

ENVIRONMENTAL INITIAL STUDY

CRYSTAL CREEK AGGREGATE, INC.
Use Permit Amendment (UP-19-0007)
Reclamation Plan Amendment (RA-19-0001)
(State Clearinghouse No. 2019090702)

Applicant:
Crystal Creek Aggregate, Inc.

INITIAL STUDY CHECKLIST References and Documentation

Prepared by:
SHASTA COUNTY DEPARTMENT OF RESOURCE MANAGEMENT
PLANNING DIVISION
1855 Placer Street, Suite 103
Redding, California 96001

February 2021

**SHASTA COUNTY
ENVIRONMENTAL CHECKLIST FORM
INITIAL STUDY**

1. **Project Title:** Crystal Creek Aggregate, Inc. Use Permit Amendment (UP-19-0007); Reclamation Plan Amendment (RA-19-0001)
2. **Lead Agency Name and Address:**
Shasta County Department of Resource Management, Planning Division
1855 Placer Street, Suite 103
Redding, CA 96001-1759
3. **Contact Person and Phone Number:**
Tara Petti, Associate Planner
(530) 225-5532
4. **Project Location:** The project site is an existing quarry located south of the community of Keswick, on the west side of Iron Mountain Road, approximately 1.0 miles north of the Intersection of Iron Mountain Road and State Route 299 West (SR-299) and directly across from the intersection of Iron Mountain Road and Laurie Ann Lane (10936 Iron Mountain Road) (refer to Figure 1, PROJECT LOCATION, and Figure 2, SITE VICINITY).
5. **Applicant Name and Address:**
Crystal Creek Aggregate, Inc.
Jerry Comingdeer, Owner/Operator
10936 Iron Mountain Road
Redding, CA 96001
6. **General Plan Designation:** Industrial (I) and Industrial – Interim Mineral Resource Overlay (I-IMR)
7. **Zoning:** General Industrial (I), Mineral Resources, and Industrial - Interim (I-IMR)
8. **Description of Project:** Crystal Creek Aggregate (CCA) (herein referred to as “project applicant”) proposes to expand their existing aggregate mining operation at their current location. CCA was originally permitted in 1990 under Shasta County Use Permit UP-24-90 and Reclamation Plan 1-90. Subsequently, in 2008 General Plan Amendment 07-005, Zone Amendment 07-020, Use Permit Amendment UP-07-020, and Reclamation Plan Amendment RP-07-022 were approved. A California Environmental Quality Act (CEQA) Mitigated Negative Declaration, with findings as specifically set forth in Planning Commission Resolution Nos. 2008-066 and 2008-067 were also adopted approving the various entitlements.

The project applicant proposes an overall project area of approximately 179.97 acres within which the existing approved Use Permit and Reclamation Plan Areas of 110.69 acres will be maintained but modified to increase the amount of aggregate to be mined. The use permit area is proposed to be expanded by an additional 69.28 acres referenced as the remaining Mineral Resource Area (MR) to serve to buffer lands to the south, west and north from noise, light and other mining related activities (refer to Figure 3, COMPREHENSIVE PROJECT PLAN OVERVIEW).

The total amount of aggregate to be processed yearly is proposed to increase from 250,000 to 500,000 tons and the total estimated amount proposed to be mined will increase from 15.92 million tons to 25.4 million tons over a period of three phases with an estimated life of the phases varying from 14 to 35 years. The estimated life of the mining operation will increase from the currently approved end of Year 2072 by 27 years to end of Year 2099. Also proposed is a portable propane powered drum mix asphalt plant. The plant could utilize up to 200,000 tons of the 500,000 tons of aggregate processed yearly for the production of asphalt.

No additional structures or operations other than those associated with the asphalt asphalt plant are proposed. The locations of the existing scales and office, rock crushing, screen and washing operational, primary and secondary entrances/exits, diesel fuel storage tanks, waste oil tank, two motor oil and one lubricating oil tank, and five settling and two recycle ponds will remain. The existing Concrete Recycle Area location and operation for which an administrative permit was issued and subsequently reissued by the County due to the Carr Fire is proposed as a project component. The location of the material and topsoil stockpiles will also remain in their current general location which will expand and contract as part of the mining operation. The number of full-time employees will increase from eight to 14 with one part-time employee. All existing and proposed uses are allowed under the existing General Plan Land Use Classifications and Zoning District Designations.

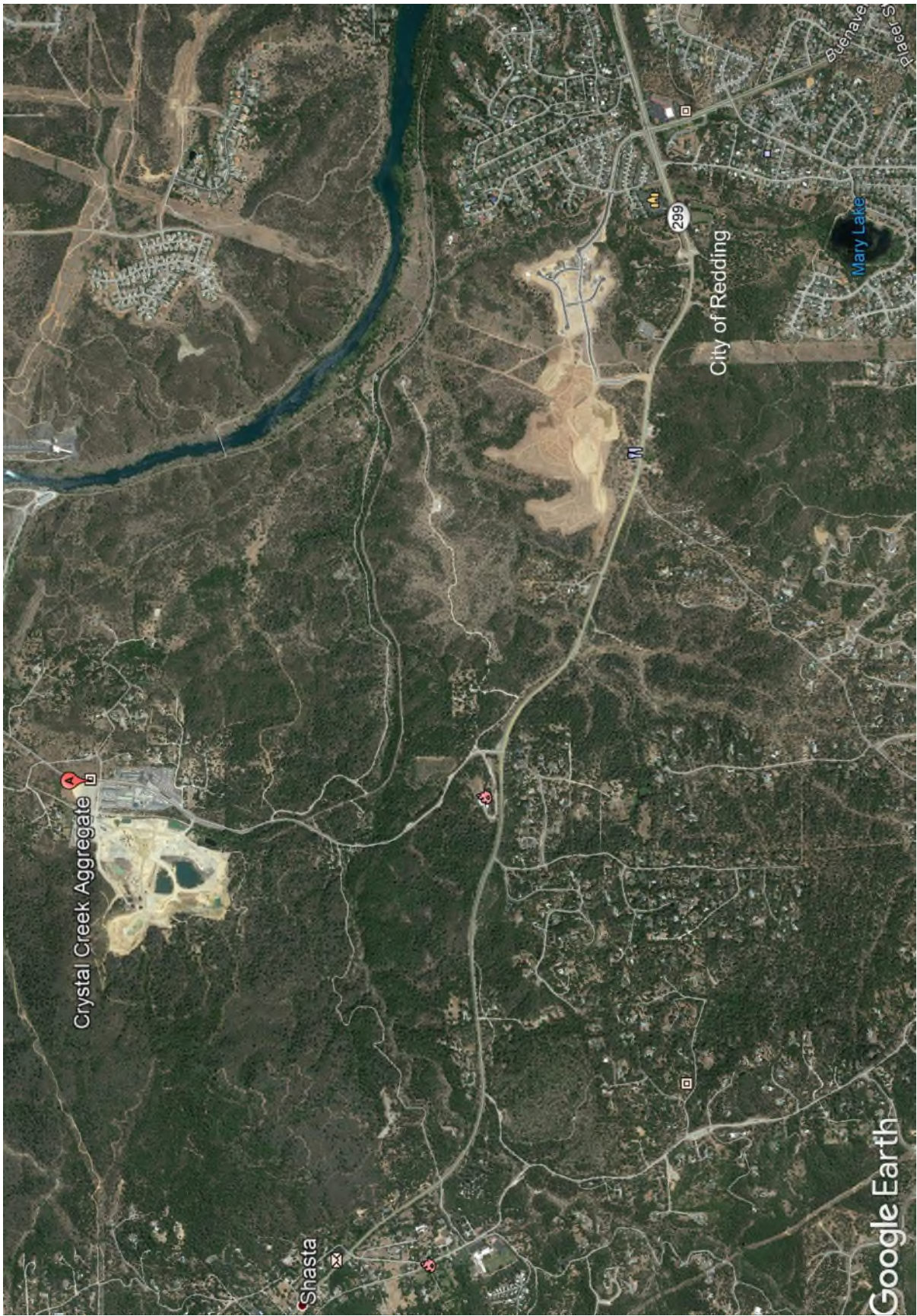


December 2, 2020

California & Shasta County Locations by rkBaron Geovisuals



FIGURE 1, PROJECT LOCATION



December 2, 2020

FIGURE 2 – SITE VICINITY

- Project Boundary - (179.97 acres)
- 25 Foot Contour
- Clavert
- Flow Direction
- Photo Points
- Data Points
 - Water
 - Test Pit
 - Wellhead
 - Other Wetlands - (0.509 acres)
- Wetland Features - (0.489 acres)
 - Perennial
 - Seasonal Wetland
 - Non-Jurisdictional by Rule - (9.943 acres)
 - Perennial
 - Pond
 - Seasonal Wetland
 - Epifaunal
 - Ditch

Conservation Plan, MAP 1432 California State Parks (17.44)

Project Boundary - (179.97 acres)

25 Foot Contour

Clavert

Flow Direction

Photo Points

Data Points

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Other Wetlands - (0.509 acres)

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Non-Jurisdictional by Rule - (9.943 acres)

Perennial

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Non-Jurisdictional by Rule - (9.943 acres)

Perennial

Pond

Seasonal Wetland

Epifaunal

Ditch

The boundary delineation on this plan is based on aerial photography and field data. It is not intended to be used for any other purpose without the written consent of the consultant.

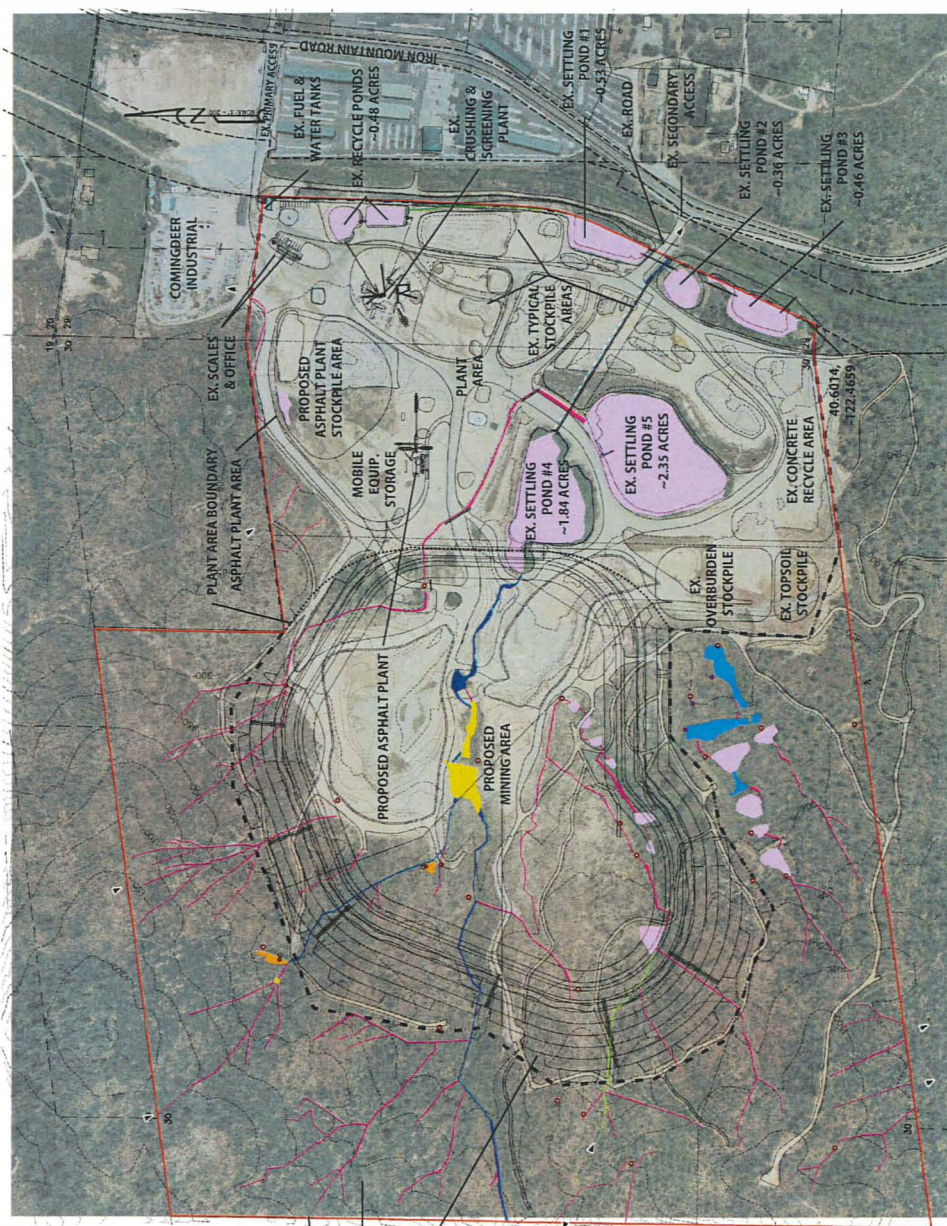


Figure 3

Crystal Creek Aggregate, Inc.
10936 Iron Mountain Road
Redding, CA 96001

Drawn: K. Mear, Civil Engineer.
U.S. by Geomatics, Inc.
PO Box 130
Redding, CA 96001
6172 Avenue Hwy, Unit 1
Redding, CA 96001
Phone: 530-241-5410
Fax: 530-241-5410
Web: 530-241-5410

Amending Use Permit UP-07-020 will modify the design of the existing mining area or quarry of approximately 57.31 acres and the plant area of approximately 53.38 acres which together total 110.69 acres that will be maintained as the Reclamation Plan Area with associated boundaries. However, the amount of aggregate mined, as noted, will be increased as will the hours of operation, particularly with respect to the asphalt plant (24 hours per day generally Sunday evenings through Friday afternoons), and yearly blasting maximums (24 instead of 12). The average height of the highwalls will increase from 22 feet to 40 feet, except for one highwall at 44 feet. Benches will also be increased in width from 30 feet to 40 feet, except for the bench along the perimeter of the pond which will be increased to 60 feet in width. The pond surface area will increase from 23.49 acres to 32.67 acres.

- 9. Surrounding Land Uses and Setting:** The existing quarry is located in an industrial area south of the community of Keswick. Surrounding land uses consist of industrial to the east, industrial to the north and low-density residential to the northeast and southeast, and undeveloped land to the south and west.

The topography of the existing quarry floor has been made relatively flat by the removal of the aggregate material over the years. The existing bowl shaped quarry face extends upslope and to the west from the quarry floor with horizontal benches having been or to be established as excavation proceeds to the extent of the existing quarry boundary. There is an approximate 200-foot change in elevation from the existing quarry floor to what would be the top of the quarry face based on the current mining plan.

The project site is located within the boundary of the 2018 Carr Fire. Prior to the area being impacted by the Carr Fire, the primary vegetation type present in unmined portions of the project site and vicinity was predominantly knob cone pine and chaparral with scattered oaks and ponderosa pine. In areas where the fire burned with lesser intensity, the composition of species remains as it existed prior to the fire. Currently, in unmined portions of the project site and vicinity where the fire burned with greater intensity, vegetation consists mostly of secondary successional vegetation.

- 10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):**

California Department of Fish and Wildlife (CDFW)
California Department of Forestry and Fire Protection (CAL FIRE)
California Department of Resources and Recycling and Recovery (CalRecycle)
California Department of Transportation (Caltrans)
California Department of Toxic Substances Control (DTSC)
California Division of Mine Reclamation (DMR)
California Division of Occupational Safety and Health (Cal OSHA)
California Regional Water Quality Control Board (RWQCB)
Shasta County Department of Public Works (DPW)
Shasta County Resource Management Agencies (Air Quality, Environmental Health, Building, Fire)
Shasta County Sheriff's Department (Sheriff)

- 11. 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, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**

The County's AB 52 contact list consists of Native American tribes that had submitted written requests for notification of CEQA projects within their geographic area of traditional and cultural affiliation as of October 7, 2019, when the County initiated consultation. The County sent a letter by certified mail on October 7, 2019 to the Wintu Tribe of Northern California and Toyon-Wintu Center. Return receipts for the certified letters indicate the letters were delivered on October 7, 2019. The County received no response to the letter.

NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

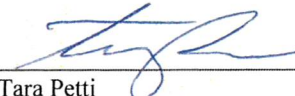
X	Aesthetics		Agricultural and Forestry Resources	X	Air Quality
X	Biological Resources	X	Cultural Resources	X	Energy
	Geology & Soils	X	Greenhouse Gas Emissions	X	Hazards & Hazardous
X	Hydrology & Water Quality		Land Use & Planning		Mineral Resources
X	Noise		Population & Housing		Public Services
	Recreation	X	Transportation		Tribal Cultural Resources
X	Utilities & Service Systems	X	Wildfire	X	Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)


On the basis of the initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- 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.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- 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.
- 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.

Copies of the Initial Study and related materials and documentation may be obtained at the Planning Division of the Department of Resource Management, 1855 Placer Street, Suite 103, Redding, CA 96001. Contact Ms. Tara Petti, Associate Planner at (530) 225-5532.


 Tara Petti
 Associate Planner

2/17/21
 Date


 Paul A. Hellman
 Director of Resource Management

2/17/21
 Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parenthesis following each question. A “No Impact” answer is adequately supported if all the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less-than-significant with mitigation, or less-than-significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more, “Potentially Significant Impact” entries when the determination is made, an EIR is required.

“Negative Declaration: Less-than-significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less-than-significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level (mitigation measures from Section XVIII, “Earlier Analyses,” may be cross-referenced).

Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or Negative Declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

- a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures: For effects that are “Less-than-significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. General Plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
 - 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
 - 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
 - 9) The explanation of each issue should identify the following:
 - a) The significance criteria or threshold, if any, used to evaluate each question; and
 - b) The mitigation measure identified, if any, to reduce the impact to less-than-significant.

I. AESTHETICS: Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?			X	
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	X			

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following determinations can be made:

- a) Scenic vistas are defined as expansive views of highly-valued landscapes from publicly accessible viewpoints. Scenic vistas include views of natural features such as topography, water courses, outcrops, and natural vegetation, as well as man-made scenic structures. The proposed project is visible from sections of Iron Mountain Road, from residences and residential properties located in the community of Keswick, and from residential areas located to the south of State Route 299 (SR-299). Implementation of the proposed project would increase the approved height of the quarry highwalls and bench widths from 25 feet high and 25 feet wide to 40 feet high and wide, respectively. However, this increase would not exceed the approved vertical and horizontal limits allowed in the current use permit and reclamation plan. The bench tops would be planted with native trees and grasses as part of the proposed reclamation plan. Reclamation would occur in phases, but for periods of time and/or until reclamation vegetation is established some rock faces would be exposed. Impacts are considered less-than-significant in this regard.
- b) The County has not designated specific scenic vistas in the immediate project area as a part of the Shasta County General Plan and there is no designated State or federal scenic highways or scenic highway corridors in the vicinity of the proposed project. Therefore, the proposed project would not substantially damage any scenic resource. The project site is also not visible from a designated scenic highway. Impacts are considered less-than-significant in this regard.
- c) Land immediately adjoining the proposed project to the north, west, and some lands further south and east are under the jurisdiction of the Bureau of Land Management (BLM) and in the vicinity of several of Shasta County’s most popular mountain biking trails. These facilities are located generally to the north, south, and west of the project site and lands owned by the Comingdeer Trust on the adjacent BLM parcels and are associated with the Rock Creek – Middle Creek Trail System and other regional trail facilities that connect to the Sacramento River Rail – Trial System. Trailhead parking is provided at various locations along Iron Mountain Road between SR-299 and Keswick Dam Road. Iron Mountain Road is also popular with on-road bicyclists and many off-road bicyclists use the segment of Iron Mountain Road adjacent to the proposed project to connect to French Fry and Trail 58/Middle Creek.

The project would not degrade the existing visual character or quality of the site and its surroundings as no expansion of the existing quarry footprint is proposed. In addition, no additional structures or operations other than those associated with the asphalt plant are proposed. The proposed reclamation plan boundary does not extend the current permitted mine boundary. The locations of the existing scales and office, rock crushing, screen and washing operations, primary and secondary entrances/exits, diesel fuel storage tanks, waste oil tank, two motor oil and one lubricating oil tank, and five settling and two recycle ponds will remain. Impacts are considered less-than-significant in this regard.

- d) Light pollution occurs when nighttime views of the stars and sky are diminished by an over-abundance of light coming from the ground. Light pollution is a potential impact from the operation of any light source at night. Proper light shields, lighting design, and landscaping are commonly used to reduce light pollution generated from lighting by blocking the conveyance of light upwards. The result is that the lights are not visible from above; therefore, ambient light is not added to the nighttime sky. In addition, light reflecting off surfaces during daylight hours has the potential to create a source of glare in the vicinity of the proposed project.

Implementation of the proposed project which includes periodic nighttime asphalt plant operations would potentially create a new source of substantial light or glare which could result in night sky illumination and/or other adverse effects on nighttime views in and around the area. Further investigation and analysis will need to be conducted to assess the visibility of the proposed project and to assess the potential lighting impacts. Therefore, this potential impact will be fully analyzed in the EIR.

Findings: In the course of the above evaluation, impacts associated with *Aesthetics* were found to be potentially significant. Additional project and environmental data, further discussion and analysis of environmental impacts, recommendations for mitigations for potential impacts, and a mitigation monitoring plan, will be included in the EIR prepared for this proposed project.

II. AGRICULTURE AND FORESTRY RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following determination can be made:

- a) The soils found on the project area belong to the Diamond Springs series. This series consists of well drained soils that are underlain by granitic or light-colored metavolcanic rocks. These soils are on uplands near Shasta, Keswick and Ingot. Slopes range from 8 to 50 percent with annual precipitation of between 40 and 50 inches.

The project site has not been historically used for agricultural purposes, nor does it possess soils that are prime for agricultural production. The site is not located within an area of Prime Farmland as identified by the California Department of Conservation’s Important Farmland Series Mapping and Monitoring Program. The subject property is not identified as Prime Farmland, Unique Farmland, or Statewide Importance on the map titled Shasta County Important Farmland 2016. Therefore, the proposed project would not convert prime farmland, unique farmland, or farmland of statewide importance to nonagricultural use and there would be no impact which means that this impact will not be evaluated in the EIR.

- b) The project area is not currently under a Williamson Act Contract nor is it zoned for agricultural use by Shasta County. Consequently, the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act Contract. Therefore, there would be no impact from the proposed project and the impact will not be evaluated in the EIR.

- c) The project would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)). The project site is not forest land, timberland or zone Timberland Production. Therefore, the proposed project would not conflict with existing zoning or cause rezoning and would have no impact on timberlands zoned as Timber Production. As such, this impact will not be analyzed further in the EIR.
- d) The project would not result in the loss of forest land or conversion of forest land to non-forest use. The project site is not forest land. In addition the proposed project is not located in an area of significant agricultural soils. As such, this impact will not be analyzed further in the EIR.

Findings: In the course of the above evaluation, impacts associated with *Agriculture and Forestry Resources* were found to not be significant because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type. The effects determined not to be significant are not required to be included in primary analysis sections of the EIR. As such, impacts to *Agriculture and Forestry Resources* are not reasonably foreseeable and will not be addressed further in the EIR to be prepared for this project.

III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	X			
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?	X			
c) Expose sensitive receptors to substantial pollutant concentrations?	X			
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	X			

Discussion: Based on related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following findings can be made:

- a) The applicable air quality plan for the project area is the Northern Sacramento Valley Air Basin’s (NSVAB’s) 2018 Air Quality Attainment Plan (“Plan”). The Plan is primarily concerned with the pollutant ozone for which the NSVAB has been designated non-attainment. In particular, the Plan presents strategies necessary to attain the California ambient air quality standard for the 1-hour ozone standard at the earliest practicable date. Due to the scale of the proposed project, further analysis is required to determine the extent to which increases in nitrogen oxides (NO_x), reactive organic gases (ROG), and inhalable particulate matter (PM₁₀) generated from project construction and operational activities may conflict with or obstruct implementation of the Air Quality Attainment Plan as well as what, if any, mitigation measures should be incorporated to reduce the impacts to a level that is less-than-significant. Therefore, these impacts are considered to be potentially significant and will need to be addressed in an EIR.
- b-c) Primary air pollutant emissions associated with operation of the asphalt plant would include natural gas combustion associated with aggregate drying and asphalt cement heating (carbon monoxide [CO], nitrogen oxides [NO_x], sulfur dioxide [SO₂], particulate matter [PM₁₀/PM_{2.5}], reactive organic gases [ROG]), and dryer dust [PM₁₀/PM_{2.5}]). The project could potentially result in a cumulatively considerable net increase of criteria pollutants, including ozone, ozone pre-cursors or PM₁₀, the pollutants for which the Northern Sacramento Valley Air Basin is in non-attainment under the applicable State ambient air quality standard. Preliminary review merits further evaluation and possible mitigation. Therefore, these potential impacts will be fully analyzed and evaluated in the EIR.
- d) The project could potentially result in air emissions which would create objectionable odors affecting a substantial number of people. Operational air contaminants include diesel emissions from on- and off-road vehicles and equipment, and diesel and process emissions, including odors.

The type of asphalt plant proposed is a portable drum mix type that will be powered by propane gas, which produces significantly less nitrogen oxide (NO_x) emissions (approximately 76 percent less), sulfur dioxide (SO₂) emissions, and some hazardous air pollutants than an oil fired plant. This process is a continuous mixing type process whereby the dryer is used, not only to dry the material, but also to thoroughly mix the heated and dried aggregates with the liquid asphalt cement. After mixing, the heated asphalt is discharged at the end of the drum and conveyed to Hot Mix Asphalt (HMA) or Warm Mix Asphalt (WMA) silos where the asphalt is stored and loaded onto trucks for delivery to project sites. The primary odor-causing compound from asphalt and the aggregate processing facilities, hydrogen sulfide (H₂S), has the potential to cause localized odor impacts in the vicinity of the project site. Preliminary review merits further evaluation and possible mitigation. Therefore, these potential impacts will be fully analyzed and evaluated in the EIR.

Findings: In the course of the above evaluation, impacts associated with *Air Quality* were found to be potentially significant. Additional project and environmental data, further discussion and analysis of environmental impacts, recommendations for mitigations for potential impacts, and a mitigation monitoring plan, will be included in the EIR prepared for this proposed project.

IV. <u>BIOLOGICAL RESOURCES</u>: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Have a substantial effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	X			
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	X			
c) Have a substantial adverse effect on state or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	X			
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	X			
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community, Conservation Plan, or other approved local, regional, or State habitat conservation plan?				X

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following determinations can be made:

a-d) On October 29, 2019, the California Department of Fish and Wildlife (CDFW) provided a response to Shasta County’s 2019 Notice of Preparation (NOP) for the previously considered onsite expansion of the quarry (GPA 19-0003, ZA 19-0002, UP 19-0007, RP 19-0001) (State Clearinghouse No. 2019090702). Comments and recommendations in the letter refer to the forthcoming EIR and the studies and data that will inform analysis of baseline conditions and potential impacts. Specific reference was made to special-status species and habitat surveys. Additional comments and recommendations, in general, referred to: additional special-status species and habitat surveys; evaluation of potential impacts to California Endangered Species Act (CESA) listed species (or plants or animals listed as endangered or threatened under CESA); rare plant and sensitive natural communities; and additional monitoring and studies related to wildlife and aquatic resources, among other issues.

A biological resources assessment will be prepared to address potential impacts to sensitive biological resources based on the applicable recommendations of CDFW’s October 29, 2019 letter and any further information provided by CDFW during this NOP process. The biological resources assessment and any further studies necessary to determine the project’s potential impacts on biological resources will be fully analyzed in the EIR.

- e) The proposed project would not conflict with any ordinances or policies which protect biological resources. Shasta County Board of Supervisors' Resolution No. 95-157 provides guidance regarding use and protection of oak trees on a voluntary basis. Implementation of the proposed project would not result in the removal of trees outside the currently permitted quarry area. No impacts would occur in this regard.
- f) There are currently no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or State habitat conservation plans for the project site or project area. There would not be any conflict with local policies or ordinances protecting biological resources, nor with any habitat conservation plans. No impacts would occur in this regard.

Findings: In the course of the above evaluation, impacts associated with *Biological Resources* were found to be potentially significant. Additional project and environmental data, further discussion and analysis of environmental impacts, recommendations for mitigations for potential impacts, and a mitigation monitoring plan, will be included in the EIR prepared for this proposed project.

V. CULTURAL RESOURCES: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	X			
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	X			
c) Disturb any human remains, including those interred outside of formal cemeteries?			X	

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following determinations can be made:

a-b) Based on the result of the Archaeological Inventory Survey (Land Designers, 2006) prepared for the previous 2008 General Plan Amendment 07-005, Zone Amendment 07-020, Use Permit Amendment, UP-07-020, and Reclamation Plan Amendment RP-07-022, no previously unidentified sites or features dating to historic time periods were observed during the survey. These negative results are explained primarily by the extensive disturbance to which all of the project area has been subjected. Two previously identified historic sites had been recorded within the project area. Both of these sites were evaluated for significance per CEQA and eligibility per the National Register of Historic Places, with Jensen concluding (2002), and the United States Bureau of Land Management (BLM) and California State Historic Preservation Office (SHPO) concurring, that neither one is eligible for inclusion on the National Register or significant per CEQA, due to lack of integrity dating to the period of potential significance of these sites. As a consequence of this recommendation and concurrence by BLM and California SHPO, no treatment or mitigative action was recommended.

The same conclusion is relevant for the twelve previously identified Isolates in the 2006 Archaeological Inventory Survey. Isolates are themselves categorically excluded as significant or potentially significant per CEQA or eligible for inclusion on the National Register of Historic Places. Again, no treatment or mitigative action was recommended in relation to potential impacts to these twelve Isolates might accompany the 2002 proposed land exchange, or any future development or impacts to which the property might be subject, such as the present licensing and reclamation plan.

The proposed project would result in a significant impact if it caused a substantial adverse change in the significance of an archaeological resource. Based on the results of the investigations described above, there are no resources in the Project Area with intact visible surface manifestations that qualify as *archaeological resources* or *historical resources* as defined by CEQA Guidelines Section 15064.5. However, there is the possibility of encountering buried archaeological resources during project activities, including ground disturbing activities onsite and at off-site intersection improvements. Additional evaluation in the EIR is required.

- c) There are no known burial sites on the proposed project site. If human remains are unearthed during future development of the site, the provisions of California Health and Safety Code Section 7050.5 shall apply. Under this Section, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition, pursuant to California Public Resources Code Section 5097.98.

Findings: In the course of the above evaluation, impacts associated with *Cultural Resources* were found to be potentially significant. Additional project and environmental data, further discussion and analysis of environmental impacts, recommendations for mitigations for potential impacts, and a mitigation monitoring plan, will be included in the EIR prepared for this proposed project.

<u>VI. ENERGY:</u> Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	X			
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following determinations can be made:

- a) No new buildings or structures requiring electric power service or additional energy consumption are proposed with the exception of lighting for the asphalt plant. Further evaluation of potential impacts to energy resources related to the increased hours of operation, including the proposed asphalt plant will be addressed in the EIR.
- b) The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The project has no effect on the County’s efforts to develop renewable energy sources for County facilities when practical. Less-than-significant impacts would occur in this regard.

Findings: In the course of the above evaluation, impacts associated with *Energy* were found to be potentially significant. Additional project and environmental data, further discussion and analysis of environmental impacts, recommendations for mitigations for potential impacts, and a mitigation monitoring plan, will be included in the EIR prepared for this proposed project.

<u>VII. GEOLOGY AND SOILS:</u> Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: <ul style="list-style-type: none"> i) Rupture of a known earthquake, fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publications 42. ii) Strong seismic ground shaking? iii) Seismic-related ground failure, including liquefaction? iv) Landslides? 			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?				X

<u>VII. GEOLOGY AND SOILS:</u> Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following determinations can be made:

a) The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault

The California Geologic Survey (CGS) evaluates the activity rating of a fault in fault evaluation reports (FERs). FERs compile available geologic and seismologic data and evaluate if a fault should be zoned as Holocene-active, pre-Holocene, or age undetermined. If an FER evaluates a fault as Holocene-active, then it is typically incorporated into a Special Studies Zone in accordance with the Alquist-Priolo Earthquake Fault Zoning Act (AP). AP Special Studies Zones require site-specific evaluation of fault location for structures for human occupancy and require a habitable structure setback if the fault is found traversing a project site. The proposed project is not located within an Alquist-Priolo Earthquake Fault Zone established by the State. Because of this, the likelihood of faulting occurring across the quarry site is low.

A number of regional faults are present in the project area. The closest mapped faults to the site are the pre-Holocene Hoadley and Spring Creek faults, both located within a few miles of the site. The closest mapped Holocene-active fault is the Hat Creek-McArthur fault zone, located about 39 miles east of the site. Based on this existing information, there will be less-than-significant impacts related to surface fault rupture.

ii) Strong seismic ground shaking

Although there are no known earthquake faults in the project vicinity, the entire northern California region is subject to the potential for moderate to strong seismic shaking due to distant seismic sources. Seismic shaking can be generated on faults many miles from the project vicinity. Renewed activity at Mt. Shasta or Mt. Lassen, would presumably be associated with seismicity and potential strong ground shaking. Seismic shaking potential is, therefore, a regional hazard; the hazard is not higher or lower at the project site than throughout the region. Standard design and construction practices meeting current California Building Codes (where applicable) will provide adequate protection for the proposed project. The implementation of these standard building practices will result in less-than-significant impacts related seismic ground shaking in the area.

iii) Seismic-related ground failure, including liquefaction

Seismic ground settlement is not considered a hazard at the site due to the fact that the site is underlain by solid granitic rock and is not subject to seismic ground failure. No impacts are anticipated in this regard.

iv) Landslides.

Landslides occur throughout Shasta County, although they have not been considered a major problem. Landslides are more prevalent in the eastern and northern portions of the county and are commonly related to the sedimentary and volcanic rocks in these vicinities. Based on the project’s Geotechnical Report, the change in horizontal and vertical bench proposed has been evaluated and indicate that the proposed walls and benches as designed would remain stable. Less-than-significant impacts would occur in this regard.

b) The soils found on the project area belong to the Diamond Springs series. This series consists of well drained soils that are underlain by granitic or light-colored metavolcanic rocks. These soils are on uplands near Shasta, Keswick and Ingot. Slopes range from 8 to 50 percent with annual precipitation of between 40 and 50 inches.

As discussed in greater detail below under Item X.a, the proposed project will continue to comply with the statewide Construction General Permit (Order No. 2009-0009-DWQ) and the Industrial Storm Water General Permit (Order No. 2014-0057-DWQ). The proposed project would be subject to the requirements of Shasta County Code Chapter 12.12 related to grading. Compliance with the statewide Construction General Permit and Shasta County Code Chapter 12.12 of would serve to ensure that short-term surface water quality impacts are minimized. Impacts would be less-than-significant in this regard.

- c) The threat of landslides, lateral spreading, subsidence, liquefaction, or collapse is insignificant as the geology of the area demonstrates stability. As noted above, based on the project Geotechnical Report, the change in horizontal and vertical bench proposed has been evaluated and indicate that the proposed walls and benches as designed would remain stable. Less-than-significant impacts would occur in this regard.
- d) Shasta County is characterized by moderate to low expansiveness in soils with small scattered areas of high expansiveness. The proposed project is not located on expansive soils. No impact would occur in this regard.
- e) The proposed project does not propose any wastewater facilities or the development of any additional onsite septic systems, therefore will be no impact.
- f) The proposed project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Findings: In the course of the above evaluation, impacts associated with *Geology and Soils* were found to not be significant because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type. The effects determined not to be significant are not required to be included in primary analysis sections of the EIR. As such, impacts to *Geology and Soils* are not reasonably foreseeable and will not be addressed further in the EIR to be prepared for this project.

VIII. GREENHOUSE GAS EMISSIONS: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	X			
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	X			

Discussion: Based on these comments, the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following determinations can be made:

- a) Impacts associated with greenhouse gas emissions are more appropriately evaluated on a regional level than at a project scale as greenhouse gas impacts on the atmosphere are generally independent of the point of emission. The internal combustion of fuels to power heavy equipment for construction as well as vehicles trips associated with the proposed project construction and operation will generate greenhouse gases. However, construction and operation-related emissions would occur at a low enough level that they are expected to have a negligible effect to climate change.

Proposed project emissions will need to be modeled to determine if the proposed project would generate greenhouse gas emissions, either directly or indirectly that might have a significant impact on the environment. This is considered a potentially significant impact and will be further addressed in the EIR.

- b) The project could conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Shasta County has drafted a Regional Climate Action Plan; however, this plan has not been adopted. Further evaluation in the EIR is required.

Findings: In the course of the above evaluation, impacts associated with *Greenhouse Gas Emissions* were found to be potentially significant. Additional project and environmental data, further discussion and analysis of environmental impacts, recommendations for mitigations for potential impacts, and a mitigation monitoring plan, will be included in the EIR prepared for this proposed project.

IX. HAZARDS AND HAZARDOUS MATERIALS: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	

IX. HAZARDS AND HAZARDOUS MATERIALS: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	X			
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	X			

Discussion: Based on these comments, the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following determinations can be made:

- a) Hazards are those physical safety factors that can cause injury or death, and while by themselves in isolation may not pose a significant safety hazard to the public, when combined with development of projects can exacerbate hazardous conditions. Hazardous materials are typically chemicals or processes that are used or generated by a project that could pose harm to people, working at the site or on adjacent areas. Many of these chemicals can cause hazardous conditions to occur should they be improperly disposed of or accidentally spilled as part of project development or operations. Hazardous materials are also those listed as hazardous pursuant to Government Code Section 65962.5.

The Shasta County Environmental Health Division (EHD) is the administering agency and the Certified Unified Program Agency (CUPA) for Shasta County with responsibility for regulating hazardous materials handlers, hazardous waste generators, underground storage tank facilities, above ground storage tanks, and stationary sources handling regulated substances. A Hazardous Materials Business Plan (HMBP) is required of businesses in Shasta County that handle, use, generate, or store hazardous materials. The primary purpose of this plan is to provide readily available information regarding the location, type and health risks of hazardous materials to emergency response personnel, authorized government officials, and the public. Large cases of hazardous materials contamination or violations are referred to the Central Valley Regional Water Quality Control Board (RWQCB) and the California Department of Toxic Substances Control (DTSC).

The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. The existing quarry and aggregate processing operation uses small amounts of fuel and lubricants and is subject to the County's HMBP program, which is regulated by the Shasta County EHD as part of the Certified Unified Program (CUPA). The program requires the preparation of a document that provides an inventory of hazardous materials onsite, emergency plans and procedures in the event of an accidental release, and training for employees on safety procedures for handling hazardous materials and in the event of a release or threatened release. These plans are routine documents that are intended to disclose the presence of hazardous materials and provide information on what to do if materials are inadvertently released.

There is a business plan on file with the Shasta County EHD which conducts periodic site inspections. Blasting of quarry rock has historically occurred onsite and the frequency of blasting will slightly increase with implementation of the proposed project. Explosive and detonators are not stored onsite and are only onsite when a blast is being set up. Less-than-significant impacts are anticipated in this regard.

- b) The level of risk associated with the accidental release of hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials used during onsite currently and the generally low level of hazardous materials utilized for asphalt plant operations. Onsite operations would be required to continue to use standard operational controls and safety procedures that would avoid and minimize the potential for accidental release of such substances into the environment. Standard practices would be observed such that any materials released are appropriately contained and remediated as required by local, State, and federal law. Implementation of the proposed project would result in less-than-significant impacts in this regard.

- c) The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. The proposed project is not located within one-quarter mile of an existing or proposed school. No impacts would occur in this regard.
- d) The project is not located on a site which is included on a list of hazardous materials sites and would not create a significant hazard to the public or the environment. The project site is not included on the list of hazardous materials sites compiled by the California Department of Toxic Substances Control. No impacts would occur in this regard.
- e) The project is not located within an airport land use plan or within two miles of a public airport or public use airport. The nearest airport to the project site is the Benton Airport located approximately 3.5 miles to the southeast. No impacts would occur in this regard.
- f) The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Currently, the County has not adopted comprehensive emergency evacuation plan applicable to this area. In addition, neither Iron Mountain Road nor Keswick Dam Road is identified as a designated evacuation route by the County. However, Iron Mountain Road provides the primary access from State Route 299 (SR-299) for residents and emergency crews to the area, including the community of Keswick. Keswick Dam Road intersects with Iron Mountain Road approximately 0.5 miles north of the site and provides important emergency ingress and egress (WSRCD 2016). The potential for the proposed project to impact emergency response will be evaluated in the EIR.
- g) The outbreak and spread of wildland fires within the project area is a potential danger, particularly during the hot, dry summer and fall months. Various factors contribute to the intensity and spread of wildland fires: humidity, wind speed and direction, vegetation type, the amount of vegetation (fuel), and topography. The topography, climate, and vegetation of much of the area are conducive to the spread of wildland fires once started.

The most significant fire incident to impact the western Shasta County, including the project site and adjacent community, was the 2018 Carr Fire. The Carr Fire began July 23, 2018 at approximately 1:15 p.m. from a suspected vehicle mechanical failure. The fire origin was within Whiskeytown National Recreation Area (NRA), and spread to lands administered by the Bureau of Land Management (BLM) and United States Forest Service (USFS) in subsequent days.

On the morning of Thursday, July 26, 2018 the California Department of Forestry and Fire Protection (CAL FIRE) moved onto the existing quarry site with approximately four bulldozers, four helicopters, 60 to 100 different fire engines and water tenders. Onsite ponds (pond No. 4 and No. 5) provided water resources to fire suppression helicopters, water tenders, and fire engines. However, they left due to the fire tornado that began that night and continued into the following morning. On Sunday, July 29, 2018, Pacific Gas & Electric Company (PG&E) and their contractor, Outback Contractors, Inc. mobilized onsite and utilized the entire site essentially as a command center. Over 500 pieces of major equipment, including but not limited to; trailers, backhoes, gravel trucks, four to five helicopters, trucks, and associated personnel, occupied the site.

According to the *Carr Incident Damage Inspection Report* (DINS) prepared by CAL FIRE, 819 residential structures were destroyed in unincorporated Shasta County (CAL FIRE 2018). This includes most of the residential structures within and surrounding the community of Keswick. At the time of the fire the community of Keswick had an estimated population of 327 residents (WSRCD 2016). As of November 2019, single-family residential building permit activity within the unincorporated portions of Shasta County impacted by the Carr Fire include the following: four permits ready to issue, 110 permits issued, 28 permit applications applied and under review, four permits cancelled or voided, and 31 permits finalized (Shasta County 2019).

The California Department of Forestry and Fire Protection (CAL FIRE) has mapped areas of significant fire hazards in the state through its Fire and Resources Assessment Program (FRAP). These maps place areas of the state into different fire hazard severity zones (FHSZ) based on a hazard scoring system using subjective criteria for fuels, fire history, terrain influences, housing density, and occurrence of severe fire weather where urban conflagration could result in catastrophic losses. As part of this mapping system, land where CAL FIRE is responsible for wildland fire protection and generally located in unincorporated areas is classified as a State Responsibility Area (SRA). Where local fire protection agencies, such as the Shasta County Fire Department, are responsible for wildfire protection, the land is classified as a Local Responsibility Area (LRA). CAL FIRE currently identifies the project site as an SRA. In addition to establishing local or state responsibility for wildfire protection in a specific area, CAL FIRE designates areas as very high fire hazard severity zones (VHFHSZ) or non-VHFHSZ. The project site is designated as VHFHSZ by CAL FIRE.

Permitted mine activities occur immediately adjacent to undeveloped lands managed by the Bureau of Land Management (BLM) and continually encroach into onsite permitted open space to access economically viable mineral deposits. As noted above, the project site and areas surrounding it have been designated as a VHFHSZ by CAL FIRE and are susceptible to wildfires. Existing houses and structures east the project area, including new residential structures being built in and around the Keswick community,

continue to be susceptible to wildland fires. The potential for wildland hazards to be exacerbated as a result of the proposed project will be evaluated in the EIR.

Findings: In the course of the above evaluation, impacts associated with *Hazards and Hazardous Materials* were found to be potentially significant. Additional project and environmental data, further discussion and analysis of environmental impacts, recommendations for mitigations for potential impacts, and a mitigation monitoring plan, will be included in the EIR prepared for this proposed project.

X. <u>HYDROLOGY AND WATER QUALITY:</u> Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	X			
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.	X			
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site; (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flows?			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e) Conflict with or obstruct implementation of a water quality control plan or sustainable management plan?			X	

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following determinations can be made:

- a) The State Water Resources Control Board (SWRCB) is responsible for implementing the Clean Water Act and has adopted four statewide general permits in order to efficiently regulate different types of stormwater discharges under a single permit. Two of those general permits are relevant to this project: general permits for stormwater runoff from industrial and construction sites.

The SWRCB has issued a statewide General Permit (Water Quality Order 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-006-DWQ) for construction activities within the State. The State General Construction Activity Storm Water Permit (CGP) is implemented and enforced by the Regional Water Quality Control Boards (RWQCBs). The CGP applies to construction activity that disturbs one acre or more, and requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) that identifies Best Management Practices (BMPs) to minimize pollutants from discharging from the construction site to the maximum extent practicable. The BMPs, that must be implemented, can be categorized into two major categories: 1) erosion and sediment control BMPs, and 2) non-storm water management and materials management BMPs. Erosion and sediment control BMPs fall into four main subcategories:

- Erosion controls
- Sediment controls
- Wind Erosion controls
- Tracking controls

Erosion controls include practices to stabilize soil, in order to protect the soil in its existing location and prevent soil particles from migration. Examples of erosion control BMPs are: preserving existing vegetation, mulching and hydroseeding. Sediment controls are practices to collect soil particles after they have migrated, but before the sediment leaves the site. Examples of sediment control BMPs are: street sweeping, fiber rolls, silt fencing, gravel bags, sand bags, storm drain inlet protection, sediment traps and detention basins. Wind erosion controls prevent soil particles from leaving the site in the air. Examples of wind erosion control BMPs include: applying water or other dust suppressants to exposed soils on the site. Tracking controls prevent sediment from being tracked off site via vehicles leaving the site to the extent practicable.

A stabilized construction entrance not only limits the access points to the construction site, but also functions to partially remove sediment from vehicles prior to leaving the site. Non-storm water management and material management controls reduce non-sediment related pollutants from potentially leaving the construction site to the extent practicable. The CGP prohibits the discharge of materials other than storm water and authorized non-storm water discharges (such as irrigation and pipe flushing and testing). Non-storm water BMPs tend to be management practices with the purpose of preventing storm water from coming into contact with potential pollutants. Examples of non-storm water BMPs include: preventing illicit discharges and implementing good practices for vehicle and equipment maintenance, cleaning and fueling operations, such as using drip pans under vehicles. Waste and materials management BMPs include implementing practices and procedures to prevent pollution from materials used on construction sites. Examples of materials management BMPs include:

- Good housekeeping activities, such as covering stored materials and elevating them off the ground, in a central location.
- Securely locating portable toilets away from the storm drainage system and performing routine maintenance.
- Providing a central location for concrete wash out and performing routine maintenance.
- Providing several dumpsters and trash cans throughout the construction site for litter/floatable management.
- Covering and/or containing stockpiled materials and overall good housekeeping on the site.

Industrial Storm Water General Permit Order 2014-0057-DWQ, as amended by Order 2015-0122-DWQ (General Industrial Permit) is an NPDES permit that regulates discharges associated with 10 broad categories of industrial activities, including mining activities like the proposed project. The General Industrial Permit requires the implementation of management measures that will achieve the performance standard of best available technology economically achievable (BAT) and best conventional pollutant control technology (BCT). Like the General Construction Permit, the General Industrial Permit also requires the development of a Storm Water Pollution Prevention Plan (SWPPP) and a monitoring plan. Through the SWPPP, sources of pollutants are to be identified and the means to manage the sources to reduce storm water pollution are described. The General Industrial Permit requires that an annual report be submitted each July 1.

The proposed project shall comply with the statewide Construction General Permit (Order No. 2009-0009-DWQ) and the Industrial Storm Water General Permit (Order No. 2014-0057-DWQ). The proposed project would be subject to the requirements of Shasta County Code Chapter 12.12 related to grading. Compliance with the statewide Construction General Permit and Shasta County Code Chapter 12.12 of would serve to ensure that surface water quality impacts are minimized.

On October 29, 2019, the Central Valley Regional Water Quality Control Board (CVRWQCB) provided a response to Shasta County's 2019 Notice of Preparation (NOP) for the previously considered onsite expansion of the quarry (GPA 19-0003, ZA 19-0002, UP 19-0007, RP 19-0001) (State Clearinghouse No. 2019090702). Comments and recommendations in the letter refer to the forthcoming EIR and the studies and data that will inform analysis of baseline conditions and potential impacts. Specific reference was made to surface water and groundwater quality. Additional comments and recommendations, in general, referred to: mine pit water quality; perpetual management of mine pit lake water level; cyanobacterial blooms; impacts to hydrogeology; wastewater treatment and disposal, among other issues.

A hydrology assessment will be prepared to address potential impacts to surface water and groundwater resources based on the applicable recommendations of CVRWQCB's October 29, 2019 letter and any further information provided by CVRWQCB during this NOP process. The hydrology assessment and any further studies necessary to determine the project's potential impacts on surface water and groundwater resources will be fully analyzed in the EIR.

- b) Approximately 960,000 gallons of water per year will be needed if all the aggregate used to produce 200,000 tons of asphalt is washed, which is equivalent to 4.8 gallons per ton. Water will be obtained from the two recycle ponds east of the wash plant that receive the used wash water which is then recycled. It is unlikely the proposed project will substantially deplete groundwater supplies or interfere substantially with groundwater recharge. No onsite wells are used for the project. Potable water service is provided by the Shasta Community Services District. Water for fire protection is provided by the onsite reservoirs which are supplied by surface and groundwater seepage. After mining is completed, reclamation would re-establish the natural surface drainage patterns in the area. The flat quarry floors, however, would enhance recharge locally. As a result, the proposed project is not anticipated to substantially deplete decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

As noted above under Item X.a, the CVRWQCB previously recommended additional evaluation and analysis of the project's potential impact to groundwater resources. The hydrology assessment and any further studies necessary to determine the project's potential impact to groundwater resources will be fully analyzed in the EIR.

- c) Implementation of the proposed project would not substantially alter the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation on-or offsite. The ultimate excavation of the quarry areas and associated water quality and drainage impacts was previously analyzed and approved through General Plan Amendment 07-005, Zone

Amendment 07-020, Use Permit Amendment, UP-07-020, and Reclamation Plan Amendment RP-07-022 (2008). No expansion in the quarry footprint would occur with the proposed project. Implementation of the proposed project would result in the addition of an onsite asphalt plant and expanded hours of onsite operation. As a result, the proposed project would result in less-than-significant impacts in this regard.

- d) The threat of a tsunami wave is not applicable to inland areas; there is no potential for the generation of a seiche. However, the uncontrolled releases from Shasta Dam, although very unlikely, would devastate the entire northern Central Valley including the proposed project. The Sacramento River and its tributaries would overtop banks and levees. Massive flooding in the lowlands along the river would occur and Interstate 5, the main west coast transportation artery, would be affected by closure and possible structural damage. As a result, the proposed project site would be directly affected by a dam overflow or failure. Although these are two different types of events, the results are the same - uncontrolled releases from Shasta Dam.

Dam Overflow

Although it is highly unlikely, a dam overflow is more likely than a dam failure. A dam overflow would be characterized by an “overtopping” of the dam. The design of the structure includes three large spillway gates to minimize the possibility of a true overtopping of the dam. During an intense and prolonged storm period that might bring water levels near the top of the dam, these spillway gates would be lowered allowing water to be discharged down the spillway. Controlling, or funneling, the discharge down the spillway prevents structural erosion along the base and sides of the dam, protects the turbine power generation plant at the base of the dam, and allows control of the release in cubic feet per second. Shasta Dam has never overflowed in its 60 year history.

Dam Failure

A dam failure is less likely than a dam overflow. A dam failure would be characterized by a structural breach of the dam. Flooding and overtopping, earthquakes, release blockages, landslides, lack of maintenance, improper operation, poor construction, vandalism, or terrorism typify dam failures. California has had about 45 failures of nonfederal dams. These failures occurred for a variety of reasons, the most common being overtopping of earthen dams. Some of the other reasons include specific shortcomings in the dams themselves or inadequate assessment of the surrounding geomorphologic characteristics. Shasta Dam is a federal dam, one of the largest concrete dams in the world, and secured firmly on bedrock.

Although there is a history of 45 dam failures within the State of California, most of the failures were earthen dams. Of the concrete dams that failed, all were of the “thin-arch” design. Shasta Dam is a federally controlled and inspected dam and is considered a “thick arch.” Seismic activity is monitored, and tunnels throughout the dam itself allow inspectors to monitor for cracks and seepage. The dam is built on bedrock and is geomorphologically sound. The probability of a dam failure is extremely low.

The proposed project, like many developed areas along the Sacramento River, is located within the mapped inundation area of Shasta Dam. As noted above, Shasta Dam has never overtopped and the probability of dam failure is considered extremely low. In addition, the County maintains an Emergency Operations Center (EOC), including communication and coordination with USBR, to help coordinate information and resources should the County experience a large event such as dam overflow or failure.

The number of full-time onsite employees will increase from eight to 14 with one part-time employee. While the proposed project would result in up to an additional seven people working at the proposed project site, the loss of life as a result of a catastrophic failure or overtopping of Shasta Dam is not considered significant given the dam type, construction, the historical context of dam operations and management, and ongoing coordination between the County and the United States Bureau of Reclamation (USBR). Impacts are therefore considered less-than-significant in this regard.

- e) Refer to response under Item X.b, above. The project would not conflict with or obstruct implementation of a water quality control plan or sustainable management plan. Impacts would be less-than-significant.

Findings: In the course of the above evaluation, impacts associated with *Hydrology and Water Quality* were found to be potentially significant. Additional project and environmental data, further discussion and analysis of environmental impacts, recommendations for mitigations for potential impacts, and a mitigation monitoring plan, will be included in the EIR prepared for this proposed project.

XI. LAND USE AND PLANNING: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			X	

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following findings can be made:

- a) The existing quarry is located on the southwestern edge of the community of Keswick, on the east side of the ridge that divides the communities of Keswick and Shasta. The proposed project does not include the creation of any road, ditch, wall, or other feature which would physically divide an established community. No impacts would occur in this regard.
- b) The project would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The existing General Plan Land Use Classification and Zoning District Designation of the Project Area is Industrial (I), Industrial - Interim Mineral Resource overlay (I-IMR) and Mineral Resource (MR). The existing plant facilities including the office, crushing, screening and washing facilities are all located in the Manufacturing – Interim Mineral Resource overlay (M-IMR) as required by the Shasta County Zoning Code. The Mining Area and the existing Topsoil Stockpiles are located in areas classified and designated as Mineral Resource (MR).

The existing General Plan Land Use Classification and Zoning District Designation of the project area is supported by the 1997 Mineral Land Classification for Shasta County by the State of California Department of Conservation that classified the existing operation and adjacent lands to the west and south as Mineral Resource Zone Category MRZ-2 “wherein lands classified as MRZ-2 are areas that contain identified mineral resources.” North of the Mining Area is the 10-acre APN 065-250-019 classified and designated Mineral Resource (MR). To the south of the existing Mining Area are 28.46-acres and to the south of that area is the remaining 81.72 acres of APN 065-250-026. These last two parcels are classified as Natural Resource Protection – Open Space (N-O) and zoned Unclassified (U). The proposed project requests the following actions from the County which involves an overall project area of 110.69-acres:

- Use Permit UP 19-0007 Amendment to modify the design of the existing mining Area of approximately 57.31-acres as identified in the Reclamation Plan Amendment, and the Plant Area of approximately 53.38-acres which together total 110.69-acres that will be maintained as the Reclamation Plan Area. Also sought is the approval for the installation and operation of an asphalt plant and for a permanent Concrete Recycle Area.
- Reclamation Plan RP 19-0001 Amendment will maintain the existing 110.69-acre Reclamation Plan Area and associated boundaries. However, the amount of aggregate mined will be increased as will the hours of operation, and yearly blasting maximums. The height of the quarry highwalls and bench widths will be increased as will the pond size and depth upon reclamation of the site. The estimated amount of aggregate proposed to be mined increases from 15.92 million tons to 25.4 million tons. The estimated life of the mining operation will increase from the end of Year 2072 by 27 years to end of the Year 2099.

Existing Land Use Classifications and Zoning District Designations provide for land use compatibility with the proposed CCA Use Permit and Reclamation Plan Amendments and overall operations. Furthermore, the compatibility preserves and protects a mineral resource of regional and local importance to meet the future needs of the North State and in particular Shasta County. In addition, the project is consistent with the policies of the General Plan, in particular with Objectives MR-1, MR-5, and MR-7, and Policy MR-a. All existing and proposed uses are allowed under the existing General Plan Land Use Classifications and Zoning District Designations. As a result, impacts would be less-than-significant in this regard.

Findings: In the course of the above evaluation, impacts associated with *Land Use and Planning* were found to not be significant because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type. The effects determined not to be significant are not required to be included in primary analysis sections of the EIR. As such, impacts to *Land Use and Planning* are not reasonably foreseeable and will not be addressed further in the EIR to be prepared for this project.

XII. MINERAL RESOURCES: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?			X	
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local General Plan, specific plan or other land use plan?			X	

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following determinations can be made:

a) A mineral resource is land on which known deposits of commercially viable mineral or aggregate deposits exist. The designation is applied to sites determined by the State Division of Mines and Geology as being a resource of regional significance and is intended to help maintain any quarrying operations and protect them from encroachment of incompatible uses. Regarding aggregate resources on the project site, as a result of productive use the proposed expansion would result in the utilization, not loss, of known mineral resources of value to the region through the extraction and sale of the aggregate resources onsite. The continued use of the mineral resources extracted as part of the proposed expansion would create local jobs and make available the raw materials for projects that would be of value to the region and residents of the State for the next 80 years. Further, this use would be from an area designated as MRZ-2 by the State recognizing the value of the aggregate as a significant mineral deposit. Because the proposed project would continue to produce and make these mineral resources available for beneficial use within Shasta County and residents of the State for up to 80 years, this loss is not considered adverse in terms of the County’s environmental review pursuant to the CEQA.

Because the proposed project would use mineral resources and would not preclude the future extraction of additional mineral resources and would not result in the loss of availability of any known statewide or regionally important mineral resources, this evaluation concludes that the project would have a less-than-significant impact associated with the loss of availability of a known mineral resources of value to the region or residents of the State.

b) As discussed above under Item XII.a, regarding aggregate resources on the project site, as a result of productive use the project would result in the utilization of a known mineral resource of value to the region through the extraction and sale of the aggregate resources present onsite. Because the project would produce and make these mineral resources available for beneficial use within Shasta County and surrounding areas, this loss is not considered adverse in terms of the County’s environmental review pursuant to CEQA. Further, this use would be from an area designated as MRZ-2 by the State, recognizing the value of the aggregate as a significant mineral deposit.

Because the proposed project would use mineral resources and would not preclude the future extraction of additional mineral resources and would not result in the loss of availability of any known statewide or regionally important mineral resources, this evaluation concludes that the project would have a less-than-significant impact associated with the loss of availability of a locally important mineral resource recovery site.

Findings: In the course of the above evaluation, impacts associated with *Mineral Resources* were found to not be significant because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type. The effects determined not to be significant are not required to be included in primary analysis sections of the EIR. As such, impacts to *Mineral Resources* are not reasonably foreseeable and will not be addressed further in the EIR to be prepared for this project.

XIII. NOISE: Would the project result in:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	X			
b) Generation of excessive groundborne vibration or groundborne noise levels	X			
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted,				X

XIII. NOISE: Would the project result in:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following determinations can be made:

- a) The proposed project would not introduce new noise into the area; however, the increased truck traffic and hours of operation have the potential to result in the permanent increase of ambient noise levels that may exceed County standards. These impacts are potentially significant and will be further evaluated in the EIR.
- b) Mineral reserves would be removed through a combination of drilling, blasting, and excavation equipment. In surface mining, holes are drilled through the overburden, loaded with explosives, and discharged, shattering the rock in the overburden. All blasts would occur during daylight hours and only on regular business days (not on weekends or holidays). While the existing operation includes blasting to break up the rock in the sides and bottom of the quarry, there will be an increase in blasting activity when compared to the existing Use Permit. Further evaluation in the EIR is required.
- c) The project is not located within the vicinity of a private airstrip or an airport land use plan, or within two miles of a public airport or public use airport. The nearest airport to the project site is the Benton Airport located approximately 3.5 miles to the southeast. No impacts would occur in this regard.

Findings: In the course of the above evaluation, impacts associated with *Noise* were found to be potentially significant. Additional project and environmental data, further discussion and analysis of environmental impacts, recommendations for mitigations for potential impacts, and a mitigation monitoring plan, will be included in the EIR prepared for this proposed project.

XIV. POPULATION AND HOUSING: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following determinations can be made:

- a) The project would not induce substantial unplanned population growth in an area, either directly or indirectly. The proposed project would result in the construction of roadway infrastructure and does not include the development of new homes or businesses. Project implementation would only require the addition of up to 7 new full-time employees and 1 part-time employee which would be derived from the local labor pool. Therefore, it is not expected to induce substantial growth in the area. No impacts would occur in this regard.
- b) The project would not displace people or existing housing. The project does not include the demolition of any existing housing. No impacts would occur in this regard.

Findings: In the course of the above evaluation, impacts associated with *Population and Housing* were found to not be significant because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type. The effects determined not to be significant are not required to be included in primary analysis sections of the EIR. As such, impacts to *Population and Housing* are not reasonably foreseeable and will not be addressed further in the EIR to be prepared for this project.

XV. PUBLIC SERVICES: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Fire Protection?				X
Police Protection?				X
Schools?				X
Parks?				X
Other public facilities?				X

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following determinations can be made:

The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for:

Fire Protection

Fire protection services to the proposed project are currently provided by County and State agencies and private emergency responders. Implementation of the proposed project is not anticipated to significantly increase response times to the site or result in an increase in the demand for these protection services or require any additional fire facilities. No impacts are anticipated in this regard.

Police Protection

Police protection services to the proposed project are currently provided by the County. Implementation of the proposed roadway extension is not expected to significantly increase response times to the site or result in an increase in the demand for police protection services or require any additional law enforcement facilities. The proposed project does not include housing or any other infrastructure that would increase the local population and therefore is not considered significant enough to warrant any additional sworn or non-sworn peace officers. No impacts are anticipated in this regard.

Schools

Implementation of the proposed project will not result in an increase of student populations in unincorporated Shasta County. The proposed project does not result in an increase in housing or population in the County which would require additional educational facilities. Therefore, the proposed project would have no impact in this area.

Parks

The project is located in the unincorporated portion of Shasta County which does not have a formal park and recreation program normally found within incorporated cities. The need for additional parkland is primarily based on an increase in population to an area. Given that the proposed project would not increase the population of Shasta County, the project would not burden any parks in the surrounding area beyond capacity by generating additional recreational users. Therefore, the proposed project would not require the construction or expansion of park and recreational facilities and would also not result in an increase in demand for parks and recreation facilities in the surrounding area. No impacts would occur in this regard.

Findings: In the course of the above evaluation, impacts associated with *Public Services* were found to not be significant because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type. The effects determined not to be significant are not required to be included in primary analysis sections of the EIR. As such, impacts to *Public Services* are not reasonably foreseeable and will not be addressed further in the EIR to be prepared for this project.

XVI. RECREATION:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following determinations can be made:

- a) The County does not have a neighborhood or regional parks system or other County-maintained recreational facilities. The proposed project does not propose to add significant new numbers of people that would require housing and ancillary recreation facilities. Additionally, there are several National and State parkland facilities, national forests, and BLM holdings within the region available to potential park users. Therefore, the proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. A less-than-significant would occur in this regard.
- b) The project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse effect on the environment. School facilities are typically used for sports and recreation. The City of Redding, located to the east of the project, also has a number of recreational facilities. In addition, there are tens of thousands of acres of rivers, lakes, forests, and other public lands available for recreation in Lassen National Park, the Shasta and Whiskeytown National Recreation Areas, the National Forests, and other public land administered by the BLM. Implementation of the proposed project would not result in substantially increased use of any area recreational facilities and would therefore not require construction of new or expansion of any other existing recreational facilities. A less-than-significant would occur in this regard.

Findings: In the course of the above evaluation, impacts associated with *Recreation* were found to not be significant because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type. The effects determined not to be significant are not required to be included in primary analysis sections of the EIR. As such, impacts to *Recreation* are not reasonably foreseeable and will not be addressed further in the EIR to be prepared for this project.

XVII. TRANSPORTATION: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	X			
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	X			
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	X			
d) Result in inadequate emergency access?	X			

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following determinations can be made:

- a) On November 1, 2019, the Central the California Department of Transportation, District 2 (Caltrans) provided a response to Shasta County’s 2019 Notice of Preparation (NOP) for the previously considered onsite expansion of the quarry (GPA 19-0003, ZA 19-0002, UP 19-0007, RP 19-0001) (State Clearinghouse No. 2019090702). Comments and recommendations in the letter refer to the forthcoming EIR and the studies and data that will inform analysis of baseline conditions and potential impacts. Specific reference was made to the likely need to improve the intersection of SR-299 and Iron Mountain Road. A Traffic Assessment Report will be prepared for the proposed project. The Traffic Assessment Report will examine existing traffic volumes on roadways increases in congestion at intersections within the proposed project study area, including potential solutions

for the SR-299/Iron Mountain Road intersection. To address potential increases in truck traffic and potential impacts to pedestrian and bicycle safety, the forthcoming assessment will be examined and incorporated into the EIR.

- b) The proposed project's consistency with CEQA Guidelines Section 15064.3 will be evaluated in the EIR.
- c) During the Notice of Preparation (NOP) period and project scoping conducted by the County between September 2019 and November 2019, the County received feedback from members of the bicycling community related to bicycle safety concerns along Iron Mountain Road. These concerns mainly focused on the existing limited shoulder space between SR-299 and Keswick Dam Road that creates hazardous conditions and potential conflicts between bicycles and vehicles, particularly trucks. The volume of bicycle traffic (both mountain bikes and road bikes) along this segment of Iron Mountain Road has continued to increase over the past several years, raising concerns from the bicycling community that this hazard would be exacerbated with implementation of the proposed project. Several recommendations to enhance safety through the installation of new signage were provided to the County.

In addition, the area of the proposed project is located in the vicinity of several of Shasta County's most popular mountain biking trails. These facilities are located generally to the north, south, and west of the project site on the adjacent BLM parcels and are associated with the Rock Creek – Middle Creek Trail System and other regional trail facilities that connect to the Sacramento River Rail – Trial System. Trailhead parking is provided at various locations along Iron Mountain Road between SR-299 and Keswick Dam Road. As mentioned above, Iron Mountain Road is popular with on-road bicyclists and many off-road bicyclists use the segment of Iron Mountain Road adjacent to the proposed project to connect to French Fry and Trail 58/Middle Creek.

Similar to concerns raised regarding on-road bicycle safety along Iron Mountain Road, the County also received feedback from members of the off-road bicycling community regarding the potential impacts of the proposed project on the adjacent trail systems noted above. Specific concerns focused on aesthetic impacts from clearing and mining, noise from blasting, odor from asphalt operations, increase runoff to Middle Creek and Rock Creek, dust generation, and increase truck traffic along Iron Mountain Road. Mitigation, such as building and maintaining an alternative bike route to Iron Mountain Road that connects the French Fry Trail and Trail 58 trailheads, was recommended.

As the proposed project is expected to increase truck traffic volumes on Iron Mountain Road, this impact is potentially significant and will be further evaluated in the EIR.

- d) The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Currently, the County has not adopted a comprehensive emergency evacuation plan applicable to this area. In addition, neither Iron Mountain Road nor Keswick Dam Road is identified as a designated evacuation route by the County. However, Iron Mountain Road provides the primary access from SR-299 for residents and emergency crews to the area, including the community of Keswick. Keswick Dam Road intersects with Iron Mountain Road approximately 0.5 miles north of the site and provides important emergency ingress and egress. The potential for the proposed project to impact emergency response will be evaluated in the EIR.

Findings: In the course of the above evaluation, impacts associated with *Transportation* were found to be potentially significant. Additional project and environmental data, further discussion and analysis of environmental impacts, recommendations for mitigations for potential impacts, and a mitigation monitoring plan, will be included in the EIR prepared for this proposed project.

XVIII. TRIBAL CULTURAL RESOURCES: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<p>a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</p> <p>i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or</p> <p>ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p>			X	

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following determinations can be made:

- a) The identification of tribal cultural resources is a continuing process between the appropriate tribes or tribal representatives and CEQA lead agency. The appropriate tribes or tribal representative are the authority on identifying tribal cultural resources. The archival records search performed as part of the cultural resources analysis did not result in the identification of known tribal cultural resources within or near the study area. Furthermore, initial field review of the project area did not identify any signs of previously unidentified subsurface tribal cultural resources within or adjacent to the project area.

Pursuant to the Assembly Bill (AB) 52 Tribal consultation process, CEQA lead agencies consult with tribes that are traditionally and culturally affiliated with the project area and that have requested consultation pursuant to Public Resources Code (PRC) Section 21080.3.1. The purpose of the consultation is to determine whether a proposed project may result in a significant impact to tribal cultural resources that may be undocumented or known only to the tribe and its members. As set forth in PRC Section 21080.3.1(b), the law requires:

Prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project, the lead agency shall begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if: (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and (2) the California Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation.

The County’s AB 52 contact list consists of Native American tribes that had submitted written requests for notification of CEQA projects within their geographic area of traditional and cultural affiliation as of October 7, 2019, when the County initiated consultation. The County sent a letter by certified mail on October 7, 2019 to the Wintu Tribe of Northern California and Toyon-Wintu Center. Return receipts for the certified letters indicate the letters were delivered on October 7, 2019. The County received no response to the letter.

Findings: In the course of the above evaluation, impacts associated with *Tribal Cultural Resources* were found to less-than-significant.

XIX. UTILITIES AND SERVICE SYSTEMS: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunications facilities, the construction or relocations of which could cause significant environmental effects?				X
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	X			
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				X
e) Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?				X

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following determinations can be made:

- a) The project would not require or result in the relocation or construction of new or expanded water or, wastewater treatment facilities or expansion of existing storm water drainage, electric power, natural gas or telecommunications facilities, the construction or relocations of which could cause significant environmental effects. No impacts would occur in this regard.
- b) Approximately 960,000 gallons of water per year will be needed if all the aggregate used to produce 200,000 tons of asphalt is washed, which is equivalent to 4.8 gallons per ton. Water will be obtained from the two recycle ponds east of the wash plant that receive the used wash water which is then recycled. It is unlikely the proposed project will substantially deplete groundwater supplies or interfere substantially with groundwater recharge. The proposed project will not require the acquisition or expansion of entitlements and there will be no need to develop infrastructure to connect to an existing water supply distribution facility. Therefore, the proposed project would not result in the exceedance of an allotted water supply for the County.

As noted above under Item X.a, the CVRWQCB previously recommended additional evaluation and analysis of the project's potential impact to groundwater resources. The hydrology assessment and any further studies necessary to determine the project's potential impact to groundwater resources will be fully analyzed in the EIR.

- c) The project would not result in the production of any wastewater. Because the proposed project will not connect to any water or wastewater treatment facilities, there would be no impact on the capacity of an existing water or wastewater treatment facilities and therefore, this impact will not be analyzed further in the EIR. No impacts are anticipated in this regard.
- d) The project would not generate new solid waste and therefore would not generate waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. The Richard W. Curry/West Central Landfill has approximately 120 to 320 tons per day of capacity; therefore, the landfill would support the low volume of waste generated during construction of any necessary offsite improvements to support the proposed project. Recycling of construction debris would reduce the potential amount of waste disposed of at the Richard W. Curry/West Central Landfill and would contribute to the recycling goals set forth by Shasta County, California Building Code, and AB 939. Construction activities would be required to comply with all federal, State, and local statutes and regulations related to solid waste. No impact would occur in this regard.
- e) The project would comply with Federal, State, and local management and reduction statutes and regulations related to solid waste. The project will not generate any solid waste. The 1989 California Integrated Waste Management Act (AB 939) requires the County to attain specific waste diversion goals. In addition, the California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires expanded or new development projects to incorporate storage areas for recycling bins into the proposed project design. Reuse and recycling of construction debris would reduce operating expenses and save valuable landfill space.

AB 939, SB 1016, AB 341, and AB 1826 require the County to meet specific waste diversion goals. The Richard W. Curry West Central Landfill has available capacity to accommodate solid construction waste generated by the proposed project. In addition, the Anderson Landfill also has available capacity to accommodate solid construction waste generated by the proposed project. No impact would occur in this regard.

Findings: In the course of the above evaluation, impacts associated with *Utilities and Service Systems* were found to be potentially significant. Additional project and environmental data, further discussion and analysis of environmental impacts, recommendations for mitigations for potential impacts, and a mitigation monitoring plan, will be included in the EIR prepared for this proposed project.

XX. WILDFIRE: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	X			
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	X			
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			X	
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			X	

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following determinations can be made:

a) The County of Shasta and all cities within the County use the *Emergency Operations Plan* to respond to major emergencies and disasters. The *Emergency Operations Plan* identifies a broad range of potential hazards and a response plan for each. The Shasta County Sheriff's Department, California Highway Patrol, and other cooperating law enforcement agencies have primary responsibility for evacuations. These agencies work with the County Office of Emergency Services, and with responding fire department personnel who assess fire behavior and spread, which ultimately influence evacuation decisions. As of this time Cal Fire, Shasta County Fire Department, Shasta County Office of Emergency Services, Shasta County Sheriff's Department, and others have not adopted a comprehensive emergency evacuation plan applicable to this area.

All evacuations in the County follow pre-planned procedures to determine the best plan for the type of emergency. The designated County emergency evacuation and law enforcement coordinator is the sheriff. The evacuation coordinator is assisted by other law enforcement and support agencies in emergency events. Law enforcement agencies, highway/street departments, and public and private transportation providers would conduct evacuation operations. Activities would include law enforcement traffic control, barricades, signal control, and intersection monitoring downstream of the evacuation area, all with the objective of avoiding or minimizing potential backups and evacuation delays.

Another factor in the evacuation process would be a managed and phased evacuation declaration. Evacuating in phases, based on vulnerability, location, or other factors, enables subsequent traffic surges on major roadway to be minimized over a longer time frame and can be planned to result in traffic levels that flow more efficiently than when mass evacuations include large evacuation areas simultaneously. Law enforcement personnel and Shasta County Office of Emergency Services staff would be responsible for ensuring that evacuations are phased appropriately, taking into consideration the vulnerability of communities when making decisions.

It is acknowledged that the existing site has been used for disaster response staging such as during fire emergencies over the last two decades. The project site would continue to be available as a local staging area for emergency personal and/or be accessible to the public as a local safe zone during a wildfire event.

There are existing residents that to the north and east of the project site with a significant number of properties anticipated to be redeveloped in the coming months and years as evidenced by building permit records maintained by Shasta County. In the event of a wildfire at, or near the project site, existing and future residences and structures in the project vicinity would be at risk. The impact of increased truck traffic related to wildfire hazards will be further evaluated in the EIR.

- b) As noted above under Item IX.g, CAL FIRE currently identifies the project site as an SRA. In addition to establishing local or state responsibility for wildfire protection in a specific area, CAL FIRE designates areas as very high fire hazard severity zones (VHFHSZ) or non-VHFHSZ. The project site is designated as VHFHSZ by CAL FIRE.

The risk of potential ignitions resulting from mining activities onsite would be considered very low for the existing cleared areas of the site with non-combustible land cover (mine production areas, rock crushing/screening plant, washing operations, mobile office trailer, truck scales, and settling/recycling ponds). However, mineral reserves would continue to be removed through a combination of drilling, blasting, and excavation equipment, albeit, increased when compared to existing conditions. The potential wildfire risk associated with increased onsite basting activity will be evaluated in the EIR.

- c) The proposed project is required to comply with defensible space standards outlined within California Public Resources Code 4291, including the standards outlined within Shasta County Code Section 8.08 and Section 8.10. The proposed project would also comply with all applicable California Fire Code requirements for constructing and operating extraction and processing activities in a VHFHSZ, including, but not limited to, specific requirements for water supply, signage, and fire department access.

The existing facility maintains two points of access that would continue to facilitate site access by responding fire agency personnel and other emergency responders, if necessary. In addition, the proposed project does not include the addition of new overhead power lines or other infrastructure or features that are expected to exacerbate wildfire risk or result in additional temporary or permanent impacts.

Development of the proposed project, in compliance with applicable with defensible space standards reduces the potential for the proposed project to impact adjacent residences from wildfire events, as well as reducing the potential that the proposed project would be significantly damaged from offsite wildfires burning onto the project site. The proposed use permit and reclamation plan amendments would continue to be subject to all applicable Shasta County Code requirements and defensible space requirements pursuant to California Public Resources Code 42911. As a result, the proposed project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Impacts are less-than-significant in this regard.

- d) The project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. The location of the proposed project does not fall within a FEMA flood zone, nor are there any sheer or unstable cliffs in the immediate area.

Development of the proposed project would not significantly alter existing onsite drainage patterns or impervious services compared to existing conditions. During each mine phase stormwater runoff will continue to be routed through the various ponds, with all but a small portion eventually discharged from Settling Pond No. 3. Stormwater from Pond No. 4 can also be routed around the Settling Ponds and discharged directly to the ditch that is tributary to Middle Creek, but this has seldom occurred (LAA 2020). As a result, overall water management and stormwater runoff control of the proposed project will be similar to current operations. The proposed project will continue to be covered under the State of California General Industrial Storm Water Permit Order Number 2014-0057-DWQ and implement Best Management Practices (BMPs) to reduce impacts to storm water quality. In addition, during the mine's operational history there have been no significance surface failures and the proposed finished mine slope of 45 degrees is considered stable (Bajada 2020). Therefore, the proposed project does not pose a significant risk of landslides.

Considering these project site features and characteristics, potential future post-fire conditions are not expected to increase risks associated with runoff and erosion. Considering the project site's phased reclamation and implementation of erosion control BMPs, potential impacts associated with runoff, post-fire slope instability, or drainage changes are considered less-than-significant.

Findings: In the course of the above evaluation, impacts associated with *Wildfire* were found to be potentially significant. Additional project and environmental data, further discussion and analysis of environmental impacts, recommendations for mitigations for potential impacts, and a mitigation monitoring plan, will be included in the EIR prepared for this proposed project.

¹ Shasta County. Statement of Conditions. Use Permit Condition No. 54. Crystal Creek Aggregate. 2007.

XIX. <u>MANDATORY FINDINGS OF SIGNIFICANCE:</u>	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below the self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	X			
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	X			
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	X			

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following determinations can be made:

- a) Based on the discussion and findings in Section IV. *Biological Resources*, there is evidence to support a finding that the proposed project would have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below the self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal.
- b) Based on the discussion and findings in all Sections above, there is evidence to suggest that the proposed project would have impacts that are cumulatively considerable. A review of cumulative impacts for each issue area that has been identified as potentially significant will be required pursuant State *CEQA Guidelines* §15130. A determination of significance will be made for each issue.
- c) Based on the discussion and findings in all Sections above, there is evidence to support a finding that the proposed project has potential environmental effects which may cause substantial adverse effects on human beings, either directly or indirectly. The EIR will include a comprehensive review of existing conditions, potential project impacts, and will recommend mitigation measures to reduce the level of significant related to short-term construction and long-term operations, as necessary.

Findings: Additional project and environmental data, further discussion and analysis of environmental impacts, recommendations for mitigations for potential impacts, and a mitigation monitoring plan, will be included in the EIR prepared for this proposed project.

SOURCES OF DOCUMENTATION FOR INITIAL STUDY CHECKLIST

All headings of this source document correspond to the headings of the initial study checklist. In addition to the resources listed below, initial study analysis may also be based on field observations by the staff person responsible for completing the initial study. Most resource materials are on file in the office of the Shasta County Department of Resource Management, Planning Division, 1855 Placer Street, Suite 103, Redding, CA 96001, Phone: (530) 225-5532.

GENERAL PLAN AND ZONING

1. Shasta County General Plan and land use designation maps.
2. Applicable community plans, airport plans and specific plans.
3. Shasta County Zoning Ordinance (Shasta County Code Title 17) and zone district maps.

ENVIRONMENTAL IMPACTS

I. AESTHETICS

1. Shasta County General Plan, Section 6.8 Scenic Highways, and Section 7.6 Design Review.
2. Zoning Standards per Shasta County Code, Title 17.

II. AGRICULTURAL AND FORESTRY RESOURCES

1. Shasta County General Plan, Section 6.1 Agricultural Lands.
2. Shasta County Important Farmland 2016 Map, California Department of Conservation.
3. Shasta County General Plan, Section 6.2 Timber Lands.
4. Soil Survey of Shasta County Area, California, published by U.S. Department of Agriculture, Soil Conservation Service and Forest Service, August 1974.

III. AIR QUALITY

1. Shasta County General Plan Section, 6.5 Air Quality.
2. Northern Sacramento Valley Air Basin, 2018 Air Quality Attainment Plan.

IV. BIOLOGICAL RESOURCES

1. Shasta County General Plan, Section 6.2 Timberlands, and Section 6.7 Fish and Wildlife Habitat.
2. Designated Endangered, Threatened, or Rare Plants and Candidates with Official Listing Dates, published by the California Department of Fish and Wildlife.
3. Natural Diversity Data Base Records of the California Department of Fish and Wildlife.
4. Federal Listing of Rare and Endangered Species.
5. Shasta County General Plan, Section 6.7 Fish and Wildlife Habitat.
6. State and Federal List of Endangered and Threatened Animals of California, published by the California Department of Fish and Wildlife.
7. Natural Diversity Data Base Records of the California Department of Fish and Wildlife.

V. CULTURAL RESOURCES

1. Shasta County General Plan, Section 6.10 Heritage Resources.
2. Records of, or consultation with, the following:
 - a. The Northeast Information Center of the California Historical Resources Information System, Department of Anthropology, California State University, Chico.
 - b. State Office of Historic Preservation.
 - c. Local Native American representatives.
 - d. Shasta Historical Society.
3. Jensen, Sean Michael. Archaeological Inventory Survey for the Crystal Creek Aggregate Relicensing Project c. 150-acres Along Ironside Mountain, Shasta County. 2006.
4. Jensen, Sean Michael. Cultural resources Inventory Survey for the Crystal Creek Aggregate General Plan Amendment and Rezone Project circa 110 acres in Shasta County. 2019.

VI. ENERGY

1. California Global Warming Solutions Act of 2006 (AB 32)
2. California Code of Regulations Title 24, Part 6 – California Energy Code

VII. GEOLOGY AND SOILS

1. Shasta County General Plan, Section 5.1 Seismic and Geologic Hazards, Section 6.1 Agricultural Lands, and Section 6.3 Minerals.
2. County of Shasta, Erosion and Sediment Control Standards, Design Manual
3. Soil Survey of Shasta County Area, California, published by U.S. Department of Agriculture, Soil Conservation Service and Forest Service, August 1974.
4. Alquist - Priolo, Earthquake Fault Zoning Maps.
5. Bajada Geosciences, Inc. 2020. *Geotechnical Report Crystal Creek Aggregate Quarry Expansion, Shasta County, California*. April 10, 2020.

VIII. GREENHOUSE GAS EMISSIONS

1. Shasta Regional Climate Action Plan
2. California Air Pollution Control Officers Association (White Paper) CEQA & Climate Change, Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act

IX. HAZARDS AND HAZARDOUS MATERIALS

1. Shasta County General Plan, Section 5.4 Fire Safety and Sheriff Protection, and Section 5.6 Hazardous Materials.
2. County of Shasta Multi-Hazard Functional Plan
3. Records of, or consultation with, the following:
 - a. Shasta County Department of Resource Management, Environmental Health Division.
 - b. Shasta County Fire Prevention Officer.
 - c. Shasta County Sheriff's Department, Office of Emergency Services.
 - d. Shasta County Department of Public Works.
 - e. California Environmental Protection Agency, California Regional Water Quality Control Board, Central Valley Region.

X. HYDROLOGY AND WATER QUALITY

1. Shasta County General Plan, Section 5.2 Flood Protection, Section 5.3 Dam Failure Inundation, and Section 6.6 Water Resources and Water Quality.
2. Flood Boundary and Floodway Maps and Flood Insurance Rate Maps for Shasta County prepared by the Federal Emergency Management Agency, as revised to date.
3. Records of, or consultation with, the Shasta County Department of Public Works acting as the Flood Control Agency and Community Water Systems manager.
4. Lawrence & Associates. 2020. *Hydraulic Evaluation for Proposed Quarry Changes, Chrystal Creek Aggregate, Inc.* November 2020.

XI. LAND USE AND PLANNING

1. Shasta County General Plan land use designation maps and zone district maps.
2. Shasta County Assessor's Office land use data.

XII. MINERAL RESOURCES

3. Shasta County General Plan Section 6.3 Minerals.

XIII. NOISE

1. Shasta County General Plan, Section 5.5 Noise and Technical Appendix B.

XIV. POPULATION AND HOUSING

1. Shasta County General Plan, Section 7.1 Community Organization and Development Patterns.
2. Census data from U.S. Department of Commerce, Bureau of the Census.
3. Census data from the California Department of Finance.
4. Shasta County General Plan, Section 7.3 Housing Element.
5. Shasta County Department of Housing and Community Action Programs.

XV. PUBLIC SERVICES

1. Shasta County General Plan, Section 7.5 Public Facilities.
2. Records of, or consultation with, the following:
 - a. Shasta County Fire Prevention Officer.
 - b. Shasta County Sheriff's Department.
 - c. Shasta County Office of Education.
 - d. Shasta County Department of Public Works.

XVI. RECREATION

1. Shasta County General Plan, Section 6.9 Open Space and Recreation.

XVII. TRANSPORTATION/TRAFFIC

1. Shasta County General Plan, Section 7.4 Circulation.
2. Records of, or consultation with, the following:
 - a. Shasta County Department of Public Works.
 - b. Shasta County Regional Transportation Planning Agency.
 - c. Shasta County Congestion Management Plan/Transit Development Plan.
3. Institute of Transportation Engineers, Trip Generation Rates.

XVIII. TRIBAL CULTURAL RESOURCES

1. Tribal Consultation in accordance with Public Resources Code section 21080.3.1

XIX. UTILITIES AND SERVICE SYSTEMS

1. Field Reconnaissance
2. Records of, or consultation with, the following:

- a. Roadway Design Engineer.
- b. Shasta County Department of Resource Management, Environmental Health Division.
- c. Shasta County Department of Public Works.

XX. WILDFIRE

- 1. Office of the State Fire Marshall-CALFIRE Fire Hazard Severity Zone Maps

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

None