2.0 EXECUTIVE SUMMARY

This section provides a summary of the proposed project and its environmental consequences. It includes a brief description of the project, a list of issues of concern, and an overview of project alternatives. At the end of this section, a table is provided that lists identified environmental impacts and mitigation measures.

Since this section is a summary of this document, it does not discuss various aspects of the project in great detail. For a more complete description of the project, please refer to Section 3.0, Project Description. For a more detailed discussion of environmental impacts, please refer to Section 4.0, Environmental Setting, Impacts and Mitigation Measures. A more complete description of project alternatives is available in Section 5.0, Project Alternatives.

2.1 PURPOSE OF THE EIR

This Draft Environmental Impact Report evaluates the potential environmental effects of the Eastside Aggregates project, located in northeastern Shasta County. The project, which includes a rock quarry, crushing and screening operation, concrete batch plant and asphalt plant, would occupy approximately 109 acres of a 343-acre parcel.

Under CEQA, public agencies are charged with the duty to consider the environmental impacts of proposed development project, and to minimize these impacts where feasible. The public agency has an obligation to balance a variety of public objectives, including economic, environmental and social factors (CEQA Guidelines Section 15021). The purpose of the EIR is to provide the necessary information on the significant environmental effects of a project to public agency decision makers and the general public. Additionally, the EIR identifies possible means to mitigate the significant effects of a project. The public agency is required to consider the information in the EIR when making its decision on a project (CEQA Guidelines Section 15121).

2.2 PROJECT CHARACTERISTICS

The project applicant, Hat Creek Construction, proposes to establish a rock quarry operation. The operation would mine rock from a volcanic basalt ledge located on the project site. The quarry would be developed in three phases over a 30-year time period. It is estimated that 900,000 cubic yards of material would be mined during the lifetime of the operation. While most of the rock would be removed by equipment, some blasting would be required. Work days would be from Monday to Friday, with occasional work on Saturdays. The maximum hours of operation would be from 4:00 a.m. to 8:00 p.m., with average hours from 7:00 a.m. to 5:00 p.m.

At the end of the 30-year period of operation, the quarry site would be reclaimed. According to the proposed reclamation plan for the quarry site, most of the site would be revegetated with grass and eventually be reused for industrial activities. The toe of the slope of the quarry face would be planted with trees and shrubs. However, the face itself would not be replanted due to lack of soils and the potential for erosion problems if resoiling was attempted. The former log pond sites would be filled so that they may be used for future industrial activities.

On the same site as the quarry, a portable crushing and screening operation is proposed. It would reduce rock material to a desired size. A wet screening method would be used to wash the material. The processed material would be conveyed to stockpiles. The estimated number of hours per year the operation would run is 400 hours. The days of operation would be Monday through Saturday, from no earlier than 4:00 a.m. to no later than 8:00 p.m.

A ready mix concrete batch plant would be constructed as part of the project. The plant would consist of silos for material storage, a gathering hopper and a mixer. The plant would likely be most active during the summer months, although it could operate all year. The estimated output per year would be 8,000 cubic yards. The days of operation for the concrete batch plant would be Monday through Friday, with occasional Saturdays. The maximum hours of operation would be from 4:00 a.m. to 8:00 p.m., with average hours from 6:00 a.m. to 3:00 p.m.

The project also proposes the construction of an asphalt plant. The plant would normally operate during the months from April to October. The plant would have cold aggregate bins, a dryer, a pug mill for mixing aggregate with asphalt oil, a heated storage bin and conveyors. Asphalt oil would be stored in a tank that can be heated. The estimated annual production would be 10,000 cubic yards per year. The days of operation for the concrete batch plant would be Monday through Friday, with occasional Saturdays. The maximum hours of operation would be from 4:00 a.m. to 8:00 p.m., with average hours from 6:00 a.m. to 5:00 p.m.

In addition, the project proposes a concrete trailer rental site, where trailers can be rented for the transport of mixed concrete. Concrete could be mixed at the rental site. Also, the project proposes an outdoor sales area for landscaping materials such as sand, gravel, cinders, rock and bark. These materials would be kept in storage bins. Business hours would be from 6:00 a.m. to 6:00 p.m. To allow for these activities to be conducted on the project site, the project applicant is requesting the rezoning of approximately 24 acres from M (General Industrial) to C-M (Commercial-Light Industrial). The proposed C-M zone would also include a 7,000 square-foot metal building containing a truck repair shop. The shop would be used for the repair of vehicles owned by Hat Creek Construction.

Retention basins, previously used as log ponds, would be used to hold surface runoff from project operations. The amount of storage would be based on a 100-year storm. Since the basins have excess capacity beyond a 100-year storm, portions of the basins would be filled during quarry operations, leaving only the portion of the basins outside the reclamation plan boundary unfilled when quarry operations cease. Future stormwater detention requirements on the site can be met within the log pond area north of and outside the reclamation plan area, among other sites on the property. Water would be provided by existing wells on the site. Sewer service would be provided by septic systems. The project would require the extension of electrical and natural gas lines from existing Pacific Gas and Electric Company (PG&E) facilities. The existing driveway approach from SR 89 would be upgraded to "Type C" standards of the California Department of Transportation (Caltrans), which typically includes a deceleration right turn lane and an acceleration lane.

The project would require the approval of a zone amendment, two use permits and a reclamation plan. The Shasta County Planning Commission must approve all these actions except the zone amendment, which must be approved by the Shasta County Board of Supervisors. Other permits and approvals would be required from other agencies.

2.3 ISSUES OF CONCERN

Prior to preparation of the EIR, a Notice of Preparation was issued notifying the public of the project and requesting comments. Based upon the public comments received and preliminary environmental review, the following issues of potential concern were identified:

- Aesthetics and Visual Resources
- Air Quality
- Biological Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Noise
- Recreation

Refer to Section 4.0, Environmental Setting, Impacts and Mitigation Measures, for a detailed description of potential environmental impacts and measures to mitigate these impacts.

2.4 PROJECT ALTERNATIVES

In accordance with CEQA Guidelines Section 15126.6, this analysis considered feasible alternatives to the project. The alternatives evaluated were as follows:

Alternative 1 - No Project
Alternative 2 - Alternative Sites
Alternative 3 - Alternative Aggregate Source
Alternative 4 - Restricted Hours of Operation

The analysis identified the No Project alternative as the environmentally superior alternative to the project. Under the CEQA Guidelines, another alternative must be identified as environmentally superior if the No Project alternative is considered the environmentally superior alternative. For this project, Alternative 4 - Restricted Hours of Operation - is the environmentally superior alternative.

2.5 OTHER IMPACTS

Under the CEQA Guidelines, the EIR must discuss cumulative impacts when they are significant. Cumulative impacts are defined as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Several cumulative impacts of the project were identified, none of which were considered significant.

CEQA requires that the growth-inducing impacts of a project be addressed in the environmental impact report. A proposed project may result in direct and/or indirect growth-inducing impacts. No growth-inducing impacts were identified with the project.

An EIR shall include a detailed statement in a separate section setting forth any significant effect on the environment that cannot be avoided if the project is implemented. No significant and unavoidable impacts were identified with the project.

2.6 SUMMARY OF ENVIRONMENTAL IMPACTS

Table 2-1 presents a summary of project impacts and proposed mitigation measures that would avoid or minimize these impacts. The table also indicates the level of significance of each impact before and after the application of the recommended mitigation. For detailed discussions of all project impacts and mitigation measures, please refer to the appropriate technical section in Section 4.0, Environmental Setting, Impacts and Mitigation Measures.

TABLE 2-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Aesthetics			
Impact 4.2.1 The project may degrade the visual character of the area visible to motorists from SR 89.	Potentially significant	**MM 4.2.1a** The project applicant shall submit a plan to screen the project site at a level adequate to obscure the view of the site from passenger vehicles on SR 89. Screening measures may include construction of earthen berms and the planting of shrubbery and other vegetation. Vegetation shall consist of species native to the region, and it shall provide adequate screening of the site within a period of five years after planting. Screening measures shall be applied within the buffer area between SR 89 and the existing shop on the project site, from approximately 500 feet north to 500 feet south of the Hat Creek Construction main entrance. In implementing the screening measures, the existing mature trees within the buffer area shall be maintained. In the event that vegetative screening is utilized, annual monitoring reports shall be required to document the incremental effectiveness of the barrier in screening views. The report shall include photo documentation. *Timing/Implementation: Screening plan reviewed and approved prior to project implementation. Annual monitoring until adequate screening is demonstrated. Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division.*	Less than significant
Impact 4.2.2 The project would alter the appearance of the bluff.	Less than significant	No mitigation required.	—

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 4.2.3 The project may introduce new light and glare sources into the area.	Significant	**MM 4.2.3a** The County shall attach conditions to the use permit which require that lighting be shielded and/or directed so that it does not shine offsite. No use, including vehicles, will be allowed to create intense light or glare that causes a nuisance or hazard beyond the property line. Proposed new lighting shall be shown on building/site plans for review and approval by the Planning Division. The lighting on the site shall be monitored by the Building Division at the time of building permit issuance and inspection. *Timing/Implementation: A lighting plan shall be submitted and approved prior to installation of lighting.* *Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division, Building Division.* **MM 4.2.3b** All new buildings shall either be painted or constructed of materials of neutral or earth tone colors. Roofing material shall be a non-glare, non-reflective material. *Timing/Implementation: Upon commencement of building construction.* *Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division, Building Division.*	Less than significant
Impact 4.2.4 The project would have no adverse cumulative effect on aesthetics and visual resources in the area.	Less than significant	No mitigation required.	–

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Air Quality			
Impact 4.3.1 The project would involve emissions of some pollutants that would exceed thresholds established by Rule 2.1 of the SCAQMD Rulebook.	Significant	**MM 4.3.1a** The project applicant shall use a diesel generator that can be demonstrated to meet or exceed SCAQMD standards for NO_x emissions. *Timing/Implementation: Prior to installation of diesel generator.* *Enforcement/Monitoring: Shasta County Air Quality Management District.* **MM 4.3.1b** Alternatives to open burning of vegetative material on the project site shall be used by the project applicant unless otherwise deemed infeasible by the SCAQMD. Suitable alternatives include, but are not limited to, chipping, mulching and conversion to biomass fuel. *Timing/Implementation: Upon commencement of grading activities.* *Enforcement/Monitoring: Shasta County Air Quality Management District*	Less than significant

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
		MM 4.3.1c All material excavated, stockpiled or graded shall be sufficiently watered to prevent fugitive dust from leaving property boundaries and causing a public nuisance. Watering shall occur at least twice daily with complete grading and construction site coverage, preferably in the mid-morning and after work is completed for the day. *Timing/Implementation: Upon commencement of grading and construction activities.* *Enforcement/Monitoring: Shasta County Air Quality Management District* **MM 4.3.1d** All land clearing, grading, earth moving or excavation activities shall be suspended when winds are expected to exceed 20 miles per hour. *Timing/Implementation: Upon commencement of grading and construction activities.* *Enforcement/Monitoring: Shasta County Air Quality Management District* **MM 4.3.1e** All inactive portions of the project site shall be seeded and watered until a suitable grass cover is established. The applicant shall be responsible for applying non-toxic soil stabilizers approved by the County Department of Public Works to all inactive construction areas in accordance with the Shasta County Grading Ordinance. *Timing/Implementation: Upon commencement of grading and construction activities.* *Enforcement/Monitoring: Shasta County Air Quality Management District*	

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
		MM 4.3.1f Paved public roadways adjacent to the project site shall be swept at the end of each day if substantial volumes of soil materials have been carried onto them. A water sweeper with reclaimed water is recommended. *Timing/Implementation: Upon commencement of grading and construction activities.* *Enforcement/Monitoring: Shasta County Air Quality Management District* **MM 4.3.1g** The project applicant shall re-establish ground cover on the project site through seeding and watering, in accordance with the Shasta County Grading Ordinance. *Timing/Implementation: Prior to final occupancy.* *Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division.* **MM 4.3.5h** The project applicant shall install water sprays in each rock crusher and screen. *Timing/Implementation: Prior to start of crushing and screening operation.* *Enforcement/Monitoring: Shasta County Air Quality Management District.*	

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
		MM 4.3.5i The project applicant shall install a fabric filter in each cement storage silo. Also, cement shall be transferred pneumatically from silo to mixing hopper and from the transfer truck to the silo. *Timing/Implementation: Upon commencement of project operations.* *Enforcement/Monitoring: Shasta County Air Quality Management District.*	
Impact 4.3.2 The asphalt plant would release a small amount of hazardous air pollutants (HAPs), which in larger amounts are considered a risk to human health.	Less than significant	No mitigation required.	–

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 4.3.3 Vehicular trips to and from the project site may generate emissions, particularly PM_{10}.	Potentially significant	**MM 4.3.3a** All areas with vehicle traffic, including unpaved roadways, shall be watered periodically or have dust palliatives applied for stabilizing dust emissions. *Timing/Implementation: Upon commencement of project operations.* *Enforcement/Monitoring: Shasta County Air Quality Management District.* **MM 4.3.3b** All traffic on unpaved roadways within the project site shall be limited to a maximum speed of 15 miles per hour. *Timing/Implementation: Upon commencement of project operations.* *Enforcement/Monitoring: Shasta County Air Quality Management District.* **MM 4.3.3c** All trucks hauling dirt, sand, soil or other loose material shall be covered or shall maintain at least two feet of freeboard. *Timing/Implementation: Upon commencement of project operations.* *Enforcement/Monitoring: Shasta County Sheriff's Office, California Highway Patrol* **MM 4.3.3d** All material transported offsite shall be either sufficiently watered or securely covered to prevent a public nuisance. *Timing/Implementation: Upon commencement of project operations.* *Enforcement/Monitoring: Shasta County Air Quality Management District*	Less than significant

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 4.3.4 The asphalt plant may generate odors which may be detected by offsite residences.	Potentially significant	**MM 4.3.4a** If complaints are received regarding the emission of odors from the asphalt plant, the plant shall be required to use odor counteractants which shall be introduced into the stack flue gas to neutralize any odors that may be produced. This mitigation shall be incorporated as a condition for approval of a "Permit to Operate" by SCAQMD. *Timing/Implementation: During asphalt production.* *Enforcement/Monitoring: Shasta County Air Quality Management District.*	Less than significant
Impact 4.3.5 The project, in conjunction with other proposed projects, may contribute to a degradation of air quality in the Burney Valley area.	Less than significant	No mitigation required.	–
Biological Resources			
Impact 4.4.1 The project may affect bald eagle and osprey habitat in the vicinity.	Potentially significant	**MM 4.4.1a** The project applicant shall retain a qualified wildlife biologist to conduct an annual survey for active bald eagle and osprey nests within one-quarter mile of the active operational areas of the quarry. The survey shall be conducted on May 15 of each year. If an active nest is found within one-quarter mile of the active operational areas of the quarry, no blasting shall occur until the young have fledged. The biologist shall submit a report to the Planning Division after completion of the survey. This measure does not preclude blasting activities occurring prior to the survey date. *Timing/Implementation: May 15 of each year.* *Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division*	Less than significant.

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 4.4.2 The project would require the fill of jurisdictional wetlands.	Significant	**MM 4.4.2a** Other than the proposed 0.32-acre fill area, the wetlands on the site shall be designated as a non-disturbance area. The project applicant shall be required to place a fence around the wetlands at a minimum of 25 feet horizontally from the edge of the water. The fence shall remain in place for the duration of the project and through the process of reclamation. The wetlands shall be maintained in perpetuity after reclamation unless the property owner obtains and complies with all necessary mitigation agreements and permits from the California Department of Fish and Game, the U.S. Army Corps of Engineers, and any other governmental agencies which have wetland-related permit authority. *Timing/Implementation: Prior to commencement of site preparation and/or operations, and thereafter as part of an annual mine inspection.* *Enforcement/Monitoring: U.S. Army Corps of Engineers, California Department of Fish and Game, Shasta County Department of Resource Management - Planning Division.*	Less than significant

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 4.4.3 Project activities may disturb sensitive habitats located outside previously surveyed areas on the project site.	Potentially significant	**MM 4.4.3a** No site development or other disturbance shall be permitted outside the vernal pool and rare plant survey boundary, as shown on as aerial photograph of the project site, marked by North State Resources and attached to it's letter to Stuart Busby of Hat Creek Construction dated February 23, 1996. If development is proposed on a part of the site that was not surveyed, a vernal pool and rare plant survey shall be conducted. *Timing/Implementation: Prior to approval of any proposed development in the unsurveyed area. EnforcementMonitoring: Shasta County Department of Resource Management - Planning Division.* **MM 4.4.3b** The boundary of the vernal pool and rare plant survey conducted by North State Resources shall be permanently marked on the project site. The boundary shall be flagged or fenced to be clearly identifiable to equipment operators. The flags or markings shall be spaced a maximum of 50 feet apart, with each marker clearly visible from the immediately adjacent markers. The flagging or fencing shall be maintained for the life of the use permits. *Timing/Implementation: Installation within 60 days of the approval of the use permits. Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division.*	Less than significant
Impact 4.4.4 The project is expected to have little significant effect of biological resources in the vicinity.	Less than significant	No mitigation required.	–

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Geology and Soils			
Impact 4.5.1 The project is located adjacent to an Alquist-Priolo Earthquake Fault Zone, which may subject the project to seismic hazards.	Significant	**MM 4.5.1a** Under the proposed project and the recommended conditions of the use permit, no permanent or fixed structures shall be located within the boundaries of the Earthquake Fault Zone as shown on the Earthquake Fault Zones map, Cassel Quadrangle, prepared by the State Geologist. *Timing/Implementation: During project implementation and thereafter as part of an annual mine inspection program.* *Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division, Building Division.* **MM 4.5.1b** The construction of structures and the installation of equipment, including the aggregate processing plant, the asphalt plant and the concrete plant, shall be in compliance with all State and local seismic safety regulations and building codes. *Timing/Implementation: During building construction and installation.* *Enforcement/Monitoring: Shasta County Department of Resource Management - Building Division.*	Less than significant
Impact 4.5.2 A possibility of seismic-related ground failure may occur on the project site.	Less than significant	No mitigation required.	–

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 4.5.3 Quarry operations could induce slope instability at the escarpment.	Potentially significant	**MM 4.5.3a** Slope stability conditions of rock and soil slopes on the quarry site shall be evaluated periodically by a qualified professional engineer or a certified engineering geologist as the mining operation progresses. Although there is no set time on when such an evaluation will be conducted, the frequency shall be no less than one time per year. The Planning Division may request additional evaluations if it determines that circumstances warrant them. If a potential slope stability problem is discovered, the engineer or engineering geologist preparing the evaluation shall make recommendations to reduce or eliminate the problem or its potential results, which the project applicant shall implement. *Timing/Implementation: During project implementation and thereafter as part of an annual mine inspection program.* *Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division.*	Less than significant

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 4.5.4 The project would result in the loss of some topsoil and the compaction of other soils.	Significant	**MM 4.5.4a** The project applicant shall submit and receive approval of a grading plan, with which all project grading and construction work shall be in compliance. The Building Division shall review the grading plan and shall inspect the project site at the time grading work is performed and completed. The Planning Division shall conduct ongoing monitoring to ensure that the objectives of the grading plan have been met. *Timing/Implementation: Grading plan to be submitted and approved prior to issuance of grading permit. Monitoring to be conducted during project implementation and thereafter as part of an annual mine inspection program.* *Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division, Building Division.*	Less than significant

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
		MM 4.5.4b Soil that is removed from the top of the bluff as excavation of the bluff progresses shall be removed as a separate layer from areas to be disturbed by mining operations. Topsoil and vegetation removal shall not precede surface mining activities by more than one year. Topsoil and suitable growth media shall be maintained in separate stockpiles. Test plots are required to determine the suitability of growth media for revegetation purposes. Topsoil and suitable growth media that cannot be utilized immediately for reclamation shall be stockpiled in an area where they will not be disturbed until needed for reclamation. Topsoil and suitable growth media stockpiles shall be clearly identified to distinguish them from mine waste dumps. Topsoil and suitable growth media stockpiles shall be planted with a vegetative cover or shall be protected by other equally effective measures to prevent water and wind erosion and to discourage weeds. *Timing/Implementation: During project implementation and thereafter as part of an annual mine inspection program.* *Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division.*	

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 4.5.5 Structures associated with the project may be constructed on potentially expansive soils.	Potentially significant	**MM 4.5.5a** For portions of the project site where structures would be placed, the project applicant shall submit a report from a qualified engineer or soils specialist that identifies the location of expansive soils and demonstrates how the potential negative impacts of these soils would be minimized or avoided, in accordance with Policy SG-e of the Shasta County General Plan. *Timing/Implementation: Prior to issuance of building permit.* *Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division, Building Division.*	Less than significant
Impact 4.5.6 Geologic and soil impacts are site-specific and are generally not affected by cumulative development in the region.	Less than significant	No mitigation required.	–

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Hazards and Hazardous Materials			
Impact 4.6.1 The project would be located in a very high wildland fire hazard area.	Significant	**MM 4.6.1a** The project applicant shall comply with the standard requirements and recommendations of the Shasta County Fire Department, as described in the letter from Bob Vanderhyde, County Fire Marshall, to James W. Cook, Planning Division Manager, dated August 17, 1999 (*Refer to Section 4.6 for a full list of mitigation measures pertaining to this impact*). *Timing/Implementation: Prior to commencement of project or during project operations, as appropriate.* *Enforcement/Monitoring: California Division of Forestry and Fire Protection/Shasta County Fire Department, Shasta County Department of Resource Management - Building Division.* **MM 4.6.1b** If the project applicant installs an automatic fire extinguishing system in the facility, plans shall be submitted to CDF/SCFD for review. *Timing/Implementation: Prior to commencement of the project during project operations as appropriate.* *Enforcement/Monitoring: California Division of Forestry and Fire Protection/Shasta County Fire Department, Shasta County Department of Resource Management - Building Division.*	Less than significant

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 4.6.2 The project may interfere with airstrip activities.	Significant	**MM 4.6.2a** When in operation, the boundaries of the airstrip shall be clearly flagged or otherwise marked to make them obvious to equipment operators and to prevent unintentional encroachment by equipment and other vehicles onto the airstrip. *Timing/Implementation: During project operations.* *Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division.*	Less than significant
Impact 4.6.3 Activities associated with the project would use hazardous materials.	Significant	**MM 4.6.3a** The project applicant shall construct a durable impermeable pad, such as a concrete pad, adjacent to the fuel storage tank areas where vehicles are fueled, in order to catch any spilled fuel, oil, antifreeze or other motor vehicle fluids and to direct it to a sump. The design of the pad, drainage system and sump shall be reviewed by the Regional Water Quality Control Board prior to construction. *Timing/Implementation: Prior to issuance of building permit.* *Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division.*	Less than significant
Impact 4.6.4 Hazardous material usage in the vicinity would mainly be limited to the project site.	Less than significant	No mitigation required.	–

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Hydrology and Water Quality			
Impact 4.7.1 Project operations may contaminate groundwater in the aquifer beneath the project site.	Significant	**MM 4.7.1a** At least once every year, each employee on the site shall be informed in writing that there is a shallow, fast-moving aquifer under the site, and that the groundwater in the aquifer flows in the direction of Burney Falls and Lake Britton. Employees shall be made aware that any spillage of fuel, oil, antifreeze, solvents, trailer sewage and other materials during equipment fueling, maintenance repair and/or storage may penetrate the soil and contaminate the aquifer. Employees shall be advised to avoid any spillage and to immediately report any spillage to their employer so that it can be immediately cleaned up and removed to an appropriate disposal site. All new employees shall receive the above information. *Timing/Implementation: Upon commencement of project operations. Monitoring to be conducted as part of annual mine inspection program.* *Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division.*	Less than significant

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 4.7.2 The project may expose structures to a potential flood hazard.	Potentially significant	**MM 4.7.2a** The project applicant shall construct drainage improvements to accommodate potential flows flows entering the site from Burney Creek during 10-year or greater storm events and local drainage from the approximately two square miles of basin south of the project site. The drainage improvement plans shall be based upon recommendations contained in a drainage study addressing the aforementioned flows, to be prepared by the project applicant. Recommended improvements may include, but are not limited to, additional retention basin space in the log pond area, new conveyance features or new retention basins. No offsite improvements shall be included as part of the drainage improvements proposed for the project. The drainage improvement plans shall be reviewed and approved by the County Department of Public Works prior to project construction. *Timing/Implementation: Study to be conducted prior to approval of site plan. Improvements to be made prior to October 15 of the year project operations commence. Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division.*	Less than significant
Impact 4.7.3 The project would require the use of groundwater beneath the project site for proposed activities.	Less than significant	No mitigation required.	–
Impact 4.7.4 Blasting from quarry operations could alter the flow characteristics of the aquifer beneath the project site.	Less than significant	No mitigation required.	–

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 4.7.5 The project is not likely to affect water flows through Burney Falls.	Less than significant	No mitigation required.	–
Impact 4.7.6 The cumulative impacts of the project on water supply in the Burney Creek watershed would be minimal.	Less than significant	No mitigation required.	–
Impact 4.7.7 The cumulative impacts of the project on water quality in the vicinity would be minimal.	Less than significant	No mitigation required.	–
Noise			
Impact 4.8.1 Temporary increases in noise levels would occur during project construction activities.	Less than significant	No mitigation required.	–
Impact 4.8.2 The project would generate noise associated with excavation and other quarry activities.	Less than significant	No mitigation required.	–
Impact 4.8.3 The project would generate noise associated with the crushing and screening operation.	Less than significant	No mitigation required.	–
Impact 4.8.4 The project would generate noise associated with the asphalt plant.	Less than significant	No mitigation required.	–
Impact 4.8.5 The project would generate noise associated with the concrete batch plant.	Less than significant	No mitigation required.	–
Impact 4.8.6 The project would generate noise associated with the truck repair facility.	Less than significant	No mitigation required.	–
Impact 4.8.7 The project would generate noise associated with traffic to and from the project site.	Less than significant	No mitigation required.	–

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 4.8.8 Blasting from quarry operations could disturb residents in the vicinity.	Significant	**MM 4.8.8a** Blasting shall take place only between the hours of 9:30 a.m. to 3:30 p.m., Monday through Friday, up to a total of six times per year. *Timing/Implementation: Upon commencement of quarry activities.* *Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division.* **MM 4.8.8b** Blasting shall not create any vibration detectable without instruments at or outside of the parcel boundaries. *Timing/Implementation: Upon commencement of quarry activities.* *Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division.*	Less than significant

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
		MM 4.8.8c Blasting shall be conducted to meet the following requirements. If there is a discrepancy between standards, the more restrictive standard shall apply: 1) Peak particle velocity ("ground vibration") shall not exceed 0.5 inches per second for vibration frequencies below 40 hertz, and 2.0 inches per second for vibration frequencies of 40 hertz or more, measured directly between the nearest residence and the blast site. 2) The maximum air overpressure ("air blast") shall not exceed 0.014 pounds per square inch (psi), measured directly between the nearest residence and the blast site. The project applicant shall establish blast criteria based upon the maximum permitted ground vibration and air blast (*For what shall be included in the criteria, refer to Section 4.8*). The project applicant shall submit a report to the Planning Division containing the criteria, and prior to the first blast shall notify the Planning Division at least two weeks in advance. The blast criteria shall be revised, if necessary, to ensure that maximum levels of ground vibration and air blast are not exceeded, based upon analysis of the first blast. The project applicant shall report to the Planning Division whether and how the blast criteria have been revised. *Timing/Implementation: Prior to first blast.* *Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division.*	

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
		MM 4.8.8d A qualified independent consultant shall record the effect of the first blast with a minimum of one seismometer and one air pressure blast recording instrument set up at a location between the blast site and nearby residential structures. The consultant shall submit a report to the Shasta County Planning Division within two weeks of the first blast. The report shall include copies of the recording instrument tapes of the blast and an analysis of the recording data to determine whether the blast met the criteria established in MM 4.88c. *Timing/Implementation: Upon commencement of first blast.* *Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division.* **MM 4.8.8e** The project applicant shall notify all residents and businesses within 1.5 miles of the blast site at least 24 hours prior to each blast. The project applicant shall also notify the Fire Dispatch Center by telephone at 225-241at least 24 hours prior to each blast. *Timing/Implementation: Prior to each blast.* *Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division.*	

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
		MM 4.8.8f If complaints are received from nearby residents, the County may require the project applicant to arrange annual or more frequent blast monitoring by a qualified independent consultant. Based upon the results of such monitoring, the project applicant may be required to revise the blast criteria so as to reduce or eliminate the blast effect generating complaints. *Timing/Implementation: Upon commencement of blasting.* *Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division.* **MM 4.8.8g** The project applicant shall obtain a blasting permit from the Shasta County Sheriff's Office *Timing/Implementation: Prior to first blast.* *Enforcement/Monitoring: Shasta County Sheriff's Office* **MM 4.8.8h** Explosives may be stored on the project site, provided that their transportation, handling and storage comply with all applicable Federal, State and local regulations. *Timing/Implementation: Upon commencement of quarry activities.* *Enforcement/Monitoring: Shasta County Division of Environmental Health.*	

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 4.8.9 The predicted noise levels generated by individual components of the project could have a significant impact when combined.	Potentially significant	**MM 4.8.9a** Short-term noise level measurements shall be conducted by the project applicant at the nearest residences to ensure that the various components of the project are not exceeding the County's adopted noise standards. If the results of that monitoring indicate that the County's noise standards are exceeded, additional noise control measures shall be implemented as needed. Such measures could include increasing setbacks, modifications of project hours of operations, the use of localized noise barriers in the form of aggregate stockpiles, portable sound attenuating blankets suspended in close proximity to the processing equipment, or other barrier configurations as may be appropriate. Noise level measurements shall be conducted at least twice annually in the first year of full project operations, and at least once annually afterwards. *Timing/Implementation: Following commencement of regular activities at the project site. Monitoring to be conducted as part of annual mine inspection. Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division.*	Less than significant

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
		MM 4.8.9b In the event that the Planning Division receives complaints about noise or vibrations, the Planning Director shall review the complaint and determine whether it can be verified. If it can be verified, the Planning Director shall inform the project applicant that a study must be submitted to the Planning Division from an acoustical engineer or other qualified professional, including actual measurements of noise and vibration from project operations and blasting. The Planning Director may choose to have the Planning Division hire the acoustical engineer or other qualified professional to perform the study. In that case, the project applicant shall deposit monies with the Planning Division to cover the cost of the study and associated administrative costs. If the complaint is verified by the study, the study shall recommend measures to reduce or eliminate the causes of the complaint. The Planning Director shall require the project applicant to implement the recommendations deemed feasible by the Planning Director. *Timing/Implementation: Upon receipt of complaint following commencement of regular activities at the project site.* *Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division.*	
Recreation			
Impact 4.9.1 Noise and air pollutant emissions from project operations may disturb users of recreational facilities in the vicinity of the project.	Less than significant	Mitigation measures for air quality (Section 4.3) and noise (Section 4.8) are adequate to minimize potential impacts.	–

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 4.9.2 The project is expected to have only an incremental effect on recreation in the area.	Less than significant	No mitigation required.	–
Mitigations for environmental issues not discussed in the EIR. (See Section 4.1 for further information)			
Cultural resources		**MM 4.1.4a** If, in the course of development, any archaeological, historical or paleontological resources or human remains are uncovered, discovered or otherwise detected or observed, construction activities in the affected area shall cease and a qualified archaeologist shall be contacted to review the site and advise the Planning Division of the site's significance. If the findings are deemed significant by the Environmental Review Officer, appropriate mitigation shall be required. *Timing/Implementation: During project implementation. Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division.*	
Transportation and traffic		**MM 4.1.4b** The project shall require a Caltrans encroachment permit to upgrade the existing driveway road approach to Caltrans "Type C" standards with a typical (R-2) modified deceleration right-turn lane and typical acceleration lane (X-6). *Timing/Implementation: At commencement of project implementation. Enforcement/Monitoring: California Department of Transportation.*	

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Utilities and service systems		**MM 4.1.4c** Onsite containment of wastewater shall be monitored by the Planning Division, as well as by the Regional Water Quality Control Board as part of its periodic inspection program. *Timing/Implementation: As part of the annual mine inspection program.* *Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division.*	