# Exhibit B

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# DISCUSSION

PROPERTY BACKGROUND:

The subject property was once part of the Moss Landing Power Plant (MLPP) which was constructed in 1949. In 1950, the MLPP began operating and generating electricity. The MLPP produced a combined net capacity of 2,060 megawatts. This power is transmitted to either the 115kV, 230kV, or 500kV switchyards for distribution into the PG&E grid system. In 1998, a Parcel Map was filed (Volume 20, Page 64 of Parcel Maps) memorializing the subdivision (Monterey County File No. PLN970371) of the MLPP property. The subject property, Parcel A, was retained by PG&E as a substation and Parcel B (with the power plant including the smoke stacks) was divested and is now owned by Duke Energy Moss Landing LLC.

On August 31, 2011, the Monterey County Planning Commission approved a Combined Development Permit (Monterey County File No. PLN090274, Resolution No. 11-029) allowing the expansion of the PG&E Moss Landing Substation consisting of: the expansion and reconfiguration of existing 115 kV and 230 kV transformer banks, replacement of lattice towers with tubular steel poles, relocation of a microwave telecommunications tower, and the relocation of an outdoor test facility.

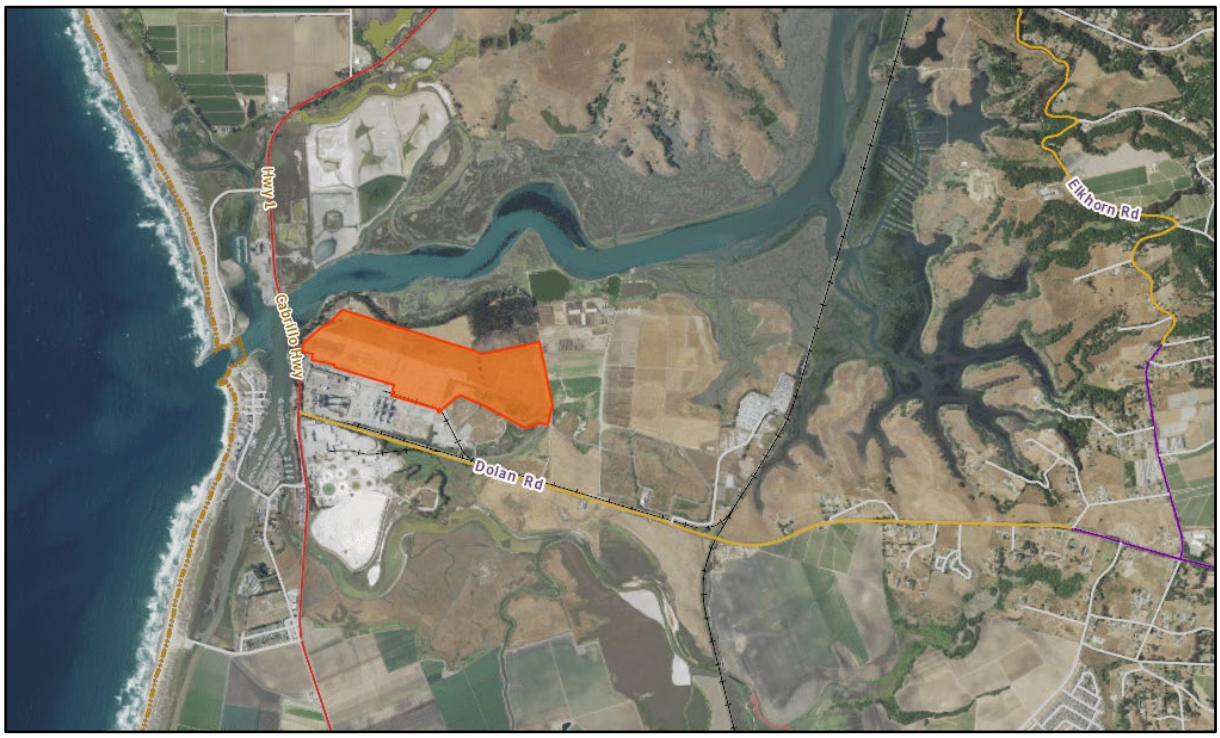



**Figure 1 - Contextual Map: Subject Parcel Outlined in Orange**

**Figure 2 - Area of Proposed Development**

The above referenced permit included the removal of the 115kV switchyard (see Figure 2). This is the area where a new Battery Energy Storage System (BESS) is proposed. The area shown in Figure 2 is approximately 4.5 acres in size. The property on which it is located is 147.77 acres, 42 of which contain development related to the existing PG&E substation. Development existing on the 42 acres includes gravel, asphalt, or pavement, associated energy structures/facilities, accessory structures such as offices, and a perimeter wall for security.

PROJECT DESCRIPTION:

**Battery Energy Storage System (BESS)**

The BESS will consist of approximately 268 Tesla manufactured Megapack units (See Figure 3) that will each include 17 battery modules and associated electrical equipment. Each unit will be housed in a storage enclosure measuring approximately 23.5 feet in length, 5.3 feet in depth, and 8.25 feet in height. The project would be located entirely on PG&E-owned property, and the BESS and associated components would be installed inside an existing substation yard. All construction will be located within the Moss Landing Substation.

The BESS project will have the capacity to dispatch up to 730 megawatt hours (MWh) of energy to the electrical grid at a maximum rate of 182.5 MW for up to 4 hours during periods of high demand. The purpose of the Elkhorn Battery Energy Storage System (BESS) Project (project) is to enable PG&E to provide reliable and flexible power to the electrical system at and around PG&E's Moss Landing Substation, which serves the South Bay-Moss Landing local sub-area, spanning Silicon Valley to the central coast. This would occur through storage of power during

off peak use times and dispersing that power back to the electrical grid for use during high peak use times. The Elkhorn BESS project will include continued use of the existing public utility operation for PG&E at Moss Landing Substation, and would enable PG&E to provide local area capacity and enhance electrical system reliability and flexibility at and around PG&E's Moss Landing Substation. Operation of the project is intended to reduce existing demand on natural gas power plants by allowing integration of renewable energy into the electrical grid through storage and use during peak need times.


**Figure 3 - Megapack Unit and Layout**

**Lithium Battery Modules**

Each battery module houses a powerpack system, an isolated direct current (DC) converter, and a battery management system connected in parallel with DC power and communications output connections. The powerpack system is made up of electrodes and electrolytes: rechargeable lithium-ion battery cells, coolant, and refrigerant. The application materials describe the batteries as hermetically sealed (air-tight) lithium-ion cells, similar to rechargeable batteries in many consumer electronic products, with a voltage of each individual cell at approximately 3.6V. The battery cells do not contain metallic lithium.

PG&E's electrical transmission grid operates in alternating current (AC). However, energy

stored in the battery modules utilizes DC (see discussion above). Therefore, the megapack includes bay(s) that house rack-mounted bio-directional inverter modules that convert the AC power received from the grid to DC power for storage into the batteries. Due to the inverter's bio-directional capability, energy is converted from DC to AC prior to dispersing it back to the grid.

**Transmission**
Energy for storage will be received through and existing 115kV transmission line at the Moss Landing Substation. Project components necessary to receive and re-distribute electricity to and from the electrical grid includes: 21kV switchgears, a transformer bank, high voltage circuit breakers, a 21kV underground cable system integrating the batteries and inverters, and an above-ground 200-foot long 115kV interconnection line connecting to the existing 115kV transmission line. This equipment also includes disconnect switches and a CAISO meter. These components will be located at 1.5-acre southeast portion of the 4.5-acre development site. The dead-end structures are approximately 36-feet tall, the transformer banks are approximately 20-feet tall, and the high voltage circuit breakers and 21kV switchgears are approximately 15-feet tall.

**Construction and Maintenance**
A preliminary Construction Management Plan (CMP) was provided by the applicant outlining the logistical planning of the proposed site improvements. The project installation component is expected to take a year and a half from start to finish. The total cut quantity of construction activities will be about 7,850 cubic yards (CY) and the total fill will be approximately 3,450 CY. There will be an average of approximately 11 round-trip truck trips per week for equipment deliveries and to remove soil.

The operational component of the project would not result in a net increase of existing employee population on the site. Only authorized personnel will be permitted on the property and access will be limited to PG&E and Tesla employees for monitoring and maintenance activities. The application estimates that between two to ten workers will be onsite during maintenance activities. Maintenance efforts will be similar to historical maintenance of the PG&E substation site. As this BESS is replacing an area that historically contained a switchyard, there will be no substantial increase in employees or maintenance activity following completion of construction.

**General Plan and Zoning**
The zoning designation of the area of development is Heavy Industrial, Coastal Zone or "HI(CZ)", and is governed by regulations and policies in the 1982 General Plan, the North County Land Use Plan, the Moss Landing Community Plan, the North County Coastal Implementation Plan, and Title 20 of the Monterey County Code. The North County Land Use Plan and Moss Landing Community Plan (MLCP) recognize the historic use of the site and designates the site for coastal dependent industrial power generation.

MLCP Section 5.2.1.A allow for growth and modernization of industrial facilities consistent with the protection of the area's natural resources. In addition, the Coastal Implementation Plan, Part 2 (CIP), Section 20.144.160.C.1.a states that coastal dependent industrial facilities should be encouraged to expand within existing sites before off-site expansion shall be considered. The project proposes is to establish a Battery Energy Storage System (BESS) within an existing industrial site. The BESS is located in a previously disturbed area contained within a perimeter

fence and conditions and mitigations have been applied to the project for the protection of natural resources adjacent to the site (See discussion under the Environmental Review heading for more detail). Therefore, the project is consistent with the applicable plans governing development at the site.

**Design Review**
The subject property is not located within a Design Control Zoning District; however, the North County LUP Chapter 5.6 - Visual Resources and Community Character provides policies for protection of scenic and visual resources of the area, specifically in the Public Viewshed. These policies are implemented through regulation contained in CIP Section 20.144.160.D. A project site is considered to be in the Public Viewshed if any portion of the proposed development is visible from or impedes the visual access to the Moss Landing Community, harbor and dunes from Highway 1 or any other public viewing area. An onsite inspection was performed and improvements would not be visible from and would not impede views of the community, harbor, or dunes from Highway 1 because the battery storage units are east of Highway 1, would lie below an existing fence along the perimeter of the property, and are screened from view by an existing berm and vegetation. Existing development on the property is related to power generation and transmission and is industrial in character. The proposed development will not change the industrial character of the site.

ENVIRONMENTAL REVIEW:
An Initial Study/Mitigated Negative Declaration or "IS/MND" (SCH No. 2019079016) for the project was prepared and circulated for public comment from July 5, 2019 to August 5, 2019. The IS/MND identified potential impacts to biological resources, cultural resources, geological, and tribal cultural resources caused by temporary construction activities and site excavation resulting from project implementation. Mitigation measures have been incorporated to reduce these impacts to a less than significant level. Impacts on other resource categories in CEQA were found to be insignificant. Potential impacts are discussed in more detail below.

**Biological Resources**
No environmentally habitat areas were observed in the area of the proposed BESS during a staff inspection of the site. However, Monterey County Geographic Information System data indicates the potential for sensitive flora and fauna to be on or near the site. The proposed development is approximately 250-feet from the Elkhorn Slough and there are known occurrences of California tiger salamander and California red-legged frog in the area. Additionally, bird and raptor nesting areas have been identified adjacent to the site.

A biological assessment prepared for the project identified that the area of development was "Urban" with "Ruderal/Landscaped" area. Near the project area exists grassland habitat, the Elkhorn Slough, a human excavated feature containing shallow water, and a dry sediment basin. In addition, wetland features were identified over 200 feet east and immediately south (Dolan Road) of the traveled roadways for construction traffic. Nearby water sources are known to be occupied aquatic habitat for the California red-legged frog (CRLF) which are listed as a Federally Threatened species. There is a potential that the frogs can travel from the aquatic habitat onto the project site through grates in the base of the perimeter security wall. In addition,

there is suitable nesting habitat for western burrowing owl adjacent to the BESS site. The Owl is a State species of Special Concern.

To minimize the potential for harm to CRLF and burrowing owls, the biologist recommended 15 avoidance or minimization measures. The recommendations have been condensed into 5 mitigation measures that are attached as conditions in **Exhibit C** of this report. Mitigation Measures include:

MM1 – Contract with a qualified biologist
MM2 – Preconstruction Survey for CRLF
MM3 – Preconstruction Survey for Nesting Birds
MM4 – Biological Education Program for Construction Personnel
MM5 – Best Management Practices

With these Mitigation Measures in place, the project will have a less than significant impact on biological resources.

**Geology and Soils**
The seismic hazard for the area of development is considered very high. The underlying soils in the area are coastal terrace deposits, with clay and iron oxide cementation in the upper weathered zone which have low susceptibility to flooding and liquefaction. Subsurface soils (upper 35 feet) in the area of development were medium dense to dense sands with varying amounts of silt and clay, except in one area. The northeastern portion of the development area contained subsurface soils that were loose sands at depths between eight and 21 feet.

North County LUP Policy 2.8.3.A.4 and CIP Section 20.144.100.A.1.c requires preparation of a soils and geological report in areas of known or suspected geological hazard for the purpose of evaluating potential on-site or off-site impacts. The County's seismic hazard zone VI is high and in accordance with this policy and implementing regulation, a report has been prepared and submitted with the application. The report concluded that the site is suitable for construction of the BESS project from a geotechnical perspective using conventional grading and the recommended foundation depths.

Potential impacts to unique geological features such as paleontological resources were idendified. Information contained in the Paleontological Analysis report prepared for the project indicates that the project site was evaluated for the potential to contain paleontological resources using the Potential Fossil Yield Classification (PFYC) system. The report also references a records search and indicates that there are no known findings of vertebrate fossils within 10 miles of the site. Sediments underlying the project area consist of Pleistocene-aged eolian deposits, older coastal dunes, and marine terrace deposits, which are all considered to have a Class 2, or low paleontological potential and a 6-foot layer of low paleontological potential artificial fill covers the sediments. However, the report found that the UCMP database identified 22 recorded fossil localities from Pleistocene-aged marine terrace deposits in Monterey, Ventura, Sonoma, Humboldt, San Mateo, and Santa Barbara Counties. As such, the paleontological potential of the project area was reclassified to Class 3, moderate. The report concludes that based on the site's moderate paleontological potential, there is a potential for impacts to the

significant paleontological resources during excavations exceeding six-feet. Therefore, the project is incorporating mitigation measures to reduce potential impacts to paleontological resources to a less than significant level (**Exhibit C**). The two Mitigation Measures include:

MM8 – Paleontological Resources Education Program for Construction Personnel; and
MM9 – Measures to take for unanticipated Discovery of Paleontological Resources.

**Cultural and Tribal Cultural Resources**
Although the area of proposed development has been previously disturbed, Monterey County GIS data indicates that the archaeological sensitivity remains high and it is in proximity of recorded positive archaeological sites. The project includes trenching for the construction of 32 new concrete pads on which the BESS will be placed.

In accordance with CIP Section 20.144.110.B.1.a, two archaeological assessments were prepared and submitted for the project. These assessments relied on previous studies prepared for MLPP as well as site specific reconnaissance and identified that the proposed excavation area for the substation has been previously disturbed from previous infrastructure installation to a depth of 6.5 feet and soils below that appear to be native. Based on known resources in the area, and the potential for new excavation into native soils, mitigation measures are recommended to minimize impacts to Cultural Resources. Those Mitigation Measures include:

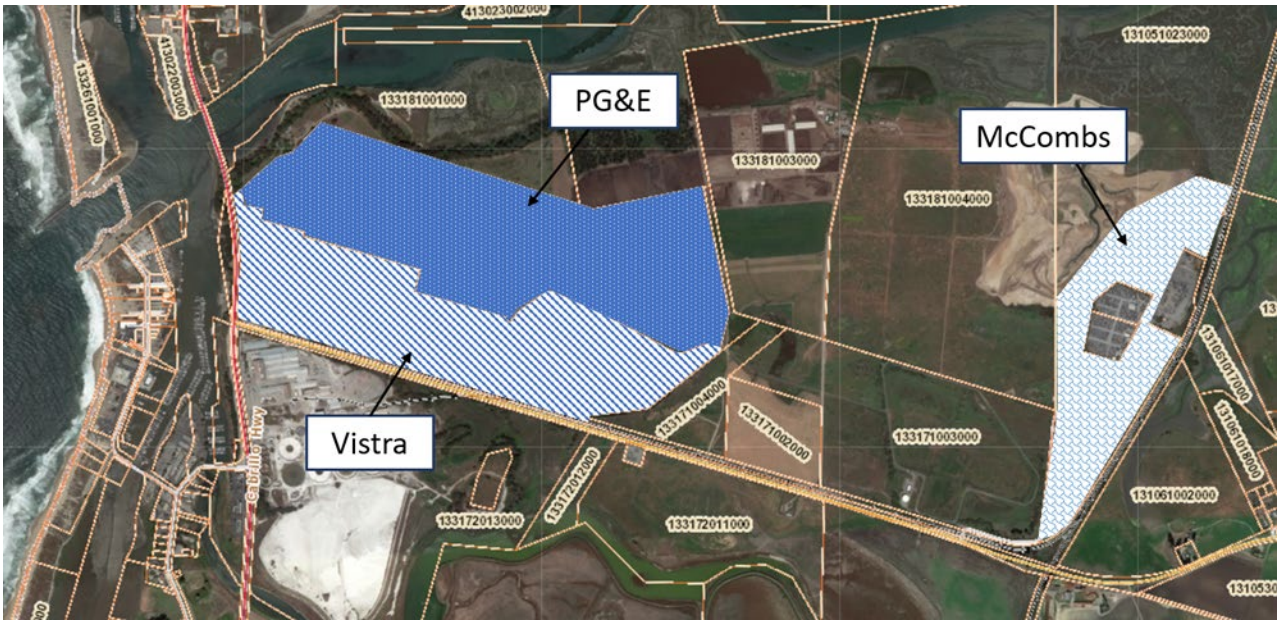
MM6 – Onsite Archaeological Monitor; and
MM7 – Measures to take for discovery of Cultural Resources

The site is in the aboriginal territory of the Ohlone/Coastanoan-Esselen Nation (OCEN) and in accordance with Public Resource Code 21080.3.1, tribal consultation between OCEN and County Staff occurred on April 02, 2019. OCEN identified that the entire Moss Landing are is a sacred ground and they object to the excavation for the substation area in principal but understand that development will continue in the area and have requested the presence of a tribal monitor during excavation if it is allowed to proceed. Implementation of this recommended mitigation (Condition No. 11 – MM01) would reduce potential impacts to tribal cultural resources to a less than significant level.

**Traffic/Transportation**
Primary vehicular access to the area is provided by Highway 1, a highly constrained roadway during peak travel hours with a level of service (LOS) rating of "F", attributed by the high volume of regional traffic and physical limitations of the roadway. Highway 1 is reduced from a 4-lane segment to a 2-lane segment between the Salinas Road and Highway 156 interchanges. Very little of the existing traffic condition is generated by the Moss Landing Community, including the subject property.

Secondary vehicular access to the vicinity is provided by Dolan Road which has a rating of LOS B. This roadway connects to Highway 156 (via Castroville Boulevard) and Highway 101 (via Castroville Boulevard and San Miguel Canyon Road).

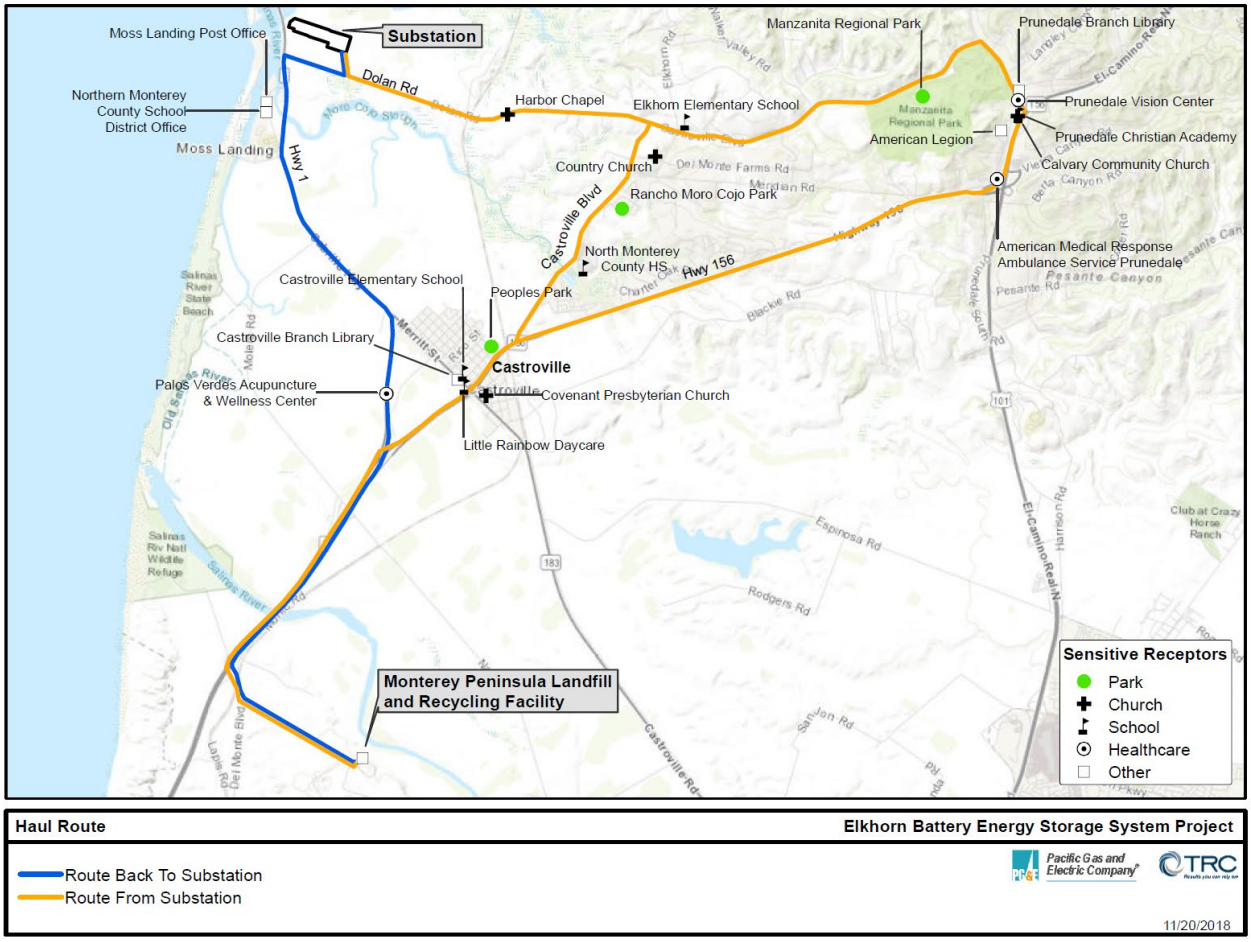
MLCP Section 5.2.2 states that the primary transportation emphasis of the Coastal Act is to preserve highway capacity for coastal access and coastal dependent land uses and recommends a reduction in the number access points from the Highway 1 to minimize hazardous and congested conditions. The North County Coastal Implementation Plan (CIP) Section 20.144.120.A.1 requires a traffic study for all development proposals with potential to significantly impact the service level or safety along Highway 1. In accordance with the provisions of the CIP, a traffic assessment was submitted with the project application. Historical vehicular access on and off the MLPP, is provided along Highway 1 and Dolan Road. Traffic trips for the PG&E project, the Vistra Project, and the RV and Boat Storage project would all utilize the same route: Dolan Road to Castroville Boulevard to San Miguel Canyon Road to Highway 101. The construction component of the PG&E Project would result in approximately 180 daily trips. The construction component of the Vistra Project would result in no more than 924 daily trips. The RV and Boat Storage would result in 27 of daily trips. Using the data provided by the project applications, and in consultation with RMA-Public Works and Facilities, it has been determined that cumulatively, the four projects would not decrease the Level of Service (LOS) on the roads outline within the haul routes. Therefore, the potential impact would result in a less than significant level.




**Projects Considered for Cumulative Analysis**

In accordance with the provisions of the CIP, a traffic management plan was submitted with the project application (**Exhibit J**). The applicant provided Construction Management Plan (CMP) indicates that all trucking deliveries and off-haul traffic would use the Dolan Road gate, located on Dolan Road, approximately 0.25 miles east of the Highway 1 and Dolan Road intersection. No negative traffic impacts are anticipated on Dolan Road as the substation site has ample staging areas, thereby eliminating the need for staging on Dolan Road. To minimize traffic at the intersection of Highway 1 and Dolan Road, exiting trucks will be routed east to either Castroville Boulevard or Highway 101 when hauling soils to the Monterey Peninsula Landfill and Recycling Facility in Marina, California. The return route from the landfill will be north on Highway 1 to

Dolan Road, with minimal impact to traffic while turning east (right turn) onto Dolan Road (**Exhibit J**).




**Haul Routes**

Primary access is through a driveway entrance off Dolan Road, approximately ¾ of a mile east of the Highway 1 and Dolan Road intersection. A secondary access point, for egress only, is located approximately 550 feet east of Highway 1 off Dolan Road. A tertiary access, for emergency services only, is located over 800 feet from the intersection of Highway 1 and Dolan Road, directly off Highway 1. The operational component of the project would not result in a net increase in employees as the BESS would be unmanned and remotely monitored. Maintenance tasks would occur on one, five, and ten year intervals, requiring an estimated two to ten maintenance workers.

In order to minimize traffic impacts to Highway 1, truck trips would be scheduled during non-peak hours and spread throughout the day to avoid construction-related peak-hour trips. Compliance with the Construction Management Plan submitted for the project has been made a condition of approval.

<u>COMMENTS RECEIVED DURING IS/MND CIRCULATION</u>:

During the circulation period of the IS/MND, comments were received from the California Department of Transportation (Caltrans) and Adams Broadwell Joseph and Cardozo, a law firm in South San Francisco. These comments are discussed below.

**California Department of Transportation (Caltrans)**
1. All work in the State's right-of-way would require an encroachment permit from Caltrans and must be done to Caltrans standards.
2. Caltrans appreciates the CMP initiatives to take traffic impacts off Highway 1, and PG&E encouraging workers to carpool would help reduce congestion and lower emissions.

The applicant is aware of Caltrans comments. No work is proposed on Highway 1 that would trigger an encroachment permit and the CMP will be followed.

**Adams Broadwell Joseph and Cardozo (August 5, 2019)**
1. The IS/MND failed to comply with CEQA in analyzing the impacts from all phases of the project including potentially significant impacts. Moreover, the IS/MND failed to support conclusions with substantial evidence.
2. Upon review of the IS/MND and technical appendices and the reference documents with the assistance of technical experts from Soil Water Air Protection Enterprise (SWAPE), the IS/MND fails to analyze air quality impacts.

**Adams Broadwell Joseph and Cardozo (December 30, 2019)**
The commenter has reached a legally enforceable settlement agreement with PG&E to address the merits of the issues raised in August, and the commenter has no further objections to the project. The commenter did, however, submit additional measures for the project as follows:

1. Hazardous substances investigations: Prior to grading, the developer should submit to the County a phase 1 environmental site assessment prepared by an independent licensed environmental professional to determine the presence of potential hazards in soils and groundwater. The developer should implement recommendations of the phase one assessment so that workers are not exposed to harmful concentrations of hazardous substances.

2. Emissions controls: All diesel vehicles that are on site for more than ten days should have engines that meet 2007 EPA standards and verified by the EPA or CARB to reduce particulate matter emissions by 85 percent when installed on a Tier 0 or 1 engine. All diesel nonroad construction equipment on site for more than ten total days must meet CARB regulations.

In response to comment 1, the applicant submitted a construction management plan that indicated if contaminated soils are identified during construction, safe soil handling would occur in accordance with PG&E's procedures for removal (**Exhibit I**). Construction crews would implement the Applicant-Proposed Measures described in Section 1.4 of the Applicant Prepared Environmental Assessment to ensure crew and public safety and to avoid or further minimize potential project-related impacts.

In response to comment 2, to assess potential project related greenhouse gas (GHG) emissions, the applicant submitted estimation data for construction emissions (which would principally be

from motor vehicles) using CalEEMod Version 2016.3.2. (**Exhibit E**). Based on the CalEEMod results, project related GHG emissions would not exceed the significance threshold established by the CARB, SLOCAPCD, or BAAQMD. As a result, the temporary project related impact would be less than significant and would not conflict with the Monterey County General Plan or any other applicable plan, policy, or regulation.

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