County of Santa Cruz

PLANNING DEPARTMENT
701 OCEAN STREET, 4TH FLOOR, SANTA CRUZ, CA 95060
(831) 454-2580 FAX: (831) 454-2131
KATHLEEN MOLLOY, PLANNING DIRECTOR
www.sccoplanning.com

NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION

NOTICE OF PUBLIC REVIEW AND COMMENT PERIOD

Pursuant to the California Environmental Quality Act, the following project has been reviewed by the County Environmental Coordinator to determine if it has a potential to create significant impacts to the environment and, if so, how such impacts could be solved. A Negative Declaration is prepared in cases where the project is determined not to have any significant environmental impacts. Either a Mitigated Negative Declaration or Environmental Impact Report (EIR) is prepared for projects that may result in a significant impact to the environment.

Public review periods are provided for these Environmental Determinations according to the requirements of the County Environmental Review Guidelines. The environmental document is available for review at the County Planning Department located at 701 Ocean Street, in Santa Cruz. You may also view the environmental document on the web at www.sccoplanning.com under the Planning Department menu. If you have questions or comments about this Notice of Intent, please contact Matt Johnston of the Environmental Review staff at (831) 454-5357.

The County of Santa Cruz does not discriminate on the basis of disability, and no person shall, by reason of a disability, be denied the benefits of its services, programs or activities. If you require special assistance in order to review this information, please contact Bernice Shawver at (831) 454-3137 to make arrangements.

PROJECT: Felton Quarry **APP #: 191104**

APNs: 062-181-12, 064-201-13, -79, 80, -81, 064-211-67, -68

PROJECT DESCRIPTION: The project is an amendment of the Felton Quarry Mining Approval to allow eighty (80) additional off-hours operations, which occur outside of the normal operating hours of the quarry, for a total of one hundred (100) off-hours operations per year. The mining operation includes an asphalt plant that processes heavy oil with aggregate to produce asphaltic concrete used in road and highway construction and maintenance throughout Santa Cruz County and the region. Off-hours operations include operation of the asphalt plant to supply public paving projects at night and on Saturday. The normal operating hours of the quarry are 6:00 A.M. to 8:00 P.M. Monday through Friday for shipping. The existing Mining Approval allows twenty (20) exceptions to these hours for operation of the asphalt plant and trucking of asphalt to public paving projects at night and on Saturday without prior approval of the Planning Director. One exception is represented by one night operation or one Saturday operation, and one night or Saturday operation may involve varying amounts of truck trips depending on the size of the paving project. The existing Mining Approval also allows the quarry operator to request twenty (20) additional exceptions and the Planning Department has the discretion to approve or deny the request. Approval such a request would allow a total of up to forty (40) off-hours operations per year under the existing Mining Approval. With this application, the quarry operator is seeking to amend the Mining Approval for approval of eighty (80) additional exceptions in addition to the twenty (20) exceptions already allowed by the permit conditions for a total of one hundred (100) exceptions for off-hours operations of the asphalt plant.

The reason for the request is due to a combination of factors. Because of increasing traffic congestion and the impacts on traffic flow, road maintenance projects on major roadways and highways are

increasingly scheduled at night to reduce traffic congestion and improve job safety. In addition, the Road Repair and Accountability Act of 2017 (SB 1) is generating significant new funding for road maintenance projects, which is expected to result in an increase in paving projects occurring at night.

PROJECT LOCATION: The project is located at the end of Felton Quarry Road which extends from San Lorenzo Avenue in the community of Felton in unincorporated Santa Cruz County. Santa Cruz County is located on the central California coast in the northern part of Monterey Bay. The inland boundary of the County follows the crest of the northwest-southeast trending Santa Cruz Mountains. The Felton Quarry is located in an area of granitic rocks in the northern part of the County in a rural area between the town of Felton and the more dispersed community of Bonny Doon.

APPLICANT/OWNER: Granite Construction Company / CGK, Sinnot, Kester, et.al.
PROJECT PLANNER: David Carlson, (831) 454-3173
EMAIL: David.Carlson@santacruzcounty.us
ACTION: Negative Declaration
REVIEW PERIOD: February 3, 2020 through February 24, 2020

This project will be considered at a public hearing before the Planning Commission. The time, date and location have not been set. When scheduling does occur, these items will be included in all public hearing notices for the project.

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NEGATIVE DECLARATION

Project: Felton Quarry **APPLICATION #: 191104**

APNs: 062-181-12, 064-201-13, -79, 80, -81, 064-211-67, -68

Project Description: The project is an amendment of the Felton Quarry Mining Approval to allow eighty (80) additional off-hours operations, which occur outside of the normal operating hours of the quarry, for a total of one hundred (100) off-hours operations per year. The mining operation includes an asphalt plant that processes heavy oil with aggregate to produce asphaltic concrete used in road and highway construction and maintenance throughout Santa Cruz County and the region. Off-hours operations include operation of the asphalt plant to supply public paving projects at night and on Saturday. The normal operating hours of the quarry are 6:00 A.M. to 8:00 P.M. Monday through Friday for shipping. The existing Mining Approval allows twenty (20) exceptions to these hours for operation of the asphalt plant and trucking of asphalt to public paving projects at night and on Saturday without prior approval of the Planning Director. One exception is represented by one night operation or one Saturday operation, and one night or Saturday operation may involve varying amounts of truck trips depending on the size of the paving project. The existing Mining Approval also allows the quarry operator to request twenty (20) additional exceptions and the Planning Department has the discretion to approve or deny the request. Approval such a request would allow a total of up to forty (40) off-hours operations per year under the existing Mining Approval. With this application, the quarry operator is seeking to amend the Mining Approval for approval of eighty (80) additional exceptions in addition to the twenty (20) exceptions already allowed by the permit conditions for a total of one hundred (100) exceptions for off-hours operations of the asphalt plant.

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Project Location: The project is located at the end of Felton Quarry Road which extends from San Lorenzo Avenue in the community of Felton in unincorporated Santa Cruz County. Santa Cruz County is located on the central California coast in the northern part of Monterey Bay. The inland boundary of the County follows the crest of the northwest-southeast trending Santa Cruz Mountains. The Felton Quarry is located in an area of granitic rocks in the northern part of the County in a rural area between the town of Felton and the more dispersed community of Bonny Doon.

Owner: CGK, Sinnot, Kester, et.al.

Applicant: Granite Construction Company

Staff Planner: David Carlson, (831) 454-3173

Email: David.Carlson@santacruzcounty.us

This project will be considered at a public hearing before the Planning Commission. The time, date and location have not been set. When scheduling does occur, these items will be included in all public hearing notices for the project

California Environmental Quality Act Negative Declaration Findings:

Find, that this Negative Declaration reflects the decision-making body's independent judgment and analysis, and; that the decision-making body has reviewed and considered the information contained in this Negative Declaration and the comments received during the public review period, and; on the basis of the whole record before the decision-making body (including this Negative Declaration) that there is no substantial evidence that the project will have a significant effect on the environment. The expected environmental impacts of the project are documented in the attached Initial Study on file with the County of Santa Cruz Clerk of the Board located at 701 Ocean Street, 5th Floor, Santa Cruz, California.

Review Period Ends: February 24, 2020

Date: _____

_____

MATT JOHNSTON, Environmental Coordinator
(831) 454-5357

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CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)
INITIAL STUDY/ENVIRONMENTAL CHECKLIST

Date: Thursday January 16, 2020 **Application Number:** 191104

Project Name: Felton Quarry **Staff Planner:** David Carlson

I. OVERVIEW AND ENVIRONMENTAL DETERMINATION

APPLICANT: Granite Construction Company **APN(s):** 062-181-12, 064-201-13, -79, -80, -81, 064-211-67, -68

OWNER: CGK, Sinnot, Kester, etal. **SUPERVISORAL DISTRICT:** 3 and 5

PROJECT LOCATION: The project is located at the end of Felton Quarry Road which extends from San Lorenzo Avenue in the community of Felton in unincorporated Santa Cruz County (Figure 1). Santa Cruz County is located on the central California coast in the northern part of Monterey Bay. The inland boundary of the County follows the crest of the northwest-southeast trending Santa Cruz Mountains. The Felton Quarry is located in an area of granitic rocks in the northern part of the County in a rural area between the town of Felton and the more dispersed community of Bonny Doon.

SUMMARY PROJECT DESCRIPTION:

The project is an amendment of the Felton Quarry Mining Approval to allow eighty (80) additional off-hours operations, which occur outside of the normal operating hours of the quarry, for a total of one hundred (100) off-hours operations per year. The mining operation includes an asphalt plant that processes heavy oil with aggregate to produce asphaltic concrete used in road and highway construction and maintenance throughout Santa Cruz County and the region. Off-hours operations include operation of the asphalt plant to supply public paving projects at night and on Saturday. The normal operating hours of the quarry are 6:00 A.M. to 8:00 P.M. Monday through Saturday for mining and processing, and 6:00 A.M. to 8:00 P.M. Monday through Friday for shipping. The existing Mining Approval allows twenty (20) exceptions to these hours for operation of the asphalt plant and trucking of asphalt to public paving projects at night and on Saturday without prior approval of the Planning Director. One exception is represented by one night operation or one Saturday operation, and one night or Saturday operation may involve varying amounts of truck trips depending on the size of the paving project. The existing Mining Approval also allows the quarry operator to request twenty (20) additional exceptions and the Planning Department has the discretion to approve or deny the request. Approval of such a request would allow a total of up to forty (40) off-

hours operations per year under the existing Mining Approval. With this application, the quarry operator is seeking to amend the Mining Approval for approval of eighty (80) additional exceptions in addition to the twenty (20) exceptions already allowed by the permit conditions for a total of one hundred (100) exceptions for off-hours operations of the asphalt plant.

The reason for the request is due to a combination of factors. Because of increasing traffic congestion and the impacts on traffic flow, road maintenance projects on major roadways and highways are increasingly scheduled at night to reduce traffic congestion and improve job safety. In addition, the Road Repair and Accountability Act of 2017 (SB 1) is generating significant new funding for road maintenance projects, which is expected to result in an increase in paving projects occurring at night.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: *All of the following potential environmental impacts are evaluated in this Initial Study. Categories that are marked have been analyzed in greater detail based on project specific information.*

- ☐ Aesthetics and Visual Resources
- ☐ Agriculture and Forestry Resources
- ☒ Air Quality
- ☐ Biological Resources
- ☐ Cultural Resources
- ☐ Energy
- ☐ Geology and Soils
- ☒ Greenhouse Gas Emissions
- ☐ Hazards and Hazardous Materials
- ☐ Hydrology/Water Supply/Water Quality
- ☒ Land Use and Planning
- ☒ Mineral Resources
- ☒ Noise
- ☐ Population and Housing
- ☐ Public Services
- ☐ Recreation
- ☒ Transportation
- ☐ Tribal Cultural Resources
- ☐ Utilities and Service Systems
- ☐ Wildfire
- ☐ Mandatory Findings of Significance

DISCRETIONARY APPROVAL(S) BEING CONSIDERED:

- ☐ General Plan Amendment
- ☐ Land Division
- ☐ Rezoning
- ☐ Development Permit
- ☐ Sewer Connection Permit
- ☐ Coastal Development Permit
- ☐ Grading Permit
- ☐ Riparian Exception
- ☐ LAFCO Annexation
- ☒ Other: Mining Approval Amendment

OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED (e.g., permits, financing approval, or participation agreement):

Permit Type/Action	Agency
None	None

CONSULTATION WITH NATIVE AMERICAN TRIBES: *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.?*

No California Native American tribes traditionally and culturally affiliated with the area of Santa Cruz County have requested consultation pursuant to Public Resources Code section 21080.3.1.

DETERMINATION:

On the basis of this 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 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.

MATT JOHNSTON, Environmental Coordinator _____ Date

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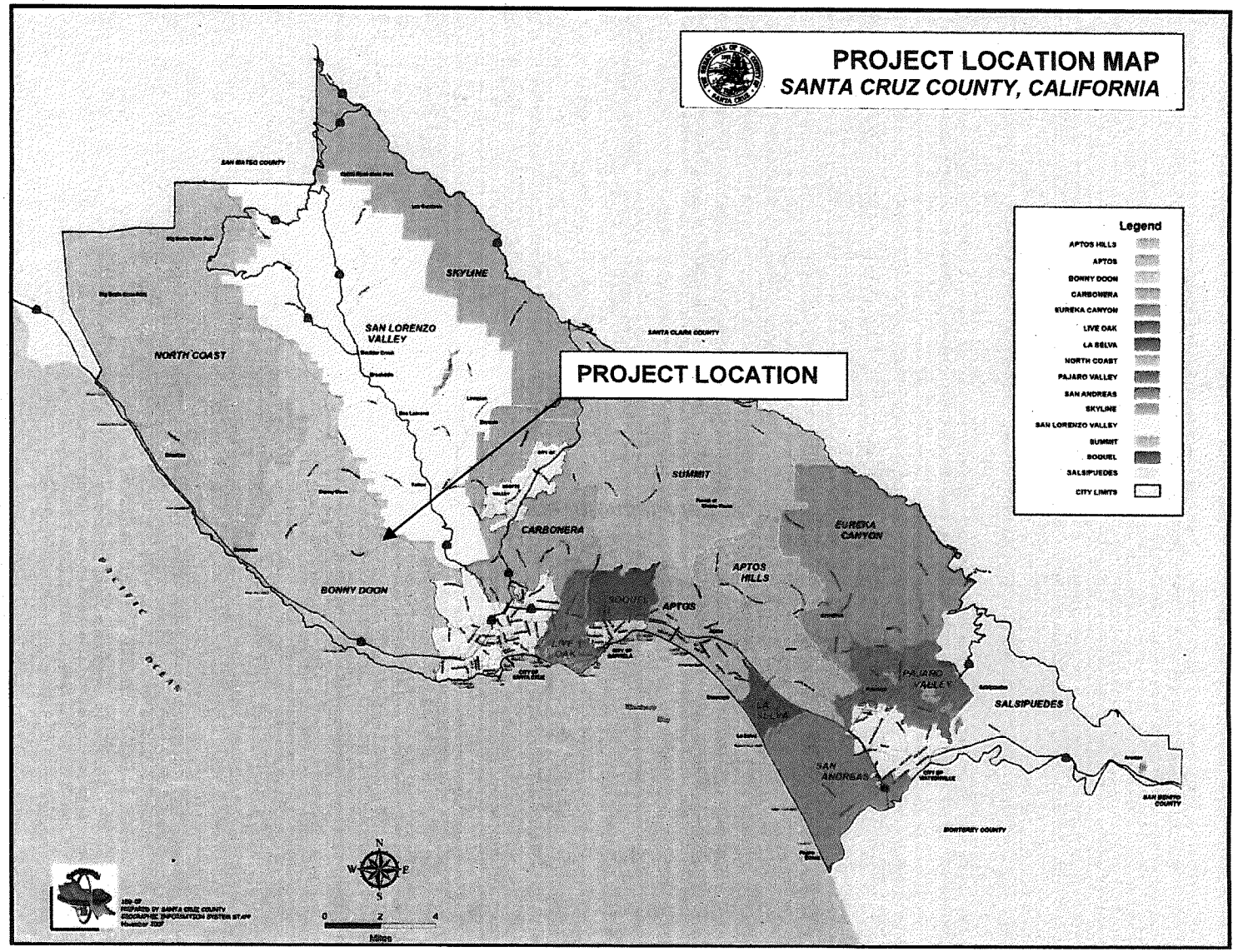
PROJECT LOCATION MAP
SANTA CRUZ COUNTY, CALIFORNIA
PROJECT LOCATION
Legend
APTOS HILLS
APTOS
BONNY DOON
CARBONERA
EUREKA CANYON
LIVE OAK
LA SELVA
NORTH COAST
PAJARO VALLEY
SAN ANDREAS
SKYLINE
SAN LORENZO VALLEY
SUMMIT
SOQUEL
SALSIPUEDES
CITY LIMITS
SKYLINE
SAN LORENZO VALLEY
NORTH COAST
SUMMIT
CARBONERA
EUREKA CANYON
APTOS HILLS
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Figure 1

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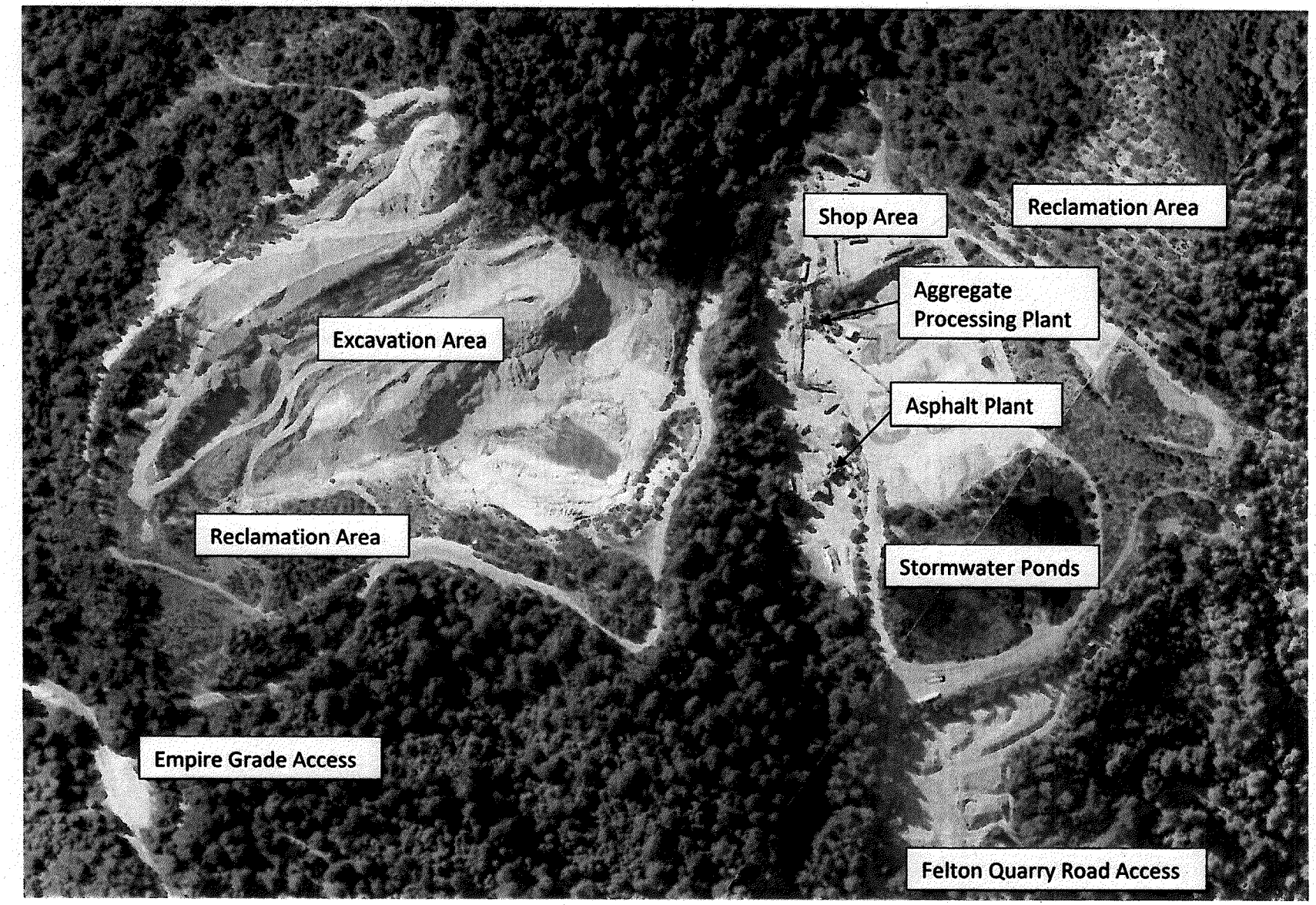

Project Site Plan **Figure 2**

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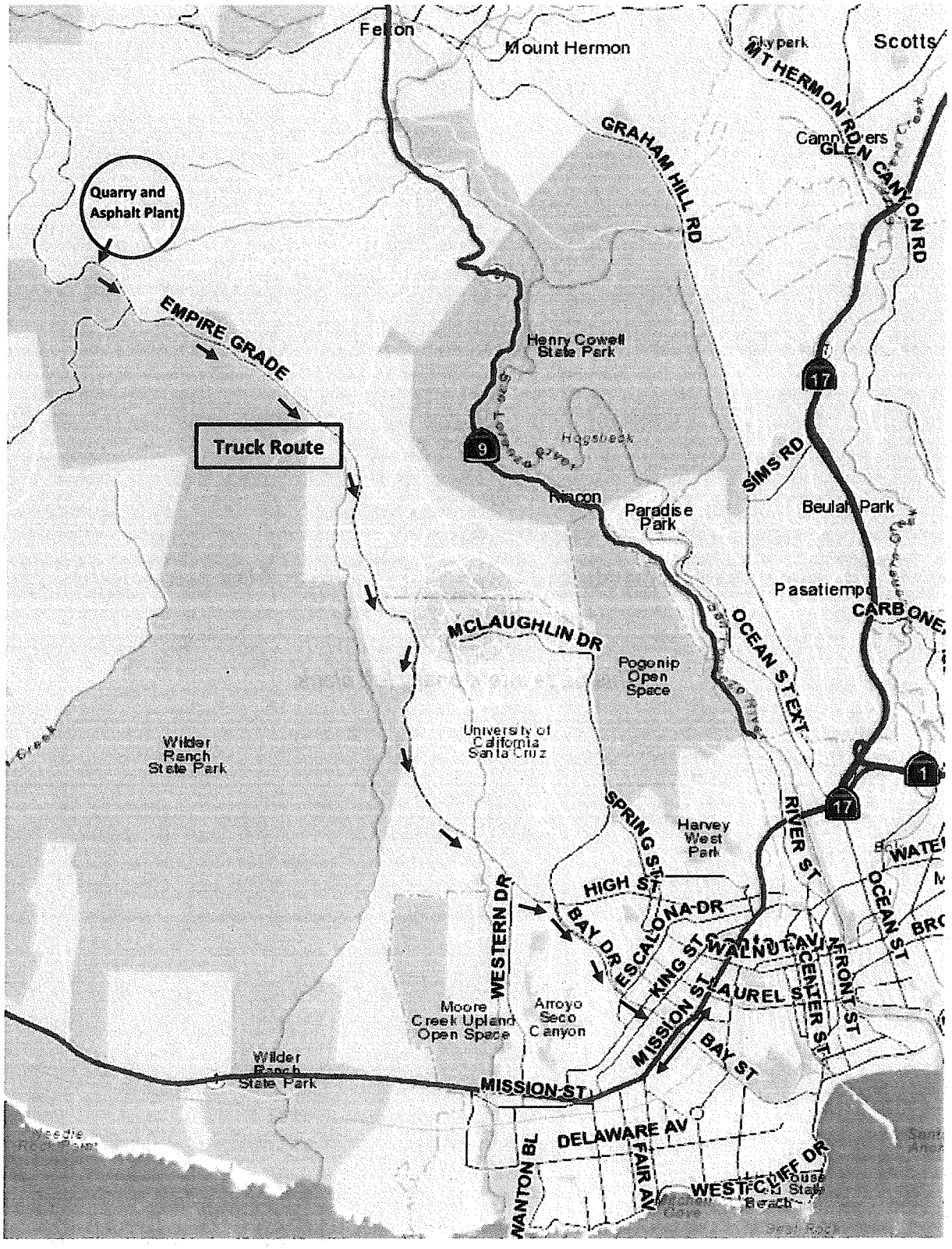

Night and Saturday Truck Route **Figure 3**

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II. BACKGROUND INFORMATION

EXISTING SITE CONDITIONS:

Parcel Size (acres):	7 parcels, 260 acres; Mining area approximately 90 acres
Existing Land Use:	Mining
Vegetation:	Mixed evergreen forest outside of mining area
Slope in area affected by project:	☐ 0 - 30% ☐ 31 – 100% ☒ N/A
Nearby Watercourse:	Gold Gulch Creek
Distance To:	Headwaters on site

ENVIRONMENTAL RESOURCES AND CONSTRAINTS:

Water Supply Watershed:	Yes	Fault Zone:	No
Groundwater Recharge:	Yes	Scenic Corridor:	No
Timber or Mineral:	Both	Historic:	No
Agricultural Resource:	No	Archaeology:	No
Biologically Sensitive Habitat:	No	Noise Constraint:	Yes
Fire Hazard:	Critical/High	Electric Power Lines:	N/A
Floodplain:	No	Solar Access:	N/A
Erosion:	Yes	Solar Orientation:	Yes
Landslide:	Yes	Hazardous Materials:	Yes
Liquefaction:	No	Other:	N/A

SERVICES:

Fire Protection:	CSA 48	Drainage District:	Zone 8
School District:	SLV	Project Access:	Private
Sewage Disposal:	CSA 12	Water Supply:	Wells

PLANNING POLICIES:

Zone District:	M-3, TP	Special Designation:	No
General Plan:	R-M	Mountain Residential	
Urban Services Line:	☐ Inside	☒ Outside	
Coastal Zone:	☐ Inside	☒ Outside	

ENVIRONMENTAL SETTING AND SURROUNDING LAND USES:

Natural Environment

Santa Cruz County is uniquely situated along the northern end of Monterey Bay approximately 55 miles south of the City of San Francisco along the Central Coast. The Pacific Ocean and Monterey Bay to the west and south, the mountains inland, and the prime agricultural lands along both the northern and southern coast of the county create limitations on the style and amount of building that can take place. Simultaneously, these natural features create an environment that attracts both visitors and new residents every year. The natural landscape provides the basic features that set Santa Cruz apart from the surrounding counties and require

specific accommodations to ensure building is done in a safe, responsible and environmentally respectful manner.

The California Coastal Zone affects nearly one third of the land in the urbanized area of the unincorporated County with special restrictions, regulations, and processing procedures required for development within that area. Steep hillsides require extensive review and engineering to ensure that slopes remain stable; buildings are safe, and water quality is not impacted by increased erosion. The farmland in Santa Cruz County is among the best in the world, and the agriculture industry is a primary economic generator for the County. Preserving this industry in the face of population growth requires that soils best suited to commercial agriculture remain active in crop production rather than converting to other land uses.

There are a number of active mining operations in Santa Cruz County which provide important mineral resources for industrial uses and construction purposes. The mines occur on mineral resource lands that have been classified by the State Geologist and designated by the State Mining and Geology Board as Regionally Significant Mineral Resource Areas. County policies reflect the requirements of State law to protect mineral resource lands for the orderly extraction of minerals with minimal impact on the environment and surrounding land uses, and reclamation of mine (quarry) sites.

PROJECT BACKGROUND:

While mining has taken place at the Felton Quarry for a much longer period of time, a use permit was approved by the County in 1979 following passage of the State Surface Mining and Reclamation Act (SMARA). A major amendment to the use permit was approved in 1993 that established the current mining plan and another amendment was approved in 2000 that allowed additional night operations of the asphalt plant. In addition, the Planning Commission has conducted periodic reviews of the mining operation in 2004 and 2010. As a result of the 2004 review additional measures were implemented by Granite Construction that have significantly reduced noise and improved dust control at the quarry.

DETAILED PROJECT DESCRIPTION:

The Felton Quarry operation mines and processes construction aggregate and asphalt concrete (asphalt) products for construction and maintenance projects throughout Santa Cruz County and regionally. The quarry also provides decorative aggregate materials (California Gold path fines, washed aggregates and accent boulders) that are used throughout northern California. The Felton Quarry operations are currently in their 41st year of mining under the current mining approval. The original mining approval estimated a 50-year operating life, which indicates the remaining lifespan of the Quarry, under the original estimate, would be about 9 years. However, due to a historic rate of mining which has been less than the original estimate, the remaining lifespan will likely be longer than 9 years.

Quarry operations include the excavation, washing, screening, stockpiling and shipping of aggregate resources. Mining operations begin with the stripping of vegetation and removal of topsoil, which is then stockpiled for use in future reclamation activities. The next process is removing raw materials from the deposit by the benching method. The first step in this process is the ripping of the material by a large ripper-equipped bulldozer. This method is occasionally augmented by blasting when necessary. The harvested raw material is loaded onto the primary feeder and a conveyor system transfers the material to the crushing and screening plant for processing.

The process of washing and screening the aggregates to produce the desired products requires the use of large quantities of water. Initially water is stored in a reservoir and is then used for scrubbing and rinsing of the aggregates. The process water is then directed to a clarifier that mechanically separates large amounts of fine sand, silt and clay. The next step in the dewatering process includes a belt press that squeezes out additional water from the silts and clays. The process water is directed back to the plant for washing aggregate. The "mud" is then sold/donated as a product or used in onsite reclamation. This wash water system was improved in 1995 to recycle 100% of the water directly from the clarifier/ belt press system and to eliminate flow to the pond system.

All shipping is accomplished by trucks, which vary in size from pick-ups to double trailer big rigs over specific haul routes.

The operation includes an asphalt plant that processes heavy oil with aggregate to produce asphalt used in road and highway construction and maintenance throughout Santa Cruz County and the region. The asphalt plant can also use Recycled Asphalt Products (RAP) in its mix, processing old asphalt removed from the highway as part of the fresh asphalt mix returned to the highway. The asphalt plant can produce new asphalt that includes 15 percent RAP with plans to increase the portion to 25 percent. This reduces the amount of fresh oil and aggregate needed to produce new asphalt. As allowed under the existing permit, the asphalt plant occasionally operates at night to supply public road paving projects that occur at night. Because of increased traffic congestion and the impacts on traffic flow, road maintenance projects on major roadways and highways are increasingly scheduled at night to reduce traffic congestion and improve job safety.

Twenty exceptions for off-hour operations of the asphalt plant (nights and Saturday) are allowed without prior approval of the Planning Director. An additional 20 exceptions per year may be granted at the discretion of the Planning Director for off-hour operations for a maximum of 40 exceptions per year. In recent years the number of off-hours operations has varied from 1 to 34 per year. All off-hour operations are for public agency projects only. Neighborhood notification is given prior to each off-hour operation. During off-hours operations the quarry monitors speed and decibel levels of trucks along the haul route through the neighborhood. A neighborhood notice that is mailed out to neighbors along the haul route contains telephone numbers of the quarry and the Planning Department quarry planner. The

contact information is intended to enable neighbors to contact the quarry or the Planning Department quarry planner during the off-hours operation to lodge a complaint. In recent years there has been a very small number of complaints, ranging from zero to three per year.

The asphalt plant, which operates at night on the occasion of an exception, is constructed with noise reducing equipment (mufflers, silencers) on noise producing parts of the plant. As a result of the 2010 Planning Commission review additional noise reducing equipment was installed, which further reduced noise level. In addition, since the last Planning Commission review the operator has been using an asphalt odor suppressant added to the asphalt oil to reduce odors in general and during night operations.

The quarry maintains a trucker awareness program consisting of several elements. All first-time truckers receive a copy of the Felton Quarry Trucker Policy consisting of speed, noise and time restrictions along with enforcement actions for violations. The quarry operator conducts occasional radar monitoring of speed to enforce this policy. Signs are posted along the quarry road to remind truckers about speed and noise. Truckers are required to use specific haul routes either through Felton and Scotts Valley or down Empire Grade during normal operations, and down Empire Grade only during night operations. The truck route for a night operation is down Empire Grade, which transitions to High Street within the City of Santa Cruz, right on Bay Drive, which transitions to Bay Street at the bottom of the hill, and left or right on Mission Street, which is the continuation of Highway 1 through the City of Santa Cruz. The Planning Department receives no complaints related to trucking during normal operating hours.

Granite Construction was recently selected by the California Department of Transportation (Caltrans) as the lead contractor on a Highway 17 road repaving project that required approximately 100 nights of paving work in 2019. As with most contemporary Caltrans projects, the contract required paving at night to limit the impact to daytime commuters. Granite Construction did supply the project with asphalt out of multiple area plants and submitted a request to the Santa Cruz County Planning Department to be able to supply 50 of the nights out of the Felton Plant in 2019. Planning Department staff granted the request with concurrence from the Planning Commission as a Minor Variation to their permit. This paving work was facilitated in part as a result of the recent voter-approved increase in gas tax funding and it is anticipated that an increased amount of paving work will continue in future years (In the 2018 election voters defeated Proposition 6, which proposed a repeal of SB 1). In anticipation of this trend, this application by Granite Construction seeks approval of a Minor Amendment to their permit, similar to the 2000 minor amendment, to increase off-hours operations at the Felton Plant to 100 nights and weekends per year.

Santa Cruz County Code Chapters 18.10 Procedures contains several provisions addressing permit amendments and SCCC Chapter 16.54 Mining Regulations contains specific procedures for amendments to mining permits, including a Minor Variation, or Minor or Major Amendment.

A Minor Variation is an amendment to a planning approval, including (without limitation) project design, improvements, or conditions of approval, if the amendment does not affect the overall concept, density, or intensity of use of the approved project, and if it does not involve either a modification of a design consideration, an improvement, or a condition of approval which was a matter of discussion at the public hearing at which the planning approval was granted (SCCC 18.10.134). The Mining Regulations specifically provide that a Minor Variation to any condition of approval of a mining permit may be made by Planning staff, pursuant to the authority contained in SCCC 18.10.134, and shall be forwarded as a written correspondence item on the next Planning Commission agenda. No other public notice is required. In reviewing the Minor Variation the Planning Commission may require the minor variation to be processed as a Minor or Major Amendment or may add, delete, or revise any condition of the Minor Variation (SCCC 16.54.032(e)).

The existing permit allows up to 40 off-hours operations of the asphalt plant and the Minor Variation approved in 2019 allowed up to 50 off-hours operations for the year 2019 only. In future years the existing permit allowance of up to 40 off-hours operations per year would remain in effect unless another permit amendment is granted. The current application is a request to allow up to 100 off-hours operations per year.

A Minor Mining approval amendment means a minor change to a mining operation having no significant impact on the environment, which may include (without limitation), minor change in hours of operation, drainage pattern or operational equipment (SCCC 16.54.020). Based on the analysis in this Initial Study, the proposed project would not have a significant effect on the environment, and a Negative Declaration will be prepared. Therefore, the proposed project qualifies as a Minor Amendment. A Minor Mining Approval Amendment is a staff level review, meaning no public hearing is required, but requires public notice by mail to property owners and occupants within 0.5 miles of the mine and to others who have requested to be on the mailing list.

The mining regulations also require that the mining operation undergo a permit review by the Planning Commission at regular intervals. The last permit review occurred in 2010, therefore, the mining operation is due for another permit review by the Planning Commission. Santa Cruz County Code requires that when more than one permit action is required for any one project, all the required actions for that permit shall, when appropriate, be concurrently acted upon at the highest processing level required for any of the required permit actions for the project (SCCC 18.10.123(B)). This means that the requested permit amendment and the permit review will both be acted on concurrently by the Planning Commission at a public hearing.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

III. ENVIRONMENTAL REVIEW CHECKLIST

A. AESTHETICS AND VISUAL RESOURCES

Except as provided in Public Resources Code section 21099, would the project:

1.	*Have a substantial adverse effect on a scenic vista?*	☐	☐	☐	☒

Discussion: The project involves a request for additional off-hours operations involving operation of an existing asphalt plant and additional trucking along an existing truck route. The project would not directly impact any public scenic vistas in the area.

2.	*Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*	☐	☐	☐	☒

Discussion: The truck route for off-hours operations travels along a portion of Empire Grade which is a County-designated scenic road. However, the project would not damage any scenic resources because it does not involve any changes to physical features within a state scenic highway, a County-designated scenic road, public viewshed area, scenic corridor, or scenic resource area. Therefore, no impact would occur.

3.	*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 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?*	☐	☐	☐	☒

Discussion: The truck route for off-hours operations travels along a portion of Empire Grade which is a County-designated scenic road. However, the project would not degrade the existing visual character or quality of public views of the site and its surroundings because it does not involve any changes to physical features or public views. Therefore, no impact would occur.

4.	*Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*	☐	☐	☐	☒

Discussion: The project would create an incremental increase in night lighting during off-hours operation of the asphalt plant. However, the asphalt plant is not visible from any public areas. Therefore, no impact would occur.

B. 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 Department 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:

1. *Convert Prime Farmland, Unique Farmland, or Farmland of 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?*	☐	☐	☐	☒

Discussion: The project would not impact any lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. In addition, the project does not impact Farmland of Local Importance. Therefore, no Prime Farmland, Unique Farmland, Farmland of Statewide or Farmland of Local Importance would be converted to a non-agricultural use. No impact would occur from project implementation.

2. *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*	☐	☐	☐	☒

Discussion: The project site is not located in an agricultural zone. Additionally, the project site's land is not under a Williamson Act contract. Therefore, the project does not conflict with existing zoning for agricultural use, or a Williamson Act contract. No impact would occur.

3. *Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by*	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

Discussion: The project would not impact land designated as Timber Resource. Therefore, no impact would occur.

4. *Result in the loss of forest land or conversion of forest land to non-forest use?*	☐	☐	☐	☒

Discussion: No forest land would be affected by the project. No impact would occur.

5. *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?*	☐	☐	☐	☒

Discussion: The project would not impact Farmlands or forest lands. Therefore, no impacts would occur.

C. AIR QUALITY

The significance criteria established by the Monterey Bay Air Resources District (MBARD)[1] has been relied upon to make the following determinations. Would the project:

1. *Conflict with or obstruct implementation of the applicable air quality plan?*	☐	☐	☐	☒

Discussion: The project would not conflict with or obstruct the Air Quality Management Plan (AQMP) of MBARD for the North Central Coast Air Basin (NCCAB). Because general estimated basin-wide on-road trucking related emissions are accounted for in the emission inventories included in the AQMP, impacts to air quality plan objectives are less than significant. The project is related to ongoing maintenance of the existing transportation system and, therefore, the increased truck trips related to this project would occur regardless of the asphalt plant supplying the project.

Because the trucking activity would be associated with repaving the existing public roadway system which does not increase population or housing the trucking activity would have no impact on the emissions forecast in the AQMP. Therefore, the trucking activity would be consistent with the AQMP.

[1] Formerly known as the Monterey Bay Unified Air Pollution Control District (MBUAPCD).

Santa Cruz County is located within the NCCAB. The NCCAB does not meet state standards for ozone (reactive organic gases [ROGs] and nitrogen oxides [NOx]) and fine particulate matter (PM_{10}). Therefore, the regional pollutants of concern that would be emitted by the project are ozone precursors and PM_{10}. General estimated basin-wide trucking-related emissions are included in the MBARD emission inventory and are not expected to prevent long-term attainment or maintenance of the ozone and particulate matter standards within the North Central Coast Air Basin (NCCAB). Therefore, trucking impacts related to air quality plans for these pollutants from the project would be less than significant, and no mitigation would be required, since they are presently estimated and accounted for in the District's emission inventory. No stationary sources would be constructed that would be long-term permanent sources of emissions.

Given that no new basin-wide traffic would be generated by the project there is no indication that new emissions of ROGs or NOx would exceed MBARD thresholds for these pollutants; and therefore, there would not be a significant contribution to an existing air quality violation.

Although not a mitigation measure per se (i.e., required by law), California ultralow sulfur diesel fuel with a maximum sulfur content of 15 ppm by weight will be used in all diesel-powered equipment, which minimizes sulfur dioxide and particulate matter. In addition, California regulations require the types of trucks typically used to haul asphalt to reduce exhaust emissions by meeting particulate matter (PM) filter requirements and upgrade to a 2010 or newer engine model year (EMY).

The asphalt plant is subject to operating permits from the MBARD which sets no limits on the throughput and fuel use to operate the plant. The permits are renewed annually at which time annual process throughput, along with propane and diesel fuel usage are reported to the District. An increase in the number of allowed night operations of the asphalt plant is not limited by the existing operating permit. Therefore, the increase in night operations of the asphalt plant, subject to the existing operating permit, would not conflict with or obstruct implementation of the air quality plan.

2. *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?*	☐	☐	☐	☒

Discussion: The primary pollutants of concern for the NCCAB are ozone and PM_{10}, as those are the pollutants for which the district is in nonattainment. The criteria for assessing cumulative impacts on localized air quality are the same as those for assessing individual project impacts. Projects that do not exceed MBARD's construction or operational thresholds and are consistent with the AQMP would not have cumulatively considerable impacts on

regional air quality (MBARD, 2008). Because the project would not exceed MBARD's thresholds and is consistent with the AQMP, there would not be cumulative impacts on regional air quality.

3.	*Expose sensitive receptors to substantial pollutant concentrations?*	☐	☐	☒	☐

Discussion: The project is an amendment of the Felton Quarry Mining Approval to allow eighty (80) additional off-hours operations, which occur outside of the normal operating hours of the quarry, for a total of one hundred (100) off-hours operations per year. Off-hours operations include operation of the asphalt plant to supply public paving projects at night and on Saturday. The truck route for a night operation is down Empire Grade, which transitions to High Street within the City of Santa Cruz, right on Bay Drive, which transitions to Bay Street at the bottom of the hill, and left or right on Mission Street, which is the continuation of Highway 1 through the City of Santa Cruz. Sensitive receptors along the truck route primarily consist of residences. Along Bay Drive/Street and High Street the homes are typically setback from the front property line at least 20 feet, more in some cases, with additional distance represented by sidewalks and landscaping areas between the property line and the travel lane of the street. Sensitive receptors exist further up Empire Grade in an isolated rural residential neighborhood where the homes are typically setback from the road by much greater distances compared to homes within the city limits. There is a private school along the truck route on Empire Grade but school would not be in session during a night operation of the asphalt plant.

Diesel exhaust contains substances (diesel particulate matter [DPM], toxic air contaminants [TACs], mobile source air toxics [MSATs]) that are suspected carcinogens, along with pulmonary irritants and hazardous compounds, which may affect sensitive receptors such as young children, senior citizens, or those susceptible to respiratory disease. Where trucking activity occurs in proximity to long-term sensitive receptors, a potential could exist for unhealthful exposure of those receptors to diesel exhaust, including residential receptors.

MBARD's CEQA Air Quality Guidelines indicate that the following traffic effects should be assumed to generate a significant carbon monoxide (CO) impact, unless CO dispersion modeling demonstrates otherwise:

- Intersections or road segments that operate at level of service (LOS) D or better would operate at LOS E or F with the project's traffic;
- Intersections or road segments that operate at LOS E or F where the volume-to-capacity (V/C) ratio would increase 0.05 or more with the project's traffic;
- Intersections that operate at LOS E or F where delay would increase by 10 seconds or more with the project's traffic;

- Unsignalized intersections which operate at LOS E or F where the reserve capacity would decrease by 50 or more with the project's traffic; or
- The project would generate substantial heavy-duty truck traffic or generate substantial traffic along urban street canyons or near a major stationary source of CO.

Impacts

The asphalt plant is subject to operating permits from the MBARD which sets no limits on the throughput and fuel use to operate the plant. The permits are renewed annually at which time annual process throughput, along with propane and diesel fuel usage are reported to the District. An increase in the number of allowed night operations of the asphalt plant is not limited by the existing operating permit. Therefore, the increase in night operations of the asphalt plant, subject to the existing operating permit, would not conflict with or obstruct implementation of the air quality plan and would have a less than significant impact on sensitive receptors in the vicinity of the plant.

Diesel particulate matter was identified as a toxic air contaminant (TAC) by the State of California in 1998. Following the identification of diesel as a TAC, the California Air Resources Board (CARB) developed a comprehensive strategy to control diesel PM emissions. The "Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles"—a document approved by ARB in September 2000—set goals to reduce diesel PM emissions in California by 75% by 2010 and 85% by 2020. This objective would be achieved by a combination of approaches (including emission regulations for new diesel engines and low sulfur fuel program). An important part of the Diesel Risk Reduction Plan is a series of measures for various categories of in-use on- and off-road diesel engines, which are generally based on the following types of controls:

- Retrofitting engines with emission control systems, such as diesel particulate filters or oxidation catalysts,
- Replacement of existing engines with new technology diesel engines or natural gas engines, and
- Restrictions placed on the operation of existing equipment.

Once the Diesel Risk Reduction Plan was adopted, the ARB started developing emission regulations for a number of categories of in-use diesel vehicles and equipment. In July 2007, the ARB adopted regulations for in-use, diesel vehicles that will significantly reduce particulate matter emissions by requiring fleet owners to accelerate turnover to cleaner engines and install exhaust retrofits.

The trucking activity would involve the use of diesel trucks and equipment that will emit diesel exhaust, including diesel particulate matter, which is classified as a TAC. Adjacent

residents and businesses would be exposed to diesel emissions related to the diesel trucking activity, but the trucking activities would be of intermittent and of short-term duration. CARB has identified diesel exhaust particulate matter as a TAC, and assessment of TAC cancer risks is typically based upon a 70-year exposure period. The diesel trucking activity would expose receptors to possible diesel exhaust for a limited number of days and hours out of a 70-year (365 day per year, 24-hour per day) period. Because exposure to diesel exhaust will be well below the 70-year exposure period and given the intermittent and short-term duration of the trucking activity, trucking related diesel emissions are not considered significant. Furthermore, the State is implementing emission standards for different classes of on and off-road diesel vehicles and equipment that apply to on-road diesel fleets and includes measures such as retrofits. Additionally, Title 13 of the California Code of Regulations (section 2485(c)(1)) prohibit idling of a diesel engine for more than 5 minutes in any location.

Additionally, the trucking would occur for a limited number of nights (up to 100 nights per year) and the trucks would not be limited to operations on a constrained site such as a construction site. Rather the trucks would be traveling along a designated truck route on an arterial street at regular intervals. It can be reasonably concluded that the exposure rate would be well below the 70-year (365 day per year, 24-hour per day) period. Therefore, the increased night trucking would not expose sensitive receptors (i.e. residents, schools, hospitals) to toxic air contaminants that exceed health exposure rates.

The City of Santa Cruz considers "D" or better to be an acceptable intersection level of service for intersections. According to the EIR for the City of Santa Cruz General Plan 2030, the signalized intersections along the truck route all operate at acceptable levels of service during peak traffic hours and would continue to operate at acceptable levels of service with the build-out assumptions in the General Plan 2030. The off-hours increase in truck traffic would occur during non-peak hours. Therefore, it can be reasonably concluded the increased truck traffic would not cause impacts to LOS at any intersections along the truck route. This also means the increased night truck traffic during non-peak hours would not cause a significant carbon monoxide (CO) impact.

The project would not be expected to expose sensitive receptors to substantial pollutant concentrations. Impacts would be less than significant.

4. *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*	☐	☐	☒	☐

Discussion: The County has received complaints about odor from the asphalt plant from one neighbor of the operation. The County has not received complaints about odor from trucks from any residents along the truck route. This does not represent a substantial or considerable number of people. The asphalt plant operates under permits from the MBARD with annual reporting on throughput and resulting emissions from the plant. Based on this

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

regulatory oversight, and compliance with the operating permits, the operation of the asphalt plant does not represent a health or safety danger to the public. Therefore, the operation of the asphalt plant associated with the increased night trucking would not create objectionable odors in substantial concentrations, affecting a substantial number of people, which could result in injury, nuisance or annoyance to a considerable number of persons or would endanger the comfort, health or safety of the public.

D. BIOLOGICAL RESOURCES

Would the project:

1. *Have a substantial adverse 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?*	☐	☐	☐	☒

Discussion: The project consists of operation of an existing asphalt plant and increased trucking activity along an existing truck route. The project would not have an adverse 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.

2. *Have a substantial adverse effect on any riparian habitat or sensitive natural community identified in local or regional plans, policies, regulations (e.g., wetland, native grassland, special forests, intertidal zone, etc.) or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*	☐	☐	☐	☒

Discussion: The project consists of operation of an existing asphalt plant and increased trucking activity along an existing truck route. The project would not have an adverse effect on any riparian habitat or sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

3. *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal,*	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

filling, hydrological interruption, or other means?

Discussion: The project consists of operation of an existing asphalt plant and increased trucking activity along an existing truck route. The project would not have an adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means.

4. *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*	☐	☐	☐	☒

Discussion: The project does not involve any activities that would interfere with the movements or migrations of fish or wildlife or impede use of a known wildlife nursery site.

5. *Conflict with any local policies or ordinances protecting biological resources (such as the Sensitive Habitat Ordinance, Riparian and Wetland Protection Ordinance, and the Significant Tree Protection Ordinance)?*	☐	☐	☐	☒

Discussion: The project would not conflict with any local policies or ordinances.

6. *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*	☐	☐	☐	☒

Discussion: The project would not conflict with the provisions of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur.

E. CULTURAL RESOURCES

Would the project:

1. *Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?*	☐	☐	☐	☒

Discussion: The project would not include any activity that could cause a substantial adverse change in the significance of a historical resource.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
2. *Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?*	☐	☐	☐	☒

Discussion: The project would not include any activity that could cause a substantial adverse change in the significance of an archaeological resource.

3. *Disturb any human remains, including those interred outside of dedicated cemeteries?*	☐	☐	☐	☒

Discussion: The project would not include any activity that could potentially disturb human remains.

F. ENERGY

Would the project:

1. *Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*	☐	☐	☐	☒

Discussion: The project is related to ongoing maintenance of the existing transportation system and, therefore, the increased truck trips and asphalt plant operations related to this project would occur regardless of the particular asphalt plant supplying the project. Therefore, the project will not result in wasteful, inefficient, or unnecessary consumption of energy resources. Impacts would not occur.

2. *Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*	☐	☐	☐	☒

Discussion: The project is related to ongoing maintenance of the existing transportation system and, therefore, the increased truck trips and asphalt plant operations related to this project would occur regardless of the particular asphalt plant supplying the project. Therefore, the project would not conflict with or obstruct any state or local plan for renewable energy or energy efficiency.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
G. GEOLOGY AND SOILS *Would the project:*				
1. *Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*				
A. *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 Publication 42.*	☐	☐	☐	☒
B. *Strong seismic ground shaking?*	☐	☐	☐	☒
C. *Seismic-related ground failure, including liquefaction?*	☐	☐	☐	☒
D. *Landslides?*	☐	☐	☐	☒

Discussion (A through D): The asphalt plant is existing, and the increased trucking would occur on an existing truck route. Therefore, the project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving any geologic hazards.

2. *Result in substantial soil erosion or the loss of topsoil?*	☐	☐	☐	☒

Discussion: The project would not result in substantial soil erosion or the loss of topsoil. No impact would occur.

3. *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?*	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Discussion: The project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project.

4. Be located on expansive soil, as defined in section 1803.5.3 of the California Building Code (2016), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒

Discussion: The project would not be located on expansive soil. No impact would occur.

5. Have soils incapable of adequately supporting the use of septic tanks, leach fields, or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

Discussion: The soils at the facility are capable of adequately supporting the use of a septic tank and leach filed currently serving the facility and permitted by Environmental Health. The project would have no impact on the existing septic system.

6. Directly or indirectly destroy a unique paleontological resource or site of unique geologic feature?	☐	☐	☐	☒

Discussion: There are no unique paleontological resources or unique geologic features associated with the existing facility. No impact would occur.

H. GREENHOUSE GAS EMISSIONS

Would the project:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐

Discussion: The project is related to ongoing maintenance of the existing transportation system and, therefore, the increased truck trips related to this project would occur regardless of the particular asphalt plant supplying the project or the origin of the truck trips. Given that no new traffic would be generated by the project there is no indication the project would generate additional greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

The project would not be responsible for an incremental increase in greenhouse gas (GHG) emissions by usage of fossil fuels. For a given public roadway paving project the source of the asphalt and the trucking of the asphalt to the job site would involve operation of a nearby asphalt plant and truck transport to the job site. The Felton asphalt plant is the subject of this

application and is operated by Granite Construction Company (Granite). Other asphalt plants operated by Granite are located in Salinas and Santa Clara. For a given paving project where Granite is the contractor the source of the asphalt would be determined by the most economical source in terms of distance from the job site and other limitations such as the current limitation on the number of night operations at the Felton plant. For example, for a public paving project in Santa Cruz County the closest source of asphalt would be the Felton plant because other plants operated by Granite are located further away from any point in the County compared to the Felton plant.

Therefore, the ability of Granite to source asphalt from the asphalt plant closest to any given paving project site is beneficial in terms of greenhouse gas emission produced by trucking operations. For a large paving project where the most efficient source of asphalt is the Felton plant requiring more than the current Felton plant allowance of forty (40) night operations per year, additional asphalt would have to be sourced from a plant further away, increasing greenhouse gas emissions as a result of trucking the asphalt a further distance compared to the Felton plant. This recently occurred in the summer of 2019 during the project to repave Highway 17 in Santa Cruz County. The project was supplied out of the Felton plant for forty (40) nights and an addition ten (10) nights allowed by a one-time exception. The additional night operations required to complete the job were supplied out of the Santa Clara plant which is further away from the job site. Trucking asphalt from a plant further away from the job site resulted in greater greenhouse gas emissions than would have occurred had the entire job been supplied out of the Felton plant. Therefore, increasing the allowed number of night operations out of the Felton plant would reduce greenhouse gas emission related to large paving projects or multiple separate paving jobs cumulatively requiring forty (40) or more night operations per year.

Due to the nature of a typical public road paving project, distance to the job site from the asphalt plant creates another trucking impact that effects greenhouse gas emissions. The asphalt supply needs to be transported to the job site in regular intervals to keep the job progressing without backing up asphalt trucks at the job site where there is typically limited space in the roadway to accommodate waiting trucks. The trucks arrive at regular intervals so that as one truck leaves empty another full truck arrives to keep the paving going without delay. This is important on a public road paving project involving lane closures and equipment mobilization on a given night to maximize progress on the job and minimize disruption of roadway operations for the public. To maintain this regular interval of asphalt supply from a plant closer to the job site would require fewer trucks to maintain a steady supply to the job compared to transporting asphalt from a plant further away which would require more trucks to maintain a steady supply while driving a longer distance to the job site. Therefore, based on the unique nature of a public road paving project, this is another

way in which supplying the project from the closest asphalt plant reduces greenhouse gas emissions.

A further consideration is the infrastructure for the production of asphalt at the various plants. The Felton plant is combined with the Felton quarry which produces the aggregate rock used in the production of asphalt. The Granite asphalt plants in Santa Clara and Salinas are not located on quarry sites and aggregate rock must be imported to these plants in order to produce asphalt. The trucking operations represented by the need to import aggregate to these other plants to produce asphalt represents increased greenhouse gas emissions compared to the production of asphalt at the Felton plant which does not require import of aggregate rock. For a given paving project that would be preferentially supplied out of the Felton plant greenhouse gas emissions associated with the production of the asphalt would be less compared to the other Granite asphalt plants.

In conclusion, increasing the number of night operations allowed out of the Felton plant for public paving projects would have the effect of reducing greenhouse gas emissions related to large paving projects or multiple separate paving jobs cumulatively requiring forty (40) or more night operations per year.

2.	*Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*	☐	☐	☒	☐

Discussion: See the discussion under H-1 above. No significant impacts are anticipated.

I. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

1.	*Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*	☐	☐	☐	☒

Discussion: The project would not create a significant hazard to the public or the environment. No routine transport or disposal of hazardous materials is proposed. No impacts are anticipated. The mining operation and the asphalt plant involve the use and storage of petroleum products and other fluids commonly associated with operation of the heavy equipment and machinery. The operation has obtained a hazardous materials permit from the County of Santa Cruz Environment Health Department and is subject to at least annual routine inspections by the department to verify safe storage and handling of hazardous materials.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
2. *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?*	☐	☐	☐	☒

Discussion: See discussion under I-1 above. No impacts are anticipated.

3. *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*	☐	☐	☐	☒

Discussion: The project would not result in hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. No impacts are anticipated.

4. *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?*	☐	☐	☐	☒

Discussion: The project site is not included on the list of hazardous sites in Santa Cruz County compiled pursuant to Government Code section 65962.5. No impacts are anticipated from project implementation.

5. *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?*	☐	☐	☐	☒

Discussion: The project is not located within two miles of a public airport or public use airport. No impact is anticipated.

6. *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*	☐	☐	☐	☒

Discussion: The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, no impacts

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

to an adopted emergency response plan or evacuation plan would occur from project implementation.

7. *Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*	☐	☐	☐	☒

Discussion: The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. No impact would occur.

J. HYDROLOGY, WATER SUPPLY, AND WATER QUALITY

Would the project:

1. *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*	☐	☐	☐	☒

Discussion: The project would not discharge runoff either directly or indirectly into a public or private water supply. No impacts are anticipated.

2. *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*	☐	☐	☐	☒

Discussion: The project would not decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. No impact would occur.

3. *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:*	☐	☐	☐	☒
A. *result in substantial erosion or siltation on- or off-site;*	☐	☐	☐	☒
B. *substantially increase the rate or amount of surface runoff in a manner*	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
which would result in flooding on- or offsite;				
C. *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;*	☐	☐	☐	☒
D. *impede or redirect flood flows?*	☐	☐	☐	☒

Discussion: The project would not alter the existing drainage pattern of the site or area. No impact would occur.

4. *In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*	☐	☐	☐	☒

Discussion: The project is not located in a flood hazard, tsunami, or seiche zone and is not subject to inundation. No impact would occur.

5. *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*	☐	☐	☐	☒

Discussion: The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. No impact would occur.

K. LAND USE AND PLANNING

Would the project:

1. *Physically divide an established community?*	☐	☐	☐	☒

Discussion: The project does not include any element that would physically divide an established community. No impact would occur.

2. *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?*	☐	☐	☒	☐

Discussion: The project would not cause a significant environmental impact due to a conflict with any land use plan, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. No impacts are anticipated.

The project was analyzed with respect to General Plan policies of the County of Santa Cruz and the City of Santa Cruz because the trucking route travels through the city where the majority of the residential uses exist along the trucking route. Policy considerations related to air quality, noise, and transportation are the same in the City's and the County's General Plans. The policy basis for the impact analysis contains the same thresholds of significance in each of these areas. See the sections on air quality, noise and transportation for these analyses.

L. MINERAL RESOURCES

Would the project:

1. *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?*	☐	☐	☐	☒

Discussion: The existing asphalt plant is located on the site of an existing quarry. The permitted mining operation produces a mineral resource of value to the region and residents of the state. No impact is anticipated from project implementation.

2. *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?*	☐	☐	☐	☒

Discussion: The existing mining operation and the on-site asphalt plant utilized a locally-important mineral resource delineated in the General Plan. No impact would occur as a result of the project.

M. NOISE

Would the project result in:

1. *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?*	☐	☐	☒	☐

Discussion: The project would generate noise as a result of operation of the asphalt plant which shares the site with a mining operation. Noise from the mining operation including

operation of the asphalt plant is monitored on a regular basis, and a long history of compliance has been established as documented by the monitoring results.

The Santa Cruz County General Plan Land Use Compatibility Chart for Exterior Community Noise (General Plan Figure 9-2) identifies a "normally acceptable" exterior noise exposure compatibility level of 60 dBA LDN (Day-Night Level). County Mining Regulations Section 16.54.050 sets a maximum noise level measured at property boundaries of no greater than 60 dBA for a cumulative period of 15 minutes during any hour of operation (L_{25}). Condition of Approval II.H.9 of the mining permit requires the operator to submit a noise monitoring report every third year to determine compliance with noise standards. Noise monitoring at the quarry by the quarry's acoustical consultant indicates that noise levels during normal quarry operations and off-hours operations of the asphalt plant at the property line and at the nearest residence are in compliance with both standards listed above (60dBA LDN and 60dBA L_{25}). Provided the mining operation continues to meet these standards on a daily and hourly basis the noise standards place no limit on the number of days the asphalt plant may operate at night. Therefore, increasing the number of allowed night operations of the asphalt plant would not result in a significant impact relative to noise generation.

Noise policies in the Santa Cruz County General Plan have been located in the Public Safety Element but were recently amended and moved to a new stand-alone Noise Element in Chapter 9. The introduction to the new Chapter explains the County has no direct control over noise produced by trucks, cars and trains because state and federal regulations preempt local laws. Given that the County cannot control transportation noise at the sources, County policies focus on reducing the impact of transportation noise along freeways, arterial roadways and rail corridors.

A series of policies address the exposure of new development to existing noise sources, such as transportation noise along a truck route. Sound insulating features would be required in the new development to mitigate existing excessive noise levels such as setback, site and floor plan design, and special sound insulating construction.

There is a series of policies that address the exposure of existing development defined as a sensitive receptor such as an existing house to new sources of noise from new commercial or industrial development on nearby property. The policies focus on stationary noise sources on the site of the new development, but also address transportation projects. This project is not a transportation project because it does not involve the construction or modification of a roadway. The project would involve increased truck traffic on an existing roadway system utilizing a designated truck route. The project is a request to allow additional trucking at night to supply asphalt to road paving projects. While the County has no direct control over truck noise, there is policy language addressing how to determine if a new activity would represent a significant degradation of the existing noise environment.

Objective 9-2 of the General Plan is to minimize exposure of existing noise-sensitive land uses and receptors to excessive, unsafe, or disruptive noise that may be generated by new land uses and development projects.

Policy 9.2.2 requires site-design and noise reduction measures for any project, including transportation projects, that would cause significant degradation of the noise environment due to project effects that could:

(a) Increase the noise level at existing noise-sensitive receptors or areas by 5 dB or more, where the post-project CNEL or DNL will remain equal to or below 60 dB;

(b) Increase the noise level at existing noise-sensitive receptors or areas by 3 dB or more, where the post-project CNEL or DNL would exceed 60 dB;

Policy 9.2.2 further states that the policy shall not be interpreted in a manner that would limit the ability of the County to require noise-related mitigation measures or conditions of approval for projects that may generate lesser increases than the above. Special consideration may also be applied to special events or activities subject to permit requirements, or to land use development permits for uses and activities exempted from County noise control regulations.

This policy provides a standard by which to measure the impact of additional truck traffic on the existing noise environment and provides the authority to require noise related mitigation measures for any increase in noise levels as a result of the project activity.

The noise environment along Bay Street was studied in 2000 as part of a previous request for additional night operations. At that time the quarry operator was requesting 20 additional night operations. The study by Consultants in Engineering Acoustics recorded noise levels in the front yard of a residence at the corner of Bay Street and Escalona Drive. The noise monitoring equipment was set up to record the noise environment for 24 hours on each of three days. Two of the days included night operations truck traffic from the quarry and one of the days did not. The results show that the trucks associated with the night operations of the asphalt plant did not exceed the noise limit specified at that time in the Motor Vehicle Code (86 dBA at 50 feet). The results also indicate that the night trucking caused an increase in average noise levels from the average noise level without night trucking of LDN of 62.7 dBA to an average noise level with night trucking of LDN of 64.5 dBA. The increase in average noise levels of 1.8 dBA is not considered significant and did not exceed the level in County General Plan Policy 9.2.2 of 3 dBA. Although this study was conducted in 2000, it is still considered valid because noise measurement techniques and equipment have not changed and ongoing periodic speed and noise monitoring of nighttime trucking operations to the present time, as required by the quarry permit, continues to show data consistent with the data collected for the 2000 study.

As noted in the detailed project description, during off-hours operations the quarry monitors speed and decibel levels of trucks along the truck route and submits the data to the Planning Department. During the most recent off-hours operation in 2019 Planning Department staff requested speed and noise monitoring by a qualified third-party acoustical consultant for quality control. Comparing noise data is complicated by the location of the sound level meter and the distance to the source. However, the third-party data is generally consistent with historic quarry data in terms of the sound level of trucks. Comparing the data from the acoustical consultant in 2000 to the data from the acoustical consultant in 2019 by correcting for distance of the sound level meter from the source does show a potential trend, however. Average maximum truck sound level appears to be reduced by approximately one decibel for trucks traveling downhill and by approximately five decibels for trucks traveling uphill. A difference of one decibel is generally not noticeable, but a difference of five decibels is generally noticeable as a reduction in sound level. Residents can still hear and count the trucks and the five-decibel reduction may not be as noticeable over a long period of time between 2000 and 2019, but it appears to be a real reduction in sound level. A possible explanation for the trend shown in the consultant data may be a gradual evolution of the truck fleet to include more modern trucks, and truck engine upgrades mandated by state law to improve air quality.

The Noise Element contains a series of policies to reduce the effects of noise generated by transportation projects. The policies suggest ways to minimize ground transportation related noise impacts including speed limits, road surfacing and maintenance, and a policy to continue to consider noise concerns in evaluating all proposed development decisions related to roadway and other transportation projects. The existing permit for the quarry and asphalt plant contains conditions of approval requiring the quarry to maintain an ongoing trucker education program to, among other requirements, obey posted speed limits and prohibits the use of loud engine brakes, known as "jake breaks".

While the noise standards use average noise levels over a 24-hour period, residents can hear the noise from individual trucks. The quarry use permit contains a condition of approval that attempts to gauge the community's response to noise based on complaints. The volume of complaints would be used to gauge the significance of the community response along with consideration of the speed and noise monitoring data from the night operations. The condition of approval indicates that widespread complaints would be grounds for not granting approval for further night operations. The community response to noise chart referenced in the condition of approval indicates that widespread complaints would be associated with a project sound level that exceeds the ambient or background sound level by a certain amount. The acoustical study has already demonstrated that the change in average sound level as a result of truck traffic during a night operation do not increase average

sound levels by a significant amount. Furthermore, the number of complaints received during the longest duration night operations is not considered to be widespread.

The City of Santa Cruz General Plan 2030 includes the following policy regarding truck traffic:

Policy M3.3 Discourage, reduce, and slow through-traffic and trucks on neighborhood streets.

According to the EIR for the City's General Plan 2030:

"The City's road system consists of arterial highways and arterial, collector and local streets. These different classifications relate to different transportation functions and are classified in terms of access, mobility, design and use. Additionally, visitor/coastal access and truck routes have been designated to facilitate the movement of visitor traffic and commodities. Highways and arterial streets carry the City's heaviest traffic flows and provide regional and inter-community access." Bay Street and Empire Grade west of Bay are designated as arterial streets.

Truck routes are intended to channel trucks through the community and away from residential and other areas where they would be a nuisance. The truck routes in the City are Highway 1 – Mission Street, Highway 17, Bay Street north of Mission, Empire Grade west of Bay, Highway 9, Morrissey Boulevard, and Soquel Avenue.

Therefore, it is expected that Bay Street will carry significant amount of truck traffic to facilitate commodities movement and protect other local streets from excessive truck traffic.

2.	*Generation of excessive groundborne vibration or groundborne noise levels?*	☐	☐	☒	☐

Discussion: See the discussion under Section M-1 above. Residents along the truck route do hear the sound of and vibration from individual trucks. However, the analysis shows the trucking does not exceed established thresholds of significance for noise impacts and is in compliance with existing permit conditions.

3.	*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, 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: The project is not in the vicinity of a private airstrip or within two miles of a public airport. Therefore, the project would not expose people residing or working in the project area. No impact is anticipated.

N. POPULATION AND HOUSING

Would the project:

1.	*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)?*	☐	☐	☐	☒

Discussion: The project would not induce population growth in the area because the project does not propose any physical or regulatory change that would remove a restriction to or encourage population growth in the area including, but limited to the following: new or extended infrastructure or public facilities; new commercial or industrial facilities; large-scale residential development; accelerated conversion of homes to commercial or multi-family use; or regulatory changes including General Plan amendments, specific plan amendments, zone reclassifications, sewer or water annexations; or LAFCO annexation actions. No impact would occur.

2.	*Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*	☐	☐	☐	☒

Discussion: The project would not displace any existing housing. No impact would occur.

O. PUBLIC SERVICES

Would the project:

1. *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:*

a.	*Fire protection?*	☐	☐	☐	☒
b.	*Police protection?*	☐	☐	☐	☒
c.	*Schools?*	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d. Parks?	☐	☐	☐	☒
e. Other public facilities; including the maintenance of roads?	☐	☐	☐	☒

Discussion (a through e): The project would have no impact on service ratios, response times, or other performance objectives for any of these public services. No impact would occur.

P. RECREATION

Would the project:

1. 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?	☐	☐	☐	☒

Discussion: The project would not increase the use of existing neighborhood and regional parks or other recreational facilities. No impacts would occur.

2. 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?	☐	☐	☐	☒

Discussion: The project does not propose the expansion or require the construction of additional recreational facilities. No impact would occur.

Q. TRANSPORTATION

Would the project:

1. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒

Discussion: This analysis will focus on the proposed trucking activity as it affects the truck route through the City of Santa Cruz. This is because the policy considerations address existing signalized intersections, which are all located in the City.

In terms of traffic congestion the City of Santa Cruz General Plan 2030 EIR provides the following information regarding intersection function:

"The City of Santa Cruz considers "D" or better to be an acceptable intersection level of service for intersections, which is a policy in the City's existing General Plan as well as in

the proposed General Plan. A significant impact would result if LOS dropped below a "D" level of service or where a project would contribute traffic increases of more than 3% at intersections currently operating at unacceptable levels (E or F), as further described below. The existing and proposed General Plans also account for accepting a LOS below "D" at major regional intersections where improvements would be prohibitively costly or result in significant, unacceptable environmental impacts. There are no other adopted plans, ordinances or policies that establish "measures of effectiveness" for the performance of the circulation system."

According to the EIR, the signalized intersections along the truck route all operate at acceptable levels of service during peak traffic hours and would continue to operate at acceptable levels of service with the build-out assumptions in the General Plan 2030. The off-hours increase in truck traffic would occur during non-peak hours. Therefore, it can be reasonably concluded the increased truck traffic would not cause impacts to LOS at any intersections along the truck route.

2.	*Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1) (Vehicle Miles Traveled)?*	☐	☐	☐	☒

Discussion: In response to the passage of Senate Bill 743 in 2013 and other climate change strategies, the Governor's Office of Planning and Research (OPR) amended the CEQA Guidelines to replace LOS with vehicle miles traveled (VMT) as the measurement for traffic impacts. The "Technical Advisory on Evaluating Transportation Impacts in CEQA," prepared by OPR (2018) provides recommended thresholds and methodologies for assessing impacts of new developments on VMT. Tying significance thresholds to the State's GHG reduction goals, the guidance recommends a threshold reduction of 15% under current average VMT levels for residential projects (per capita) and office projects (per employee), and a tour-based reduction from current trips for retail projects. Based on the latest estimates compiled from the Highway Performance Monitoring System, the average daily VMT in Santa Cruz County is 18.3 miles per capita (Department of Finance [DOF] 2018; Caltrans 2018). The guidelines also recommend a screening threshold for residential and office projects—trip generation under 110 trips per day is generally considered a less-than-significant impact.

The project is related to ongoing maintenance of the existing transportation system and, therefore, the increased truck trips related to this project would occur regardless of the location of the particular asphalt plant supplying the project or the origin of the truck trips. Given that no new traffic would be generated by the project there is no indication the project would conflict with or be inconsistent with CEQA Guidelines related to VMT. No impact would occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
3. *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*	☐	☐	☐	☒

Discussion: No increase in hazards would occur as a result of normal trucking activity along an existing truck route. Nighttime trucking activity is intended to reduce hazards by occurring at night when traffic congestion is less and to supply public highway projects that occur at night in order to reduce hazards and congestion related to road maintenance operations.

4. *Result in inadequate emergency access?*	☐	☐	☐	☒

Discussion: The project would have no impact on emergency access.

R. TRIBAL CULTURAL RESOURCES

1. *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:*

A. *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources Code section 5020.1(k), or*	☐	☐	☐	☒
B. *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 Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*	☐	☐	☐	☒

Discussion: The project would have no impact on tribal cultural resources.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

S. UTILITIES AND SERVICE SYSTEMS

Would the project:

1. *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 relocation of which could cause significant environmental effects?*	☐	☐	☐	☒

Discussion: The project would not 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. No impact would occur.

2. *Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*	☐	☐	☐	☒

Discussion: The existing facility has sufficient water supplies available to serve the permitted mining operation and hydrogeologic monitoring is performed on a regular basis to confirm current water supply conditions. The project would have no impact on water supplies.

3. *Result in 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?*	☐	☐	☐	☒

Discussion: The project is not served by a wastewater treatment provider. The project would have no impact on wastewater treatment capacity.

4. *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?*	☐	☐	☐	☒

Discussion: The project would not 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. No impact would occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
5. *Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*	☐	☐	☐	☒

Discussion: The project would comply with all federal, state, and local statutes and regulations related to solid waste disposal. No impact would occur.

T. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

1. *Substantially impair an adopted emergency response plan or emergency evacuation plan?*	☐	☐	☐	☒

Discussion: The project will not conflict with emergency response or evacuation plans. Therefore, no impact would occur.

2. *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?*	☐	☐	☐	☒

Discussion: The project would not exacerbate wildfire risks. No impact would occur.

3. *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?*	☐	☐	☐	☒

Discussion: The project does not require the installation any new infrastructure. No impact would occur.

4. *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?*	☐	☐	☐	☒

Discussion: The project would not exacerbate wildfire risk, therefore, would not result in downslope or downstream impacts as a result of wildfire.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
U. MANDATORY FINDINGS OF SIGNIFICANCE				
1. *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 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 community or eliminate important examples of the major periods of California history or prehistory?*	☐	☐	☒	☐

Discussion: 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 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 were considered in the response to each question in Section III (A through T) of this Initial Study. As a result of this evaluation, there is no substantial evidence that significant effects associated with this project would result. Therefore, this project has been determined not to meet this Mandatory Finding of Significance.

2. *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 with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*	☐	☐	☒	☐

Discussion: In addition to project specific impacts, this evaluation considered the project's potential for incremental effects that are cumulatively considerable. As a result of this evaluation, there were determined to be no potentially significant cumulative effects associated with this project. Therefore, this project has been determined not to meet this Mandatory Finding of Significance.

3. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*	☐	☐	☒	☐

Discussion: In the evaluation of environmental impacts in this Initial Study, the potential for adverse direct or indirect impacts to human beings were considered in the response to specific questions in Section III (A through T). As a result of this evaluation, no potentially adverse effects to human beings associated with this project were identified. Therefore, this project has been determined not to meet this Mandatory Finding of Significance.

IV. REFERENCES USED IN THE COMPLETION OF THIS INITIAL STUDY

California Department of Fish and Wildlife, 2019

California Natural Diversity Database Felton USGS 7.5-minute quadrangle; queried 1/6/20.

CalFIRE, 2010

Santa Cruz County-San Mateo County Community Wildfire Protection Plan. May 2010.

City of Santa Cruz, 2012a

General Plan 2030 for the City of Santa Cruz, California. Adopted by the City Council in June 2012.

City of Santa Cruz, 2012b

Environmental Impact Report for the City of Santa Cruz General Plan 2030. Adopted by the City Council in June 2012.

Consultants in Engineering Acoustics, 2000

Noise at Two Residences Associated with Asphalt Plant Operation and Trucks during Nighttime Paving. August 31, 2000. (Attached)

County of Santa Cruz, 1994

1994 General Plan and Local Coastal Program for the County of Santa Cruz, California, as amended. Adopted by the Board of Supervisors on May 24, 1994 and certified by the California Coastal Commission on December 15, 1994.

County of Santa Cruz, 2013

County of Santa Cruz Climate Action Strategy. Approved by the Board of Supervisors on February 26, 2013.

County of Santa Cruz, 2015

County of Santa Cruz Local Hazard Mitigation Plan 2015-2020. Prepared by the County of Santa Cruz Office of Emergency Services.

Environmental Consulting Services, 2019

Monitoring of Speed and Noise of Vehicles Using Empire Grade in Santa Cruz During Evening Haul Periods. June 11, 2019. (Attached)

FEMA, 2012

Flood Insurance Rate Map Panel 0211 Federal Emergency Management Agency. Effective on May 6, 2012.

MBARD, 2008

Monterey Bay Air Resources District (MBARD), CEQA Air Quality Guidelines. Prepared by the MBARD, Adopted October 1995, Revised: February 1997, August 1998, December 1999, September 2000, September 2002, June 2004 and February 2008.

MBARD, 2017

MBARD Air Quality Management Plan, Triennial Plan Revision 2012-2015. Adopted March 15, 2015.

OPR, 2018
"Technical Advisory on Evaluating Transportation Impacts in CEQA." Available online at http://www.opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.

G2

consultants in engineering acoustics

Analysis and Planning for
Vibration and Noise Control

Thomas R. Norris, P.E.,
Jerome S. Lukas, Ph.D., and Associates

August 31, 2000

Mr. Mike Ray
Plants Manager
Granite Construction Company
P.O. Box 720
Watsonville, CA 95077-0720

Subject: Noise at Two Residences Associated with Asphalt Plant Operations and Trucks during Nighttime Paving

Dear Mr. Ray:

Nighttime paving operations between 8:00 PM and 3:00 AM were scheduled on Monday through Thursday during the four weeks of August 2000, beginning August 7. Nighttime paving did not occur on Fridays. Consultants in Engineering Acoustics ("CIEA") measured noise levels near two residences for three days beginning on Wednesday, August 9, 2000 to ascertain whether noise from the asphalt plant and trucks complied with Santa Cruz County Noise Standards.

Three major sections comprise this report. The first is a summary, details are provided in the second, and two recommendations are made in the third.

Summary

The County's Noise Standard (Reference 1) for homes affected by truck noise is L_{dn} = 60.[1] The criterion noise level is L_{25} = 50 dBA[2] at homes affected directly by nighttime noise from asphalt plant operations (Reference 2).

Noise levels near the residence at the intersection of Escalona Drive and Bay Street affected by nighttime truck operations exceeded the County's criterion (L_{dn} = 60) whether or not Granite Construction's trucks were operating. The average level was L_{dn} = 64.5 for

[1] L_{dn}, or average day/night sound level, is a calculated description of sound over a 24-hour period, which takes account of the fact that sounds are more annoying at night (10:00 PM to 7:00 AM) than during the day (7:00 AM to 10:00 PM). It is calculated by determining the L_{eq}, or equivalent sound level, over a 24-hour period after adding 10 dBA to the sound levels occurring in the period between 10:00 PM and 7:00 AM. For reference, a sound that occurs over a 24-hour period and has an L_{eq} = 43 dBA would be equivalent to $L_{dn} \approx$ 50 dBA.

EXHIBIT C

[2] dBA, or decibel A-weighted, refers to the electronic technique by which the response of the sound level meter simulates the relative response of the human auditory system to the different frequencies comprising a sound or noise. L_{25} is the noise level exceeded 25 percent of the time during any hour, or 15 minutes in any hour, according to the Mining Code, Section 16.54.06(d)1 (Reference 3).

the two days when Granite's trucks operated and L_{dn} = 62.7 on Friday when Granite's trucks were not operating. Generally heavy traffic on both Bay and Escalona accounts for the noise levels exceeding the County's standard, although the noise level was reduced about 1.8 dB when Granite's trucks did not operate at night.

A noise reduction of 1.8 dB is neither dramatic nor considered significant, even though residents along Bay Street can easily hear the trucks passing by. A difference of at least 3 dB and, more typically, a difference of 5 dB is necessary for people to reliably detect and comment upon a change in the average environmental noise level (Reference 4).

The average hourly noise level (Leq[3]) was about 44.5 dBA at the Simpson residence (260 Bonnywood Way) during the nighttime hours when the asphalt plant could be operating (8:00 PM to 3:00 AM) and 36.0 dBA on Friday night when the asphalt plant was inoperative. This is a significant difference. However, the noise level (44.7 dBA) when the asphalt plant was in full operation is also significantly less than the County's criterion of 50 dBA (Reference 2). It is concluded, therefore, that although asphalt plant noise is clearly audible at the Simpson residence, its loudness is well below the County's criterion of acceptability.

Under the usual operating conditions, that is, when the asphalt plant is not operating at night, the noise level limit is L_{dn} = 60 dBA at the Simpson/Granite Construction property line (Reference 5). The measured level when the asphalt plant was inoperative at night was L_{dn} = 47 dB, which is very nearly the same as the L_{dn} = 48 dB measured in 1998 (Reference 6). With the asphalt plant operative, the L_{dn} = 53 dB averaged over the two nights. Thus, under both conditions the noise level at approximately the eastern property line is in compliance with the County's Noise Limit.

Study Details and Results

Details

Magnetic tape recordings of noise occurred in the front yard of the Carlyle-Bodge residence at 1106 Escalona Drive(at Bay Street) and on the rear deck of the Simpson residence at 260 Bonnywood Way, which overlooks Granite Construction's Felton Quarry. The microphones (attached to tripods) were placed at an elevation of five to six feet above ground and at a location with unimpeded acoustical views of traffic on Bay and Escalona and of the quarry below the Simpson residence.

EXHIBIT C

[3] L_{eq}, or the equivalent level, is the sound level of a continuous, or steady, sound that contains the same sound energy as the actual tone varying sound over a specified time period (one hour in the present case). According to References 2 and 3, the criterion noise level is L_{25} = 50 dBA. L_{25} is the noise level exceeded 25 percent of the time. This level is only about 0.5 dB louder than the L_{eq} and, as a result, CIEA did not modify its computer program to produce both the L_{eq} and L_{25} metrics.

The sound recording system[4] was calibrated and set to record samples of the noise environment on magnetic tape over a period of about 24 hours on each of three days. Nighttime asphalt plant operations occurred on only two nights. Each sample had a duration of seven seconds and a sample was obtained every four minutes throughout the recording period. The sampling period (every four minutes) was selected to best catch the movements of the asphalt-carrying trucks, which were estimated to occur once every six minutes. The tape recordings began at approximately 2:00 PM on Wednesday, August 9, 2000 and ended at roughly 11:00 AM on Saturday, August 12, 2000. The recorded noise was analyzed in CIEA's acoustic laboratory using a special-purpose computer program.

Results

At Escalona Drive and Bay Street

Tables 1A, 1B, and 1C show the distributions of hourly noise levels and the most prominent sources contributing most to those noise levels. It should be noted that the major source of noise is traffic at the Escalona and Bay intersection. (See the Prominent Noise Sources column.) My observations indicated that most of this traffic was on Bay Street, but a significantly large component used Escalona Drive to and from Bayona Drive to reach homes on the hill above Escalona Drive. Escalona and Bay is a very busy intersection with a large number of trucks passing by. These daytime trucks were operating at a construction site at the University of California at Santa Cruz.

Table 2 provides counts of the number of trucks and buses on Bay Street passing Escalona Drive at different times and dates. It is immediately apparent that non-Granite trucks were operating almost exclusively during the daytime whereas Granite Construction's trucks operated primarily at night. For example, on August 10 between 11:15 AM and 12:15 PM only three Granite Construction trucks passed by on Bay while 21 trucks from organizations other than Granite Construction passed by. In contrast, during the two-hour nighttime period (beginning at 9:30 PM) on the same date, 33 of Granite Construction's trucks passed by on Bay Street while only one non-Granite truck passed by.

Table 3 shows the maximum noise levels from the various heavy vehicles passing by on Bay Street. It can be seen that, on average, Granite Construction's trucks are quieter than non-Granite trucks, but the differences are 2 dB or less, which is generally not detectable by the average listener. These trucks and the buses did not exceed the noise limit (86 dBA at 50 feet) specified in Section 23130(a) of California's Motor Vehicle Code.

EXHIBIT C

The noise levels shown in the L_{eq} columns of Tables 1A, 1B, and 1C were used to calculate the L_{dn} noise levels at the Bay Street/Escalona Drive intersection, as shown in

[4] The system consisted of a Quest model 215R sound level meter, a Sony TDC5M cassette tape recorder, and a Sharp model PD 1500 (A) pocket computer controller. It is self-contained and battery-operated.

Table 4. The noise limit at the property line of residences along Bay Street is L_{dn} = 60 dB. The data provided in Table 4 show that this limit was exceeded whether or not Granite Construction's trucks were operating on Bay Street between about 8:00 PM and about 3:00 AM. Truck operations are necessary at this time to supply asphalt for paving operations that must occur at night so as not to affect normally heavy daytime traffic. Relatively high volumes of traffic on Bay Street and Escalona Drive is the reason that the L_{dn} exceeded the County's limit, whether or not Granite Construction's trucks were operating. Note, for example, in Tables 1A, 1B, and 1C that the hourly average noise levels (the L_{eq} column) typically are in the low-60-dBA range throughout the daytime hours (say, 7:00 AM to 8:00 PM, or 0700 to 2000 hours) when Granite Construction's trucks were not present. These daytime noise levels have a major influence on the L_{dn}.

It should also be pointed out that the maximum 2.3-dB difference between the L_{dn}'s with and without Granite Construction's trucks operating at night typically is not detectable by the average listener, although the listener is able to hear and count those trucks. However, as shown in Table 4, the aggregate community response is expected to be an increase of between 1.7 and 3.1 percent in numbers of people reporting high annoyance with the nighttime asphalt truck traffic. In other words, about 15.6 percent of people on Bay Street near this intersection, if asked, are expected to express a high degree of annoyance with the noise environment due to traffic on Bay Street and Escalona Drive. With the addition of Granite Construction's truck traffic, up to about 18.7 percent would express a high degree of annoyance with the noise. This is not considered a large or significant change, since it probably is well within the normal range of measurement variability of annoyance surveys.

At the Simpson Residence

Tables 5A, 5B, and 5C show the distribution of noise levels at the rear deck of the Simpson residence. This deck overlooks Granite Construction's Felton Quarry, which contains the asphalt plant.[5] The L_{eq}'s do not clearly reflect (increase) startup of the asphalt plant, which occurred during the 1800 hour (6:00 PM) on August 9 and 10, although asphalt plant noise is clearly audible on the tape recordings. This is the result of the relatively high ambient noise levels from the quarry, traffic on Empire Grade, and other environmental noise sources. However, early in the morning these miscellaneous noise sources are absent and shutdown for the asphalt plant shows up clearly in the L_{eq}'s.

For example, in Table 5A it can be seen that L_{eq}'s between 1800 hours (6:00 PM) and 0100 hours (1:00 AM) were in the high-40-dBA range. During the 0200 hour (2:00 AM) hour, when the asphalt plant shut down at about 0208 hours (see the Prominent Noise Sources column), the L_{eq} was reduced to 37.9 dBA, and during the following hour (0300)

EXHIBIT C

[5] Quarry sounds are clearly audible at the Simpson residence but the associated operations cannot be seen because of numerous tall evergreens at and beyond the Simpson property line, which is approximately 100 feet downhill from the measurement location.

the L_{eq} was down to 29.6 dBA. (Note also the changes in the L_{99} column.) Similar changes can be seen in Table 5B. The asphalt plant was inoperative during the time periods shown in Table 5C and the changes in hourly noise levels are due to other sources.

In all three tables, the increase in hourly noise levels with startup of the quarry at about 0600 hours (6:00 AM) is apparent. For example, on August 10 in Table 5A, the ambient, or background, noise level was 33.3 dBA at 0500 hours (5:00 AM), but it increased to 43.1 dBA with the beginning of quarry operations during the 0600 hour. Similar changes can be seen in Tables 5B and 5C.

Table 6 shows the noise levels between 8:00 PM and 3:00 AM at the rear deck of the Simpson residence with and without asphalt plant operations. Clearly, asphalt plant noise was audible and measurable at this location. The increase of about 8 dBA in noise level with asphalt plant operations is significant. However, the noise level limit specified by the County (Reference 2) is 50 dBA and an average level of 44.5 dBA with asphalt operations is significantly less.

Table 7 shows the L_{dn}'s near Granite Construction's eastern property line with and without asphalt plant operations. Santa Cruz County has specified (Reference 5) a limit of L_{dn} = 60 dBA at the property line for quarry operating noises. Table 7 shows that the noise level was L_{dn} = 53.0 dB under the worst operating condition when the asphalt plant was operating, a level significantly less than the limit. When the asphalt plant is inoperative at night, the L_{dn} is 13 dB lower than the limit.

Recommendations

Granite Construction should investigate techniques to (1) reduce and control asphalt plant noise and to (2) reduce and control noise from the main crusher.

Please call with questions about the preceding.

Sincerely,

Jerome S. Lukas (JKK)

Jerome S. Lukas, Ph.D.

EXHIBIT C

G2

References

1. County of Santa Cruz, Noise Element, Section 3.6 of the General Plan (revised January 1985); see Table 3-1, "Land Use Compatibility Chart for Exterior Community Noise."

2. Letter dated October 29, 1992 from Kim Tschantz to Mike Ray; subject: Environmental Review of Application 91-0364.

3. County of Santa Cruz, Mining Ordinance, Ordinance Amending Chapter 15.54; see Section 16.54.060.(d)1, "Noise and Vibration."

4. International Organization for Standardization, ISO Recommendation R1996, "Assessment of Noise with Respect to Community Response," 1st edition, May 1971.

5. County of Santa Cruz, Planned Quarry Permit 74-633-PD, Section III.A.1, Operating Requirements, Noise and Vibration.

6. Letter dated November 6, 1998 from Jerome Lukas to Eric Gaboury; subject: Annual Report on Noise from the Felton Quarry.

7. S. Fidell and D.M. Green, "Noise-Induced Annoyance of Individuals and Communities" in C.M. Harris, ed., *Handbook of Acoustical Measurements and Noise Control*, 3rd edition, New York, McGraw Hill Inc., 1991, Chapter 23.

Enclosures: Tables 1 through 7

EXHIBIT C

JSL:jkk
GRN-0829.MR

cc: Rachelle Lather, Santa Cruz County – Via Facsimile: (831) 454-2131

Table 2

Number of Passbys at Bay Street and Escalona Drive by Selected Vehicles

	Time		Vehicle Type					
			Granite Trucks		Non-Granite Trucks		Buses	
Date	From	To	Uphill	Downhill	Uphill	Downhill	Uphill	Downhill
8/09/00	8:20 PM	9:00 PM	9	5	0	0	4	4
8/09/00	9:00 PM	10:00 PM	7	11	0	0	4	4
8/09/00	10:00 PM	11:00 PM	11	4	0	0	1	3
8/10/00	11:15 AM	12:15 PM	1	2	10	11	4	3
8/10/00	9:30 PM	11:30 PM	14	19	0	1	5	6

Table 3

Average Maximum Noise Levels of Trucks and Buses on Bay Street at Escalona Drive as a Function of Direction of Travel on Bay Street

	Direction[1]			
Vehicle Type	Uphill	Number	Downhill	Number
Granite Construction	74.7 dBA	12	74.2 dBA	15
Other than Granite Construction	76.9	10	76.2	11
Buses	77.1	6	69.8	3

[1] Vehicles traveling uphill were about 80 feet from the microphone, while vehicles traveling downhill were about 50 feet from the microphone. State law prohibits a noise level in excess of 86 dBA at 50 feet by heavy trucks traveling under the speed and grade conditions of Bay Street.

EXHIBIT C

GRN-0825.TB2

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TABLE 1A
DISTRIBUTION OF NOISE LEVELS near the NORTHWEST CORNER OF BAY ST. and
[illegible] ESCALONA DR.(THE CARLYLE-BODGE RESIDENCE) BEGINNING ON WEDNESDAY, AUGUST 9, 2000
WITH NIGHT PAVING

DAY/ DATE	HOUR BEGINNING AT	Leq	L01	L10	L50	L90	L99	PROMINENT NOISE SOURCES
WED., 8/9	1400	62.4	72.9	65.4	59.7	49.2	47.1	traffic with trucks
	1500	59.8	67	63.6	57	47.7	45.5	traffic
	1600	61.7	70.2	65.6	59.2	52	44.9	traffic
	1700	63.9	73.3	67.4	60	51.8	48	traffic with trucks
	1800	62.3	68.4	65.7	61	52.8	48.8	traffic
	1900	64.5	77.1	64.6	56.4	47.6	45.4	motorcycle, traffic
	2000	59.8	67.1	64.4	56.8	49.8	43.7	traffic
	2100	58.6	67.4	64.2	52.4	42.6	40.7	traffic with trucks
	2200	60.7	72.4	64.4	50.7	40	38.7	airplane, traffic with trucks
	2300	59.4	67.5	63.6	55.3	39.9	36.7	traffic
THUR.,	2400	61.9	70.1	68.4	45.3	40	39.3	trucks, lite traffic, distant police sirens
8/10	100	43.5	53.2	45.8	40.5	38.5	36.6	lite traffic, 1 truck
	200	45.6	59.2	41.9	38.6	37.5	36.4	lite traffic
	300	53	67.1	54.1	38.3	37.6	37.4	3 truck smpls
	400	45.2	59.2	40.7	38.3	37.7	37.4	1 auto
	500	55.6	65.8	62	39.9	38.5	38.1	traffic begins
	600	60.5	69.6	66	51.7	40.8	40.3	2 or 3 trucks + other traffic
	700	63.4	72.4	68.6	57	49.1	44.6	3 trucks & other traffic
	800	61.2	69.3	65.2	58.3	50.1	42.4	2 trucks & traffic
	900	61.5	71.7	64	56.5	45.8	43.9	truck and traffic
	1000	61.2	70.1	65	57.9	48.6	46.5	truck + traffic
	1100	60.2	69.2	64.8	55.6	51.2	48.5	truck and traffic
	1200	61.9	68.2	64.9	60.6	55.7	51.3	traffic
	1300	61.4	68.5	65.7	59.1	51.2	43.7	traffic
	1400	59.6	67.9	63.2	56.7	50.4	43.8	traffic + truck
	1500	58.6	66.5	63.9	51.6	28.5	28.5	traffic, last smpl @ 1524*

Leq, or Equivalent Sound Level, is the sound level of a continuous, or steady, sound which contains the same sound energy as the actual time varying sound over a specified period, one hour in the present case.
L01, L10, etc., are the noise levels exceeded 01, 10, etc. percent of the time, one hour in the present case.
L01 may be considered to be near the highest, or loudest, noise level, and L99 as nearly the lowest, or most quiet, level.

EXHIBIT C

G2

TABLE 1B

DISTRIBUTION OF NOISE LEVELS near the NORTHWEST CORNER OF BAY ST. and 1106 ESCALONA DR.(THE CARLYLE-BODGE RESIDENCE) BEGINNING ON THURSDAY, AUGUST 10, 2000 WITH NIGHT PAVING

DAY/ DATE	HOUR BEGINNING AT	Leq	L01	L10	L50	L90	L99	PROMINENT NOISE SOURCES
THUR.	1516	61.1	69.5	65.3	56.9	47.6	44.2	traffic
8/10	1600	60.3	66.4	63.4	59.7	51.1	44.5	traffic
	1700	60.6	66.2	63.6	59.7	51.8	39.8	traffic
	1800	61.6	67.9	65.1	60.5	49.5	42.5	traffic
	1900	60.2	67.5	65.1	55.8	48.7	46.4	traffic
	2000	61.3	70.5	64.6	58.1	52.3	49.5	traffic + 1 truck @ 1956
	2100	59.6	67.2	63.4	57.5	47.4	43.4	traffic 2 trucks
	2200	57.4	69.4	61.5	50.9	41	38.4	several trucks + traffic
	2300	62.4	74	67.2	54.6	38.4	34.7	2 trucks + traffic
FRI.,	2400	54	64.3	58.9	43.8	38.7	35.1	traffic
8/11	100	57	67	62.6	41.8	38.9	38.2	trucks + traffic
	200	47.8	59.4	48	37.9	36.5	34.9	almost no traffic
	300	50.5	63.2	40.9	38.1	37.4	36.9	1 auto, quiet otherwise
	400	48.8	64.6	45.5	40.2	39.2	38.9	1 auto, quiet otherwise
	500	52.4	64.3	57	43.1	40.6	40	about 5 autos, quiet otherwise
	600	57.3	70.3	59.4	48.1	43.7	42.4	1 truck ?, traffic otherwise
	700	64	72.2	69.5	58	49.2	46.6	3 trucks + traffic
	800	61	71.6	63.5	57.7	49.9	47.6	1 truck + traffic
	900	58.5	67.4	62.1	55.9	47.9	42.6	traffic
	1000	62.6	70.4	67.6	58.5	48.6	45.8	1 truck + traffic
	1100	61.3	71.1	64.2	58.2	47.1	41.3	1 truck + traffic
	1200	63.9	70.2	66.1	64	59.4	58.3	traffic, ended at 1208

Leq, or Equivalent Sound Level, is the sound level of a continuous, or steady, sound which contains the same sound energy as the actual time varying sound over a specified period, one hour in the present case.

L01, L10, etc., are the noise levels exceeded 01, 10, etc. percent of the time, one hour in the present case.

L01 may be considered to be near the highest, or loudest, noise level, and L99 as nearly the lowest, or most quiet,level.

EXHIBIT C

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TABLE 1C
DISTRIBUTION OF NOISE LEVELS near the NORTHWEST CORNER OF BAY ST. and
1106 ESCALONA DR.(THE CARLYLE-BODGE RESIDENCE) BEGINNING ON FRIDAY, AUGUST 11, 2000
WITHOUT NIGHT PAVING

DAY/ DATE	HOUR BEGINNING AT	Leq	L01	L10	L50	L90	L99	PROMINENT NOISE SOURCES
FRI.,	1216	60.1	70.9	62.6	57.1	49.6	44.9	traffic with 1 truck
8/11	1300	63.6	72.3	67	60.5	52	49.9	traffic with 1 truck
	1400	61.9	71.8	65.9	56.8	49.7	47	traffic with 1 truck
	1500	60.9	68.4	65	58.5	51.7	47.1	traffic with trucks
	1600	60	66.4	63.6	58.7	46	43.9	traffic
	1700	62.6	69.9	65.8	61.2	54.9	52.2	truck + traffic
	1800	62.1	69.2	66	59.5	51.9	44.9	traffic
	1900	60.2	67.4	64.6	57.1	50.4	46.5	traffic
	2000	58.4	65.3	62.2	56.3	51.4	47.3	traffic
	2100	58	67.5	63	52.2	42.1	41.2	traffic
	2200	59.9	68.1	63.9	56.1	43.2	41.3	traffic
	2300	59	68.5	63.1	52.6	44	42.9	motorcycle + traffic
SAT.,	2400	56.7	65.8	61.8	51.5	41.9	41.1	traffic
8/12	100	54.2	65.4	58.7	43.5	41	40.5	traffic
	200	43.9	50.3	47.1	41.8	40.4	39.8	distant police siren, lite traffic
	300	46.5	58.4	46	40.8	40	39.6	lite traffic
	400	46.4	59.9	47.2	40.7	39.3	39.5	2 or 3 autos, quiet otherwise
	500	47.8	55.8	47.9	42	40.7	40.2	2 autos, quiet otherwise
	600	47.2	61.4	47.4	41.3	40	39.3	1 auto, 1 distant auto, wquiet otherwise
	700	55.8	69.8	59	45.7	40.3	38.6	traffic
	800	59.8	68.5	64.9	52.4	44.5	40.7	traffic
	900	56.5	66	61.2	52.5	45.4	41.6	traffic

Leq, or Equivalent Sound Level, is the sound level of a continuous, or steady, sound which contains the same sound energy as the actual time varying sound over a specified period, one hour in the present case.
L01, L10, etc., are the noise levels exceeded 01, 10, etc. percent of the time, one hour in the present case.
L01 may be considered to be near the highest, or loudest, noise level, and L99 as nearly the lowest, or most quiet, level.

EXHIBIT C

Table 4

Average Day/Night Noise Levels (L_{dn}) Near the Intersection of Bay Street and Escalona Drive

Date	Granite Const. Trucks at Night?	L_{dn}	Percent Highly Annoyed[1]
August 9-10, 2000	Yes	65.0 dB	18.7 %
August 10-11, 2000	Yes	64.0	17.3
August 11-12, 2000	No	62.7	15.6

[1] See Reference 7

Table 6

Average Hourly Noise Levels (L_{eq}) between 8:00 PM and 3:00 AM on the Rear Deck of the Simpson Residence

Date	Asphalt Plant Operating?	L_{eq}
August 9-10, 2000	Yes	44.7 dBA
August 10-11, 2000	Yes	44.3
August 11-12, 2000	No	36.0

Table 7

Average Day/Night Noise Levels (L_{dn}) at the Simpson Residence and near the Eastern Property Line of Granite Construction's Felton Quarry

Date	Asphalt Plant Operating?	L_{dn}	Percent Highly Annoyed
August 9-10, 2000	Yes	53.0 dB	7.0%
August 10-11, 2000	Yes	52.3	6.6
August 11-12, 2000	No	46.6	4.9

EXHIBIT C

GRN-0830.TB4

62

TABLE 5A
DISTRIBUTION OF NOISE LEVELS near the SIMPSON RESIDENCE at 260 BONNYWOOD WAY
SANTA CRUZ COUNTY, BEGINNING ON WEDNESDAY, AUGUST 9, 2000
WITH NIGHT PAVING

DAY/ DATE	HOUR BEGINNING AT	Leq	L01	L10	L50	L90	L99	PROMINENT NOISE SOURCES
WED..8/9	1524	48.6	53.8	51.1	48.3	40.9	39	quarry ops, back up beepers(bub)
	1600	49.5	53.8	51.8	49.2	44.1	40.5	main crusher (crusher)
	1700	49	52.6	51.2	48.7	44.7	42.2	crusher & trucks
	1800	46.4	52.3	49.4	46.3	39	35.9	quarry quiet, far BUB, asphalt plant (ap) start up
	1900	49.7	54.3	52.3	49.1	46.4	45.2	AP
	2000	48.9	53.1	51.2	48.3	45.8	43.7	AP as in prevous hours
	2100	50	55.4	51.9	49.4	46.9	45	AP
	2200	48.1	50.5	49.5	48	46.2	43.5	AP plus trucks
	2300	49	51.7	50.7	49.1	45.9	44	AP + trucks and ringing- like souns
UR..	2400	49.6	54.2	51.9	48.7	46.5	44.5	same motor+ trucks and?(ringing like sound)
8/10	100	47.4	51.7	48.9	47.1	45.1	42.9	AP, here and elsewhere loudness is variable
	200	37.9	47.6	44	30.1	28.2	27.5	AP off @ 0208, some traffic noise, then quiet @ 28dBA*
	300	29.6	37.2	29.6	28.2	27.3	26.8	some h2o pump-like @ 0320*, 1 smpl, quiet other times
	400	30.4	38.4	34.9	27.8	26.8	26.3	same h2o pump as before,1 smpl, far motorcycle,barking
	500	33.3	41.6	35.5	31.2	28.5	27.1	traffic started about 0530
	600	43.1	52.4	46.5	38.9	31.8	30.7	quarry started @ 0620*;trucks, BUB, convevor, crusher
	700	51.4	55.8	53.9	51.6	44.8	42.9	loud trucks & BUB, quarry sounds in general
	800	50.5	56.2	53.3	49.6	46.3	44.3	numerous quarry sounds
	900	51.3	58	53	50.6	48.1	45	BUB, crusher, and other quarry sounds
	1000	51.9	58.8	54	50.6	48.3	46.9	BUB, other quarry sounds
	1100	52	56.3	54.2	51.4	48.5	46.8	quarry sounds
	1200	49.9	55.8	52.4	49.1	45.2	43.7	quarry sounds, but quieter for a while- LUNCH?
	1300	50.9	55.5	53	50.4	47.8	46.5	BUB, quarry sounds, crusher
	1400	49.7	52.6	51.7	48.9	47.9	47.6	sound of asphalt plant, quarry sounds, off @ 1416

Leq, or Equivalent Sound Level, is the sound level of a continuous, or steady, sound which contains the same sound energy as the actual time varying sound over a specified period, one hour in the present case.

L01, L10, etc., are the noise levels exceeded 01, 10, etc. percent of the time, one hour in the present case. L01 may be considered to be near the highest, or loudest, noise level, and L99 as nearly the lowest, or most quiet, level.

EXHIBIT C

G2

TABLE 5B
DISTRIBUTION OF NOISE LEVELS near the SIMPSON RESIDENCE at 260 BONNYWOOD WAY
SANTA CRUZ COUNTY, BEGINNING ON THURSDAY, AUGUST 10, 2000
WITH NIGHT PAVING

DAY/ DATE	HOUR BEGINNING AT	Leq	L01	L10	L50	L90	L99	PROMINENT NOISE SOURCES
THUR.,	1428	50.1	54.3	52.8	49.4	47.1	46	quarry sounds, wind chimes
8/10	1500	50.8	57	53.3	50.1	45.1	41.8	quarry sounds,prominent crusher,2 smpls tracked vhicle
	1600	51.1	57.8	53.1	50.3	47	45.2	* BUR, quarry sounds, train horn, wind chimes
	1700	49.2	54.2	51.9	49.2	38.9	35.8	quarry sounds until 1745", then quiet
	1800	46	55.3	47.7	45.4	35.6	32.6	quiet until 1824" when asphalt plant was activated
	1900	46.5	49.8	48.3	46.3	43.7	42.5	asphalt plant throughout hour
	2000	46.1	50.2	47.7	45.8	43.8	42.4	asphalt plant + trucks
	2100	46.3	49.5	47.8	46.1	44.7	43	asphalt plant
	2200	46.8	49	48.1	46.7	45.1	43.1	asphalt plant, trucks,& a few wind chimes
	2300	47.5	50.8	49.4	47.1	44.9	42.7	asphalt plant, a few trucks
FRI.,	2400	48.6	53.8	50.2	48	46.8	44.3	truck, asphalt plant
8/11	100	47.8	49.9	49	47.3	46.4	42.5	asphalt plant, and a few distant trucks
	200	37	47.6	38.7	30	28.9	27.9	asphalt plant until 0212", then quiet
	300	34.6	45.5	36.6	28.8	27.6	27	some traffic, wind chimes 2 smpls, quiet otherwise
	400	32.2	41	35.5	29.5	28	27	wind chimes 2 smpls,h2o-like pump 1 smpl,quiet othrwise
	500	35.6	40.1	38.2	34.8	31.7	29.5	traffic begins
	600	46.1	53.8	49.3	44.2	39.9	37	quarry sounds begin @ 0600,+ smpls of tracked vhcle
	700	50.3	54.1	52.4	50.6	46.1	37	quarry sounds, tracked vehicle, airplane 1 smpl
	800	46.6	51.8	49.2	45.7	43.5	41.2	quarry is relatively quiet
	900	46.7	53.3	50.1	44.4	42.5	41.1	some strange mechanical sound last 2 smpls,quarry quiet
	1000	49.3	59	49.9	46.7	41.9	39.7	nearby dog barks,stange mechanical,quarry quiet rltvly
	1100	48.4	51.9	50.2	48	46	44.9	relatively quiet quarry, stopped at 1136"

Leq, or Equivalent Sound Level, is the sound level of a continuous, or steady, sound which contains the same sound energy as the actual time varying sound over a specified period, one hour in the present case.
L01, L10, etc., are the noise levels exceeded 01, 10, etc. percent of the time, one hour in the present case.
L01 may be considered to be near the highest, or loudest, noise level, and L99 as nearly the lowest, or most quiet,level.

EXHIBIT C*

G2

TABLE 5C
DISTRIBUTION OF NOISE LEVELS near the SIMPSON RESIDENCE at 260 BONNYWOOD WAY
SANTA CRUZ COUNTY, BEGINNING ON FRIDAY, AUGUST 11, 2000
WITHOUT NIGHT PAVING

DAY/ DATE	HOUR BEGINNING AT	Leq	L01	L10	L50	L90	L99	PROMINENT NOISE SOURCES
FRI.,	1144	47.4	50.5	48.9	47.2	45.5	44.7	quarry equipment, crusher not operating
8/11	1200	48	50.5	49.6	47.7	46.1	45	quarry is relatively quiet
	1300	49.3	54.6	51.9	48.5	45.4	43.1	airplane 1 smpl, quarry
	1400	48.6	53.6	51.1	47.9	45.1	43.1	quarry
	1500	47.3	50.1	48.9	47.1	44.7	43.6	quarry
	1600	48.5	54.6	52	47.4	41	26	airplane 1 smpl, quarry, and quarry shut down @ 1630^
	1700	46.8	53.1	49.8	45.3	41.7	40.5	autos and some track-like sound 1 smpl
	1800	45.3	57.4	47.9	37.8	36.1	34.8	motorcycle, jet, autos, wind chimes, quiet otherwise
	1900	36.4	38.7	37.4	36.2	35.2	34.3	none apparent, quiet
	2000	41.5	52.2	42.9	37.5	35.2	34	airplane 1 smpl, quiet otherwise
	2100	37.2	42.3	39.5	36.5	34.4	33.6	autos on Empire Grade, quiet otherwise
	2200	38	41.7	39.9	37.7	35.4	34.1	autos on Empire Grade, and some far mechanical sound
	2300	36.8	39.8	38.7	36.6	33.9	31.7	autos on Empire Grade. Mechanical sound is gone
.,	2400	38.3	43.1	41	37.9	32.6	31.1	sprinklers ? on for 1/2 hour, quiet otherwise
8/12	100	34.8	41.3	37.2	33.5	31	30.1	wind chimes several smpls, h2o-like pump sound 1 smpl
	200	31.7	35.6	33.4	31.2	30	29.3	1 auto, quiet otherwise
	300	29.4	34.5	31.7	28.5	27.6	27.1	h2o-like pump sound 1 smpl, buzzing loudness up/down
	400	33.1	39.2	36.8	30.5	28	27.6	h2o-like pump sound 1 smpl, autos,buzz on & off,mech.?
	500	36.6	41.8	39	35.9	33.6	32.6	autos?, some mechanical sound don't know source
	600	42.3	47.5	44.8	41.4	38.5	36.6	quarry sounds: conveyor?, tracked vehicle
	700	44.4	50.1	46.9	43.6	40	35.1	mechanical quarry sounds, some hammering
	800	45.7	50.7	47.3	45.1	41.7	39.2	vehicles, quarry-like sounds
	900	44.5	49	46.5	44	40.8	38	quarry sounds
	1000	44.8	52	48.3	43.4	37.5	35.2	quarry
	1100	46.4	49.4	48.4	45.9	44.3	43.4	quarry sounds, 1 smpl only

Leq, or Equivalent Sound Level, is the sound level of a continuous, or steady, sound which contains the same sound energy as the actual time varying sound over a specified period, one hour in the present case.
L01, L10, etc., are the noise levels exceeded 01, 10, etc. percent of the time, one hour in the present case.
L01 may be considered to be near the highest, or loudest, noise level, and L99 as nearly the lowest, or most quiet,level.

EXHIBIT C

Environmental Consulting Services **18488 Prospect Road – Suite 1, Saratoga, CA 95070**
Phone: (408) 257-1045 stanshell99@toast.net

June 11, 2019

Ms. Christine Williams
Mr. Mitchell Bush
Granite Construction
1800 Felton Quarry Road
Santa Cruz County, CA

Subject: Monitoring of Speed and Noise of Vehicles using Empire Grade in Santa Cruz during evening haul periods

Dear Christine and Mitchell,

At your request I have measured the noise generated by vehicles using Empire Grade on two nights last week, as well as their speed. The data is attached to this letter for your review.

Noise Measurement Procedures

Vehicle noise measurements were made on the evenings of June 4th and 5th, using a CEL-440 Precision Noise Meter and Analyzer, with a Type 1 ½" microphone and amplifier, calibrated with a B & K Model 4230 Sound Level Calibrator. Noise levels were measured and are reported using A-weighted decibels with Slow meter response. Speed measurements were made with a Pocket Radar, Model PR1000. Notations showing the type of vehicle and whether traveling up or down on Empire Grade are recorded on the datasheets. On June 4 measurements were made between 10 pm and 1 am at the Waldorf School entrance driveway at 2190 Empire Grade, Santa Cruz. The meter was extended out of the window of the car, about 15 feet from the center of the "up" vehicle lane and 25 feet from the "down" lane. The car was parked parallel to the roadway. A good sample of vehicles passing in both directions were monitored and recorded. Obviously, because of bunching and the time necessary to record speed and noise level, data on many vehicles could not be recorded. Ambient noise levels in the absence of vehicles was 33 to 35 dBA.

On June 5 measurements were made between 10 pm and 1 am at the entrance to the UCSC Arboretum, Arboretum Drive at Empire Grade, Santa Cruz. Again, the meter was extended out of the window of the car, about 15 feet from the center of the "up" vehicle lane (25 feet from the "down" lane). For the first 1.5-hour monitoring period, the car was parked perpendicular to the roadway, and for the second monitoring period it was parked parallel to the road, as at Waldorf School. The distance to the roadway was the same in each case.

If I may be of further assistance on this project, please do not hesitate to contact me.

Respectfully submitted,

Stan Shelly

H. Stanton Shelly
Acoustical Consultant
Board Certified Member (1982)
Institute of Noise Control Engineering

Granite Construction

Truck Noise & Speed Data

	A	B	C	D	E	F	G
1	Date	Location	Direction	Vehicle type	Speed (MPH)	Noise (dBA)	Notes
2							
3	June 4	Waldorf Sch	Dn	car	27	68	Ambient 33-35 dBA
4	10 pm	2190 EG	Up	C	35	75	
5		11 to street	U	C	30	63	Dist-up = 15' to center
6			U	Truck	25	84	
7			D	C	38	73	Dist-Dn = 25' to center
8			U	C	40	78	
9			D	C	38	76	
10			U	C	44	75	
11			U	C	35	76	
12			D	C	38	72	
13			D	C	38	76	
14			U	T	20	85	
15			D	T	26	82	
16			U	T	22	85	
17			D	C	38	77	
18			U	MC	40	78	
19			D	C	37	67	
20			U	C	42	75	
21			D	C	38	67	
22			D	C	30	70	
23			D	T	30	80	
24			U	T	28	84	
25			D	C	32	66	
26			U	C	40	67	
27			U	C	40	69	
28			U	T	18	86	
29			D	T	26	85	
30			D	T	25	78	
31			D	C	34	79	
32			D	T	32	78	
33			D	C	36	69	
34			U	T	30	83	
35			D	MC	45	88	
36			U	T	30	84	
37			U	C	33	69	
38			D	T	26	74	
39			U	C	30	74	
40			U	T	24	84	

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Granite Construction — **Truck Noise & Speed Data**

	A	B	C	D	E	F	G
1	Date	Location	Direction	Vehicle type	Speed (MPH)	Noise (dBA)	Notes
2	June 4	Waldorf Sch	U	C	33	74	Cal 93.8V
3		1115 pm	U	C	35	68	Temp 55°F
4			U	C	43	75	
5			U	T	23	87	
6			U	T	25	85	
7			U	T	24	86	
8			D	T	28	78	
9			D	T	26	77	
10			U	C	27	72	
11			D	C	32	76	
12			D	T	23	75	
13			U	C	31	90	
14			U	C	37	74	
15			D	C	50	75	
16			U	T	24	85	
17			U	T	27	86	
18			D	C	35	68	
19			U	C	32	73	
20			U	MC	30	80	
21			U	C	44	78	
22			U	C	38	81	
23			D	T	27	84	
24			U	T	25	83	
25			D	T	30	79	
26			U	C	36	72	
27			U	T	21	84	
28			U	T	20	80	
29			U	C	30	71	
30			D	T	27	77	
31			D	T	28	78	
32			U	MC	40	83	
33			D	T	30	78	
34			U	C	42	75	
35			U	T	30	93	
36			U	C	25	67	
37			U	C	27	68	
38			D	T	24	74	
39			U	C	35	77	
40			D	T	30	78	

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Granite Construction — **Truck Noise & Speed Data**

	A	B	C	D	E	F	G
1	Date	Location	Direction	Vehicle type	Speed (MPH)	Noise (dBA)	Notes
2	June 4	Waldorf Sch	U	C	28	68	
3	12:15 pm		D	T	32	80.	
4			U	T	28	85	
5			U	T	25	83	
6			U	T	23	85	
7							
8							
9							
10							
11	JUNE 5	Arboretum	U	C	44	69	15 ft from near lane
12	10:00 pm	ave UC	U	C	40	67	(up)
13		⊥ to street	D	C	41	75	25 ft from down
14		(back seat)	U	C		74	lane center
15			U	T	35	82	
16			D	C	37	67	Ambient 34-36 dBA
17			D	C	23	70	
18			U	C	35	75	57°F
19			U	C	33	72	
20			D	C	43	65	neg/ wind
21			D	C	42	68	
22			D	C	50	73	
23			U	T	25	85	
24			D	C	40	68	
25			U	C	43	76	
26			U	C	44	75	
27			U	C	50	76	
28			U	T	30	84	
29			U	T	35	85	
30			D	C	38	67	
31			D	C	40	70	
32			U	T	34	85	
33			D	T	25	76	
34			U	C	33	73	
35			D	Bus	34	78	
36			U	T	36	87	
37			U	T	28	82	
38			U	C	36	68	
39			D	C	47	69	
40			U	C	37	74	

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Granite Construction — **Truck Noise & Speed Data**

	A	B	C	D	E	F	G
1	Date	Location	Direction	Vehicle type	Speed (MPH)	Noise (dBA)	Notes
2	June 5	Arboretum	U	T	33	83	
3		⊥ to road	U	T	32	82	
4			U	C	37	72	
5			D	C	34	72	
6			U	T	32	80	
7			U	T	34	83	
8			D	T	36	78	
9			U	C	39	72	
10			U	C	43	75	
11			D	C	50	67	
12			U	C	43	82	
13			U	C	47	76	
14			U	C	50	77	
15			U	C	47	74	
16			U	C	39	93	
17			D	T	33	85	
18			U	C	39	75	
19			D	C	37	73	
20			D	C	43	76	
21			D	T	30	79	
22			D	T	38	75	
23			U	T	31	80	
24			U	C	40	73	
25							
26	June 5	Arboretum	U	C	40	75	16' from up center
27	11 pm	⊥ to road	D	C	49	73	26' from down center
28			D	T	40	79	
29			D	T	37	84	
30			U	T	32	82	
31			D	C	50	73	
32			D	C	43	70	
33			U	C	46	77	
34			D	MC	55	81	
35			U	C	35	74	
36			U	C	35	71	
37			D	C	43	69	
38			U	C	44	75	
39			D	T	31	82	
40			D	C	36	74	

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	A	B	C	D	E	F	G
1	Date	Location	Direction	Vehicle type	Speed (MPH)	Noise (dBA)	Notes
2	6-5	Arboretum	U	T	25	86	
3	1140	11 to road	D	C	37	74	
4			D	C	37	72	
5			D	C	50	74	
6			U	C	43	78	
7			U	C	46	77	
8			D	C	46	74	
9			U	C	44	79	
10			D	C	47	73	
11			D	T	31	82	
12			D	C	42	75	
13			U	C	46	76	
14			D	C	39	76	
15			U	T	36	89	
16			U	C	35	79	
17			U	T	35	89	
18			D	C	40	77	
19			U	T	25	80	
20			D	T	34	76	
21			U	T	25	80	
22			D	T	24	76	
23			U	C	42	76	
24			D	C	47	75	
25			U	C	50	78	
26			D	C	38	72	
27			D	C	35	69	
28			D	C	43	73	
29			U	C	48	79	
30			D	T	35	84	
31			U	C	48	76	
32			D	C	43	72	
33			D	C	50	77	
34			U	T	34	85	
35			U	C	37	74	
36			D	C	44	73	
37			D	T	53	80	
38			D	C	39	71	
39			U	C	45	76	
40			D	C	50	77	
41			U	C	36	71	
42			D	T	28	77	

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