep slopes, the operator will measure the overall species in the field prior to mining and compare that with the productivity after reclamation, using an estimated 80% cover on the flattened areas. The following estimates the total productivity of the site.

Total Productivity	*AUM/Acre	Total AUM
Existing footprint of quarry before disturbance:		
135 ac rolling hills at <25% slopes, 5% canopy	0.2	27
With reclamation on 135 acres and 80% re-growth of the excavated areas:		
120 ac area at <10% slopes, 0% canopy	2.0	240
15 ac area at >40% slopes, 0-25% canopy	0.1	1.5
Total AUM after reclamation		241.5

*AUM - Animal Units per Month

Estimated residual dry matter (RDM) for the site after mining will be the same as pre-mining. Summer annuals are not considered in the estimate of RDM and may actually increase it. Subsequently, AUM's may be greater in number post mining than that listed above. In theory, the end goal is to provide no net loss of agricultural productivity based on a yield per field or AUM of 27 as minimum. However, the default end goal is to return the site to the current vegetative cover observed during the spring of 2016 in the southeastern corner of the property.

4.9 SITE SECURITY

The perimeter of the property is secured with a barbed wire fence and as needed, appropriate warning signage such as "No Trespassing" will be posted to alert the public that the property is privately owned, is an active quarry, and that trespassing is prohibited. Public access to the site will be via Moriah Heights Road where a locked security gate will be maintained. Other access roads to the property will also be secured by locked gates or a combination of locked gates and fencing.

4.10 RECLAMATION PERFORMANCE STANDARDS

SMARA Section 2773(a) requires that the reclamation plan establish site-specific criteria for evaluating compliance with the approved reclamation plan including: topography, re-vegetation, surface water runoff sediment, and erosion controls. The following sections present the proposed minimum performance standards for the reclamation of the Pilgrim Rock Quarry site.



4.10.1 Erosion and Sediment Control

Erosion and sediment controls will be implemented in compliance with BMPs for the Pilgrim Rock Quarry site. The sediment retention basins will be designed to accommodate a 100-year, 24-hour storm event. Erosion and sediment control monitoring will be performed simultaneously and at the same frequency as the vegetation monitoring. The site monitoring data will be used to identify areas that will need to be repaired in order to maximize the stability of graded slopes and the quality of water discharging from the site. Table 3 below presents qualitative criteria for evaluating erosion damage and appropriate mitigation measures (Stoddart et al., 1975).

Class	Description
1	No soil loss or erosion; topsoil layer intact, well-dispersed accumulation of litter from past year's growth plus smaller amounts of older litter.
2	Soil movement slight and difficult to recognize; small deposits of soil in form of fans or cones at end of small gullies or fills, or as accumulations in back of plant crowns or behind litter, litter not well dispersed or no obvious accumulation from past year's growth.
3	Soil movement or loss more noticeable; topsoil loss evident, with some plants on pedestals or in hummocks; rill marks evident, poorly dispersed litter and bare spots not protected by litter.
4	Soil movement and loss readily recognizable; topsoil remnants with vertical sides and exposed plant roots, roots frequently exposed, litter in relatively small amounts and washed into erosion protected patches.
5	Advanced erosion; active gullies, steep sidewalls on active gullies; well-developed erosion pavement on gravelly soils, litter mostly washed away.

All engineered fills should be graded with maximum 12-inch-thick loose lifts (layers) that have been moisture conditioned to within ± 4 percentage points of the American Society for Testing and Materials (ASTM) D1557 optimum moisture content. Each moisture conditioned soil lift should then be compacted to achieve a minimum relative compaction of 90 percent of the ASTM D1557 maximum dry density.

4.10.2 Re-vegetation Performance Criteria

The Pilgrim Rock Quarry area will be re-vegetated consistent with the reclamation plan. The performance standard for the plan will be based on current vegetated cover AUMs as explained in Section 4.3. More forage grows on flat areas than on slopes and in areas with fewer canopies than in shaded areas. The proposed quarry floor will be the location of the relatively flat area where most of the cattle will graze. The current grazing capacity rate of the site has been estimated is 27 AUM/acre. The proposed rate of 241.5 AUM/acre demonstrates that the reclaimed land will meet the regulatory requirement that the post mine land use is equal to or better than that of similar non-



mined lands. The post-mining rate AUM/acre is based on more productivity due to gentler topography and no canopy cover.

Residual Dry Matter (RDM) will be measured by a qualified biologist by either comparing photo standards or clipping and weighing a plot. Commonly, a combination of both methods is used to estimate RDM through a formal process via comparative yield or estimating RDM after clipping by eye. It is suggested that clipping a plot for RDM follow procedures outlined in Publication 8092, *California Guidelines for Residual Dry Matter Management on Coastal and Foothill Annual Rangelands*, University of California, Davis. The re-vegetated areas should be monitored on an annual basis to ensure that performance criteria are being met.

4.11 MONITORING AND REMEDIATION ACTIVITIES

Site monitoring will continue until the site reclamation standards have been achieved. The site monitoring and remediation activities discussed below include: geotechnical engineering, erosion and sediment controls, and site re-vegetation.

4.11.1 Geotechnical Engineering

The Pilgrim Rock Quarry slopes will be observed by the geotechnical engineer of record or certified engineering geologist on an annual basis or on an as needed basis to provide guidance to the operator for alternate slope magnitudes as conditions dictate. On a preliminary basis, we performed modeling of the proposed slopes based on similar project within the same geologic environments and can be found in Appendix G of the CEQA Checklist. There should be monitoring of the cut slopes during and post reclamation to ensure the propose slope magnitudes are feasible.

4.11.2 Erosion and Sediment Controls

Eroded areas larger than 500 square feet that are located within the re-vegetated portions of the Pilgrim Rock Quarry site that are classified as Class 2 or higher by the criteria presented in Table 3 will require another inspection in one year. If the classification score remains unchanged or increases to Class 3, 4 or 5 during the second year of monitoring, then appropriate measures should be considered, if required.

4.11.3 Site Re-vegetation

Re-vegetation of the site will be monitored for a minimum of five years following implementation or until the specified performance standards have been reached. Monitoring activities will take place during the peak flowering season, generally occurring during the months of April to late May. Once the monitoring initiation date is set, any additional monitoring that is required for areas that have been classified by the criteria presented in Table 3 as Class 2 or higher should occur within two weeks of that monitoring initiation date.



Re-vegetation monitoring will include both quantitative measurements and qualitative measurements. A minimum of 14, permanently marked, randomly placed plots (or the number of plots deemed necessary for a confidence and precision level of 80 percent), with a minimum size of 100 square feet, should be established following completion of reclamation treatments. The species, composition, and percent cover should be recorded. If it appears that the site will not meet the re-vegetation performance standards discussed in the preceding section, then the impacted areas should be remediated. Appropriate remedial measures are listed in Table 4 below.



Table 4 - Remediation Measures

Site Features	Monitoring Frequency	Remediation
Wind Erosion: Soil drifts found behind plants and rises; blowing dust.	Continuously during quarrying and reclamation; annually following reclamation.	Apply straw and/or mulching and re-vegetation
Water Erosion: rilling or gullyng or erosion of Class 3 or greater; evidence of washouts or erosion in drainages.	First Major storm event greater than 0.5-inches in a 24-hour period during construction; annually during reclamation period.	Install lined drainage control ditches, berms, and diversion channels. Apply straw, mulches, and re-vegetation hydro-seeding. Replace eroded soil with loosely compacted soil.
Slope Stability: slope failures and slumping.	Continuous monitoring during quarrying; annually during reclamation.	Reconstruct slopes to maximum gradient of 1H:1V overall with an inter bench gradient of ¼H:1V (horizontal to vertical slope ratio) and install erosion and drainage control improvements.
Sparse Vegetation: plant cover after one year is less than 50 percent	Annually	Reseed area; modify seed mix if necessary; evaluate soil and rock conditions for application of amendments.
Sparse Vegetation: perennial density is less than 6 plants per 100 square feet, plant cover is less than 30 percent after 5 years.	Annually	Re-seeding; revise seed mix; analyze soil for amending with nutrients.

4.11.4 Annual Reporting

Once the reclamation activities for an area have been completed, monitoring activities will commence and will continue for two years or until the lead agency is satisfied that performance standards have been met. Annual monitoring will be performed in concert with annual mining inspections in order to determine disturbance versus reclamation for the year and will be used to perform financial assurance cost estimates and to complete Mining Annual Reports required by the Department of Conservation.



5 APPLICANT STATEMENT OF RESPONSIBILITY

The undersigned accept full responsibility for implementation of the Pilgrim Rock Quarry reclamation plan for all of the mined lands described in this report. The Pilgrim Rock Quarry Reclamation plan will be implemented in general compliance with the requirements of the California Code of Regulations Title 14, Division 2, Articles 1 and 9, the Surface Mining and Reclamation Act Section 2710, and with any modifications requested by the lead agency as conditions of approval.

<u>RA Home Inv LLC</u>	<u>1101 Fulton Ave</u>	<u>1-18-2019</u>
Owner	Address	Date
	<u>Suite 204</u>	
	<u>Sacramento CA</u>	
	<u>95825</u>	
<u>John Kranz</u>	_____	_____
Operator's Representative	Address	Date
<u>Manager</u>		

6 LEAD AGENCY CERTIFICATION

The undersigned agrees that this Pilgrim Rock Quarry reclamation plan is in general compliance with the requirements of the California Code of Regulations Title 14, Division 2, Articles 1 and 9, the Surface Mining and Reclamation Act Section 2710.

_____	_____	_____
Agency Representative	Agency Name	Date

_____	_____	_____
Agency Representative	Agency Name	Date



7 FINANCIAL ASSURANCE BOND ESTIMATE

The financial assurance bond estimate is proposed to be calculated prior to commencement of mining to provide the most accurate estimate for reclamation of the mining phases. It will be submitted under separate cover and is not included as part of this document.

8 REFERENCES

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- California Journal of Mines and Geology January 1956, State of California Department of Natural Resources, Economic Geologic Map of Amador County, Plate 9 and p.432 Figure 22, Vol. 52, No. 1.
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- Erosion and Sediment Control Guidelines for Developing Areas of the Sierras, 1981, Prepared by the High Sierra RC&D Council.
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- U.S. Department of Agriculture, Soil Conservation Service, Engineering Division, Technical Release 55, (1986), Urban Hydrology For Small Watersheds, Second Edition, U.S. Government Printing Office, Washington, D.C.
- Wagner, D.L., et al, Geologic Map of the Sacramento Quadrangle, 1981, California Department of Conservation, Division of Mines and Geology, Regional Geologic Map Series – Sacramento Quadrangle - Map No. 1A.
- Youngdahl Consulting Group, Inc., Preliminary Reserve Estimate, Pilgrim Rock Quarry (formerly known as 1 SWD Quarry), prepared by Youngdahl Consulting Group, Inc. dated 24 March 2015 (Revised 16 April 2016).



9 LIMITATIONS

The following limitations apply to this reclamation plan, which was prepared by Youngdahl Consulting Group, Inc. for the Pilgrim Rock Quarry site.

- Youngdahl Consulting Group, Inc. is not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to the preparation of the Pilgrim Rock Quarry site reclamation plan.
- Youngdahl Consulting Group, Inc. does not warrant the accuracy of information supplied to us by others, or the use of segregated portions of this reclamation plan.
- Youngdahl Consulting Group, Inc. prepared this reclamation plan for the sole use of the client and the regulatory agencies that are governing the site unless noted otherwise. Reliance on this report by any other third party is at the party's sole risk.

CEQA Environmental Checklist

PROJECT DESCRIPTION AND BACKGROUND

Project Title:	Pilgrim Rock Quarry
Lead agency name and address:	Amador County Planning Department
Contact person and phone number:	Chuck Beatty
Project Location:	200 Highway 16, Plymouth, CA 95669 Western parcel 329 acres (APN 001-130-008) Eastern parcel 40 Acres (APN 001-140-041) Grant deeds are found in Appendix A. Footprint of the Quarry is approximately 143 acres out of 369 acres.
Project sponsor's name and address:	R. A. Home Investments, LLC 1101 Fulton Avenue, Suite 204 Sacramento, California 95825
General plan description:	Agricultural General
Zoning:	R-1A and AG
Description of project:	<p>The project would consist of three components:</p> <ul style="list-style-type: none"> • Initial work to begin the mining operation ("construction"). • Mining and processing in the quarry ("operation"). • Reclamation activities that would be performed during each of these project elements are described below. <p>Construction</p> <p>Construction on the project site is expected to commence in early summer 2020. Construction activities would include:</p> <ul style="list-style-type: none"> • Clearing and leveling of the aggregate processing area. • Construction of a gravel haul road between the aggregate processing area and the quarry pit. • Improvements to the access road, including widening and paving, between SR 16 and the processing area. Improvements to the intersection of SR 16 and the private road. • Installation of utilities (electrical

connection to PG&E lines, and water connection to the existing on-site well).

- Installation of a prefabricated/portable mine office building.
- Installation of aggregate processing equipment.

Operation

Mining operations in the quarry would include stripping overburden (vegetation and topsoil) and transporting it to a stockpile area.

- Preparation of exposed rock for blasting by drilling a series of evenly spaced holes up to 30 feet deep.
- Blasting up to twice per week. Excavation of blasted material, loading on mine trucks and hauling material to the processing site.
- Application of water to exposed areas and haul roads as needed for dust control, a minimum of twice per day during dry weather.
- Grading, replacing topsoil, and revegetating areas where mining is complete. Typical equipment used for the mining operation would include bulldozers, rock drill rigs, excavators, front-end loaders, and off-road dump trucks and water trucks.

Operations in the processing area would include:

- Loading material from stockpiles to hoppers/conveyors for size classification and/or crushing. Some large material may be loaded on delivery trucks without classification.
- Classification of material by size using vibratory screens and/or rotary trommels, and conveyors.
- As needed, some rock may be reduced in size by a primary and/or a secondary rock crusher, followed by further size classification.
- Processing rock transferred to stockpiles by a conveyor. Material too fine to be saleable will be transported to the topsoil stockpile area by truck. Loading material from stockpiles onto customers' delivery trucks. Dust will be controlled for all material size classification, crushing operation, and

	<p>conveyor transfer processes using sufficient water to eliminate visible emissions. Application of water to exposed areas and unpaved haul roads as needed for dust control, a minimum of twice per day during dry weather.</p> <p>All aggregate processing equipment (conveyors, crushers, and classifiers) would be electrically powered. Other equipment used in the processing area would include front-end loaders, excavators, and water trucks powered by Tier 4 diesels. Two possible processing area locations are being considered.</p> <p>Option 1 (see Figure 2 of the attached Air Quality and Greenhouse Gas Study) would locate the processing area near the western project site boundary and would require an unpaved haul road between the processing area and the start of the quarry pit. Option 2 (see Figure 32 of the attached Air Quality and Greenhouse Gas Study) would locate the processing area near the western end of the quarry pit and would require extending the paved access road from the western property line to the processing area. The mine would operate from 6:00 a.m. to 6:00 p.m., Monday through Saturday. Blasting would occur between 11:30 a.m. and 2:30 p.m. twice per week.</p>
<p>Surrounding land uses and setting; briefly describe the project's surroundings:</p>	<p>Mostly rural residential, undeveloped 40-acre lots and an adjacent quarry.</p>
<p>Other public agencies whose approval is required (e.g. permits, financial approval, or participation agreements):</p> <p>California State Water Resources Quality Control Board, Department of Fish and Game, Army Corps of Engineers, Department of Mining and Reclamation, and County Permits for a Surface Mining Operation.</p>	
<p>Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?</p> <p>Native American tribes were consulted and the details of the Cultural Resources onsite are provided in The Archeological Study attached to this document.</p>	

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project. Please see the checklist beginning on page 3 for additional information.

<input checked="" type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agriculture and Forestry	<input checked="" type="checkbox"/>	Air Quality
<input checked="" type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Cultural Resources	<input checked="" type="checkbox"/>	Geology/Soils
<input checked="" type="checkbox"/>	Greenhouse Gas Emissions	<input type="checkbox"/>	Hazards and Hazardous Materials	<input type="checkbox"/>	Hydrology/Water Quality
<input type="checkbox"/>	Land Use/Planning	<input checked="" type="checkbox"/>	Mineral Resources	<input type="checkbox"/>	Noise
<input type="checkbox"/>	Population/Housing	<input type="checkbox"/>	Public Services	<input type="checkbox"/>	Recreation
<input type="checkbox"/>	Transportation/Traffic	<input type="checkbox"/>	Tribal Cultural Resources	<input type="checkbox"/>	Utilities/Service Systems
<input type="checkbox"/>	Mandatory Findings of Significance				

DETERMINATION:

On the basis of this initial evaluation:

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

Signature:	Date:
Printed Name:	For: