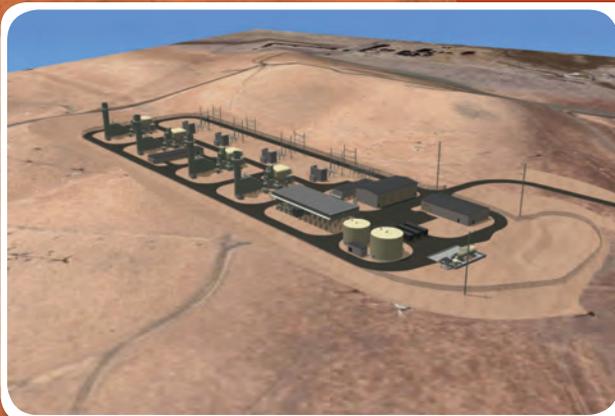


**APPLICATION FOR CERTIFICATION  
CONSTRUCTION TRAFFIC CONTROL  
AND IMPLEMENTATION PLAN  
TRANS-3**



SUBMITTED TO THE  
**California Energy Commission**

FOR THE  
**Mariposa Energy Project**  
(09-AFC-03C)



SUBMITTED BY

  
**Mariposa Energy, LLC**

TECHNICAL ASSISTANCE BY

 **CH2MHILL**

**JUNE 2011**

# **Construction Traffic Control and Implementation Plan for the Mariposa Energy Project**

Prepared for  
**Mariposa Energy, LLC**

June 2011

**CH2MHILL**  
2485 Natomas Park Drive  
Suite 600  
Sacramento, CA 95833

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## SECTION 1

# Introduction

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The purpose of this Construction Traffic Control and Implementation Plan, or Traffic Control Plan (TCP), is to reduce traffic impacts on existing transportation facilities during construction of the Mariposa Energy Project (MEP). The TCP was designed to satisfy the requirements of the local agencies for maintaining traffic and preserving the integrity of the existing transportation facilities.

This document has been prepared to comply with Condition of Certification (COC) TRANS-3, as set forth in the California Energy Commission (CEC) Commission Decision for MEP (CEC, 2011). The TCP addresses the following requirements as stated in TRANS-3, Traffic Control Plan, Heavy Hauling Plan, and Parking/Staging Plan:

- **Item 1:** A work schedule designed to ensure that the project does not significantly impact level of service (LOS) on the local and regional transportation network in the project's vicinity. The project owner shall use one or more of the following measures to reduce impacts to LOS: staggered work shifts, off-peak work schedules (arriving or departing from about 6:30 p.m. to 6:00 a.m. and from about 9:00 a.m. to 3:30 p.m.), and/or a park-and-ride program for construction employees.
- **Item 2:** Provisions for an incentive program, such as employer-sponsored commuter checks, to encourage construction workers to carpool and/or use van or bus service.
- **Item 3:** A project schedule to ensure that the construction-related activities associated with MEP and other cumulative projects are coordinated with California Department of Transportation (Caltrans) District 4 and the relevant local jurisdictions. This would ensure that construction-related traffic and activities would not impact transportation facilities and existing traffic levels within the project area.
- **Item 4:** Timing of heavy equipment and building material delivery to the sites, which shall occur during off-peak traffic hours.
- **Item 5:** Provisions for redirection of construction traffic with a flag person as necessary to ensure traffic safety and minimize interruptions to non-construction related traffic flow.
- **Item 6:** Provisions for ensuring traffic safety during the implementation of Biological Resources Condition of Certification **BIO-10**. For example, the plan shall include:
  - Traffic control methods and/or scheduling to ensure safety of the biological monitors and to prevent collisions and traffic back-ups caused by slow-moving surveying vehicles.
  - Details on whether or not construction traffic will be rerouted during the wet season as described under BIO-10 ii, and if so, details of methods that will be used to redirect construction traffic.

- **Item 7:** Placement of necessary signage, lighting, and traffic control devices at the project construction site and laydown areas.
- **Item 8:** Routes to the project site to be used by construction worker vehicles and truck traffic, including trucks carrying hazardous materials. Routes shall avoid use of the West Grant Line and Midway Road intersection during peak hours, as this intersection already operates at LOS F during evening (PM) peak hours.
- **Item 9:** A heavy-haul plan addressing the transport and delivery of heavy and oversized loads requiring permits from the Caltrans, other state or federal agencies, and/or the affected local jurisdictions.
- **Item 10:** Timing of construction-related trips, with trips scheduled for off-peak hours if possible.
- **Item 11:** Location and details of construction along affected roadways at night, where permitted.
- **Item 12:** Temporary closure of travel lanes or disruptions to street segments and intersections during construction activities.
- **Item 13:** Traffic diversion plans (in coordination with Alameda County, San Joaquin County, Contra Costa County, and the City of Tracy) to ensure access during temporary lane/road closures.
- **Item 14:** Access to residential and/or commercial property located near construction work and truck traffic routes.
- **Item 15:** Insurance of access for emergency vehicles to the project site.
- **Item 16:** Advance notification to residents, businesses, emergency providers, and hospitals that would be affected when roads may be partially or completely closed.
- **Item 17:** Identification of safety procedures for exiting and entering the site access gate.
- **Item 18:** Parking/Staging Plan (PSP) for all phases of project construction and for project operation.
- **Item 19:** The property owner and contractor(s) shall make available information on public transportation within the project vicinity and surrounding counties and cities to MEP construction and operations workforce.

The other COCs pertaining to Traffic and Transportation are listed below. These COCs address transportation-related issues, but do not require additional focus in this TCP. Therefore, they are just provided for reference.

- **TRANS-1, Roadway Use Permits and Regulations.** The project owner shall comply with limitations imposed by Caltrans District 4 and other relevant jurisdictions, including the City of Tracy, the Mountain House Community, and the counties of Alameda, San Joaquin, and Contra Costa, on vehicle sizes and weights, driver licensing, and truck routes. In addition, the project owner or its contractor shall obtain necessary transportation permits from Caltrans and all relevant jurisdictions for roadway use.

- **TRANS- 2, Restoration of All Public Roads, Easements, and Rights-of-Ways.**

The project owner shall restore all public roads, easements, and rights-of-way that have been damaged due to project-related construction activities. The restoration shall be completed in a timely manner to the original or near original road condition.

Prior to the start of site mobilization, the project owner shall notify the relevant jurisdictions, including the Counties of Alameda, Contra Costa, and San Joaquin, the City of Tracy, and Caltrans District 4, of the proposed schedule for project construction. The purpose of this notification is to request that these jurisdictions consider postponement of any planned public right-of-way repair or improvement activities in areas affected by project construction until construction is completed, and to coordinate any concurrent construction-related activities that cannot be postponed.

- **TRANS-4, Encroachment into Public Rights-of-Way.** Prior to any ground disturbance, improvements, or obstruction of traffic within any public road, easement, or right-of-way, the project owner or its contractor(s) shall coordinate with all relevant jurisdictions, including the counties of Alameda and Contra Costa and Caltrans District 4, to obtain all required encroachment permits and comply with all applicable regulations.
- **TRANS-5, Transportation of Hazardous Materials.** The project owner shall obtain the necessary permits and/or licenses from the California Highway Patrol, Caltrans District 4, and any relevant local jurisdictions for the transportation of hazardous materials. The project owner shall ensure compliance with all applicable regulations and implementation of the proper procedures. In addition, the owner shall ensure that hazardous materials deliveries occur outside of normal commute hours.
- **TRANS-6, Payment of Transportation Fees.** Where applicable, the property owner shall pay traffic and transportation fees to Alameda County for development of the MEP. These fees may include but not be limited to the Tri-Valley transportation development fee and the cumulative traffic impact mitigation fee.
- **TRANS-7, Obstruction Marking and Lighting.** The project owner shall install obstruction marking and lighting on the exhaust stacks, consistent with FAA requirements, as expressed in the following documents:
  - FAA Advisory Circular 70/7460-1K
  - FAA Safety Alert for Operators (SAFO) 09007

Permanent lighting consistent with all requirements shall be installed and activated within 5 days of completion of construction and prior to the start of plant operation. Lighting shall be operational 24 hours a day, 7 days a week for the life of project operation. Upgrades to the required lighting configurations, types, location, or duration shall be implemented consistent with any changes to FAA obstruction marking and lighting requirements.

- **TRANS-8, Pilot Notification and Awareness.** The project owner shall initiate the following actions to ensure pilots are aware of the project location and potential hazards to aviation:
  - Submit a letter to the FAA requesting a Notice to Airmen (NOTAM) be issued advising pilots of the location of the MEP and recommending avoidance of overflight of the project site below 1,500 feet AGL. The letter should also request that

the NOTAM be maintained in active status until all navigational charts and Airport Facility Directories (AFDs) have been updated.

- Submit a letter to the FAA requesting a power plant depiction symbol be placed at the MEP site location on the San Francisco Sectional Chart with a notice to “avoid overflight below 1,500 feet AGL”.
- Submit a request to and coordinate with the Byron Airport Manager to add a new remark to the Automated Surface Observing System (ASOS) identifying the location of the MEP and advising pilots to avoid direct overflight below 1,500 feet AGL as they approach or depart the airport.
- Request that TRACON (NORCAL) and/or the Oakland Air Traffic Control Center submit aerodrome remarks describing the location of MEP and advising against direct overflight below 1,500 feet AGL to the:
  - FAA AeroNav Services, formerly the FAA National Aeronautical Charting Office (Airport/Facility Directory)
  - Jeppesen Sanderson, Inc. (JeppGuide Airport Directory, Western Region)
  - Airguide Publications (Flight Guide, Western States)

## 1.1 Project Description

The proposed 10-acre MEP site is located in an unincorporated area in the northeastern corner of Alameda County, near Contra Costa County to the north and San Joaquin County to the east. The MEP site is approximately:

- 6 miles south of Byron
- 2.7 miles southeast of Contra Costa County’s Byron Airport
- 2 miles west of the San Joaquin County boundary
- 2.5 miles west of the community of Mountain House
- 7.4 miles northwest of the town of Tracy

The project site is located southeast of the intersection of Bruns Road and Kelso Road, about 2 miles southwest of the Byron Highway and 3.5 miles north of Interstates 580 (I-580) and 205 (I-205). It is located less than a mile south of the Pacific Gas and Electric Company (PG&E) Bethany Compressor Station and the Kelso Substation. Direct access to the MEP site is from Bruns Road onto an existing 1,100-foot-long easement. This easement provides shared access with the existing 6.5-megawatt (MW) Byron Power Cogeneration Plant, which occupies 2 acres of the 158-acre parcel on which MEP is located.

Regional site access to the proposed project site from the north is via Byron Highway, while regional access from the south is via I-580 or via I-205 from the Mountain House Parkway Interchange. Local roads used to access the proposed project site are Bruns Road, Kelso Road, Mountain House Road, Mountain House Parkway, and West Grant Line Road.

## 1.2 Existing Conditions

### 1.2.1 Affected Roadways

The following roadways are located near MEP. Therefore, the following local and regional roadways may be affected by construction and operations traffic.

- **I-205:** I-205 is a freeway located approximately 3.5 miles south of the MEP site. It runs east-west for approximately 13 miles between I-580 to the west and Interstate 5 (I-5) to the east. East of the project site in San Joaquin County near Tracy, I-205 is a four-lane divided freeway. It changes into a six-lane divided freeway in Alameda County near Midway Road, about 3.5 miles southeast of the MEP site.
- **I-580:** I-580 merges with I-205 about 3.5 miles south of the MEP site. I-580 is a major inter-regional freeway route between the San Francisco Bay Area and the Central Valley, linking the cities of Dublin, Livermore, and Pleasanton. It extends from its easternmost point at I-5 in San Joaquin County to its western terminus in San Rafael, just north of San Francisco. From its eastern terminus to its connection with I-205 in Alameda County, I-580 is four lanes. It then widens and continues west through Alameda County as an eight-lane freeway.
- **Byron Highway:** Byron Highway is an arterial located about 2 miles northeast of the MEP site. It extends southeast from its intersection at Marsh Creek Road/Camino Diablo in Contra Costa County to the city of Tracy in San Joaquin County. Byron Highway has multiple names and road classifications which vary as the road crosses through different counties. In Contra Costa County, it is called J4 and classified as an arterial; in Alameda County, it is called Byron-Bethany Road and has no road classification; and in San Joaquin County, it is called West Byron Road and has two road classifications: major County road in unincorporated San Joaquin County and rural highway in the City of Tracy.
- **Bruns Road:** Bruns Road is a north-south road lying along the western border of MEP and intersecting with Byron Highway to the north. An easement off of Bruns Road would provide the entrance, and therefore the direct access, to the project site.
- **Kelso Road:** Kelso Road is just north of the proposed MEP site. Kelso Road runs east-west between the Delta Pumping Plant and Great Valley Parkway near West Byron Road (Byron Highway).
- **Mountain House Road:** Mountain House Road runs north-south and is a local two-lane road in the vicinity of MEP. It begins at Byron Bethany Road (Byron Highway) to the north and ends with West Grant Line Road near I-580 to the south. The City of Tracy 2006 General Plan classifies the roadway as a two-lane rural highway.
- **West Grant Line Road:** West Grant Line Road is a two-lane rural roadway in the vicinity of the MEP site. It runs primarily east-west, beginning south of I-580, extending over I-580 in a northerly direction, and eventually heading east and ending at West Byron Road. West Grant Line Road is used by some commuters to bypass congestion on I-205 between I-580 and West Byron Road.

## 1.2.2 Railroads, Bus Routes, Bicycle Routes and Carpool Facilities

### 1.2.2.1 Railroads

**Freight Rail.** Union Pacific has rail switching and terminal services in the City of Tracy, approximately 7 miles from the MEP site. The closest at-grade railway crossing in the vicinity of the project is at the intersection of Byron Highway and Grant Line Road.

**Passenger Rail.** The Altamont Commuter Express (ACE) provides commuter train service between Stockton and San Jose, with connections to Amtrak and Caltrain in the Bay Area. The ACE stop closest to the proposed MEP site is in Tracy. The ACE provides three round-trip peak hour trains and one mid-day train (ACE, 2010; Mountain House Community Services District [MHCS], 2010).

### 1.2.2.2 Bus Routes

Tri Delta Transit provides bus service centered in East Contra Costa County, mainly between the cities of Antioch, Pittsburg, Brentwood, Oakley, Bay Point, Discovery Bay, and Concord. It also provides commuter bus service between Wicklund Elementary School in Mountain House and the Dublin/Pleasanton BART station Monday through Friday during peak commute hours (MHCS, 2010; Tri Delta Transit, 2010).

The San Joaquin Regional Transit District (SJRTD) provides 11 Interregional Subscription buses with service to the Bay Area. The nearest SJRTD bus stop within the vicinity of the proposed MEP site is located in Tracy (MHCS, 2010; SJRTD, 2010).

### 1.2.2.3 Bicycle Routes/Pedestrian Facilities

The Alameda Countywide Bicycle Plan (ACBP) and the Countywide Pedestrian Plan (CPP) do not include planned bikeways or pedestrian pathways within the vicinity of MEP. However, the East Bay Regional Park District (EBRPD) 2007 Master Plan (EBRPD, 2007) includes an extension of the Delta Trail from the Clifton Court Forebay to the Bethany Reservoir State Recreation Area. The written policy portion of the Master Plan was developed in 2010.

The nearby roadways are generally not conducive to bicycle and pedestrian activity because they have gravel or dirt shoulders, are overgrown, and provide uneven footing. However, there is some low-level pedestrian and bicycle activity in the area. The California Aqueduct Bikeway is a bicycle and pedestrian path located a little over a mile south from the proposed MEP site. It stretches approximately 70 miles from the Bethany Reservoir State Recreation area to the San Luis Reservoir (Ostertag, 2001). East of MEP, a Class III bike lane is proposed along West Byron Road, between the Alameda County line and the City of Tracy. The Class III designation means it would provide continuity to the local bikeway system, connecting discontinuous bikeway segments while sharing the right-of-way with motor vehicles (San Joaquin County Public Works Department, 2002). There are no crosswalks within the vicinity of the project.

### 1.2.2.4 Carpool Facilities

The nearest park-and-ride lots in the vicinity of MEP are located in Tracy. They are located at the intersections of I-205 westbound on-ramp and Grant Line Road/Naglee Road; I-205 eastbound ramps and MacArthur Drive; and at 6th Street and Central Avenue (Commute Connection, 2010). The three figures below present the location of the park-and-ride lots.



FIGURE 1  
I-205 and Grant Line Road/Naglee Road Park-and-Ride Lot Location



FIGURE 2  
I-205 and MacArthur Drive Park-and-Ride Lot Location

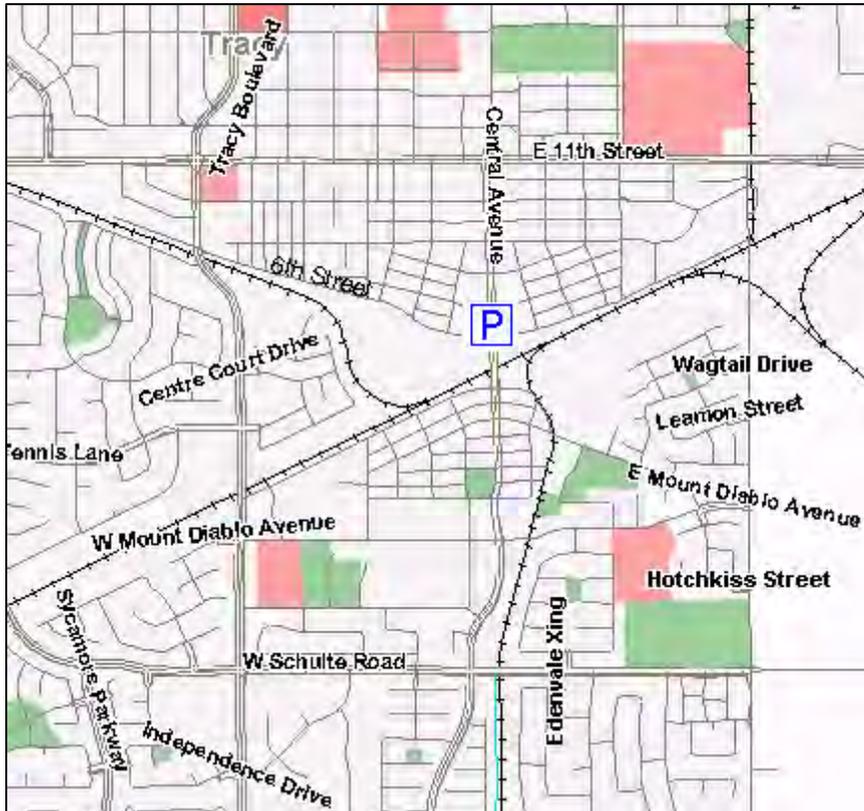


FIGURE 3  
6th Street and Central Avenue Park-and-Ride Lot Location

## SECTION 2

# Construction Impacts

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The following section identifies the potential traffic impacts associated with the construction of MEP, as identified in the CEC Commission Decision (CEC, 2011). Project construction is expected to begin June 2011, with commercial operation commencing on July 1, 2012.

## 2.1 Construction Traffic Impacts

### 2.1.1 Construction Workforce Traffic

The MEP construction workforce would commute daily from locations primarily within Alameda, San Joaquin, and Contra Costa counties. As identified in the Application for Certification (Mariposa Energy, 2009) and Supplemental Staff Assessment (SSA) (CEC, 2010), the workforce would likely peak in size with a maximum of 177 construction workers per day during Month 7. It was assumed that 10 percent of these workers would ride as passengers in other construction workers' vehicles. The estimate of 10 percent is based on the rural nature of the project area and surroundings and reflects a relatively low rate of carpooling. Based on this assumption, about 18 construction workers would carpool, and 159 workers would drive their own vehicles, resulting in 318 one-way daily vehicle trips during peak construction.

Additional workforce numbers have been developed during the engineering design phase of the project. The expected construction workforce numbers for each week of the project are included as Appendix A. As shown in Appendix A, the predicted number of construction workers onsite each day during a majority of the construction period will be significantly less than 120 workers and the peak workforce is expected to occur during Month 9. However, to plan for the worst-case scenario, the traffic impact analysis was based on the peak workforce numbers and it was assumed half of these trips would occur during the morning (AM) peak hours (worker arrival time) and half during the PM peak hours (worker departure times).

### 2.1.2 Construction Truck Traffic

During peak construction, MEP would generate approximately 36 daily one-way truck trips (composed of 18 arrival trips and 18 departure trips). For this traffic analysis, truck trips were converted to passenger car equivalent (PCE) trips at a ratio of 1.5 passenger cars for each truck (Mariposa Energy, 2009). Using this conversion, MEP would generate approximately 54 one-way PCE truck trips per day. Of these trips, 12 one-way PCE truck trips would occur during peak hours, with 6 one-way PCE trips in the morning and 6 one-way PCE trips in the evening.

Approximately 28 oversized or heavy loads would be delivered during project construction. The oversized or heavy loads would be transported to the MEP site by truck. Per TRANS-3, Item 4, the timing of heavy equipment and building material delivery to the sites will be scheduled to occur during off-peak traffic hours (i.e., between 9:00 a.m. and 3:00 p.m. on weekdays).

Near the project site, the primary truck route to and from the project site and construction laydown area would be via Byron Highway to Bruns Road. To reach Byron Highway from I-580 and/or I-205, truck traffic is expected to use Mountain House Parkway. This is consistent with Alameda County's recommendation to use Byron Highway and the most direct route as much as possible, and San Joaquin County's feedback on the use of Mountain House Parkway (Appendix B). Per TRANS-1, the owner will also comply with all vehicle sizes, weights, and driver certifications. The transportation of hazardous materials will be subject to additional permitting and/or licensing; per TRANS-5, the project owner will comply with all applicable regulations. The truck route restrictions, by county, are presented in Table 1.

TABLE 1  
Traffic Restrictions in Surrounding Counties and Municipalities

County/Municipality	Restrictions in Addition to Those Outlined in the California Vehicle Code (CVC) Sections 35550-35559
San Joaquin County (Cooper, 2009)  (Chetley, 2011)	7 ton per axle weight restriction in 35 mph zones 5 ton per axle weight restriction in 25 mph zones No map or list of approved truck routes are available County staff feedback on the use of Mountain House Parkway to Byron Highway (Appendix B).
Alameda County (Bates, 2009)	County staff recommended the use of the most direct route and the use of Byron Highway as much as possible. Trucks are banned on Mountain House Road under the county ordinance unless the final destination is along Mountain House Road (Bates, 2009). No map or list of approved truck routes are available
Contra Costa County	If a weight or dimension exceeds the CVC provisions, the route proposed must be pre-approved by the permitting department. No map or list of approved truck routes are available for the unincorporated parts of Contra Costa County.
City of Tracy	City of Tracy Municipal Code Title 3 Article 7 Section 3.08.310 lists the designated truck traffic routes: <ul style="list-style-type: none"> <li>• Arbor Road (MacArthur Drive to Holly Drive)</li> <li>• Byron Road (west City Limits to Lammers Road)</li> <li>• Corral Hollow Road (Larch Road to Grant Line Road and Linne Road to I-580)</li> <li>• Chrisman Road (north of Valpico Road portion of Chrisman Road within City Limits)</li> <li>• 11th St (Lammers Road to the west City Limits and MacArthur Drive to east City Limits)</li> <li>• Grant Line Road (west City Limits to Corral Hollow Road and MacArthur Drive to east City Limits)</li> <li>• Holly Drive (Arbor Road to Larch Road)</li> <li>• Lammers Road (Byron Road to 11th Street) - Per comments received from the City of Tracy on the draft TCP, the only purpose of designating this segment of Lammers Road as a truck route was to allow any trucks exiting off I-205 at Eleventh Street to go back to I-205 through county roads (Appendix B).</li> <li>• Larch Road (Holly Drive to Corral Hollow Road)</li> <li>• Linne Road (east City Limits to west City Limits)</li> <li>• MacArthur Drive (Arbor Road to 11th Street)</li> <li>• Tracy Boulevard (Larch Road to I-205 and Linne Road to south City Limits)</li> </ul>

### 2.1.3 Construction Traffic-related Impacts

As presented in Table 2, the total workforce and truck trips generated during the peak construction month would be 372 daily one-way trips (318 worker trips added to 54 PCE truck trips). It is assumed that 159 one-way worker trips and 6 PCE truck trips would occur during the morning peak and 159 one-way worker trips and 6 PCE truck trips would occur during the evening peak. Therefore, peak hour trips conservatively include all 318 one-way worker trips and 12 one-way PCE truck trips.

TABLE 2  
One-way Trips Generated by Peak Construction

Vehicle Type	Daily Trips	AM Peak Hour Trips	PM Peak Hour Trips
Construction Workers			
18 Carpooling Workers <sup>a</sup>	Not Applicable	Not Applicable	Not Applicable
159 Drivers <sup>b</sup>	318	159	159
Delivery/Haul Trucks (PCE) <sup>c</sup>	54	6	6
<b>Total</b>	<b>372</b>	<b>165</b>	<b>165</b>

<sup>a</sup> This is the number of peak construction workers expected to commute as passengers in other workers' vehicles.

<sup>b</sup> This is the number of peak construction workers who would drive their own vehicles. Some of these drivers would accommodate carpooling workers in their vehicles.

<sup>c</sup> PCE was calculated using a ratio of 1.5 passenger cars for each truck, consistent with guidelines in the Highway Capacity Manual 2000.

#### 2.1.3.1 Findings as Presented in the AFC and SSA

It was assumed in the AFC (Mariposa Energy, 2009) and SSA (CEC, 2010) that the construction workforce traffic would commute daily from locations relatively near the project within Alameda, San Joaquin, and Contra Costa counties. The following is a breakdown of the estimated percentage of worker traffic traveling each route to the MEP site:

- 10 percent via Byron Highway (originating from Contra Costa County)
- 30 percent via I-580 east / West Grant Line Road (originating from Alameda County / San Francisco Bay Area)
- 20 percent via I-580 west / West Grant Line Road (originating from San Joaquin County / Central Valley)
- 30 percent via I-205 west/West Grant Line Road (originating from San Joaquin County / Central Valley)
- 10 percent via West Grant Line Road (originating from Tracy and beyond)

The potential MEP traffic impacts associated with assumptions presented in the AFC (Mariposa Energy, 2009) were evaluated by analyzing roadway segments, freeway segments, and intersections in the vicinity of the project site. The comparisons of preconstruction and peak construction peak hour traffic volumes and LOS on study freeway segments are presented in Tables 3 and 4. Table 3 summarizes the information for AM peak

hour trips and Table 4 summarizes the information for PM peak hour trips. Preconstruction and peak construction LOS would remain the same, with the exception of I-205 westbound between Midway Road and Mountain House Parkway during the AM peak hour. The LOS for this segment would change from LOS C to LOS D. The acceptable LOS for all freeway segments is LOS E. All study freeway segments currently operate at LOS E or better and are projected to continue to do so during peak construction. Therefore, there are no direct project-related impacts on any of the freeway segments in the vicinity of MEP that need to be addressed in this TCP.

Table 5 is a comparison of preconstruction and peak construction annual average daily traffic (AADT) and LOS on study roadway segments. Although traffic volumes and AADT increase during peak construction, projections show that peak construction LOS is not expected to differ from preconstruction LOS. The LOS standards for the study roadways range from LOS C to LOS D. All study roadways will operate at an acceptable LOS during peak construction, so there are no impacts that need to be addressed.

Table 6 presents a comparison of pre- and peak construction delays and the LOS at study intersections during the PM peak hour. Peak construction is projected to increase delay at all intersections. However, LOS would remain the same, with the exception of the West Grant Line Road/I-580 eastbound intersection, which would change from LOS A to LOS B.

**TABLE 3**  
Freeways: AM Peak Hour Trips and LOS during Peak Construction

Freeway Segment	AM Peak Hour Volume and LOS			LOS Standard
	Existing (Year 2009)	MEP-added Trips	Peak Construction (Year 2011) <sup>a</sup>	
I-580 EB, North Flynn Road and West Grant Line Road	1,282 LOS A	48	1,330 LOS A	LOS E <sup>b</sup>
I-580 WB, North Flynn Road and West Grant Line Road	7,854 LOS E	0	7,854 LOS E	LOS E <sup>b</sup>
I-580 EB, West Grant Line Road and Midway Road	1,273 LOS A	0	1,273 LOS A	LOS E <sup>b</sup>
I-580 WB, West Grant Line Road and Midway Road	7,800 LOS D	80	7,880 LOS D	LOS E <sup>b</sup>
I-580 EB, Midway Road and Mountain House Parkway	312 LOS A	0	312 LOS A	LOS E <sup>b</sup>
I-580 WB, Midway Road and Mountain House Parkway	3,011 LOS D	32	3,043 LOS D	LOS E <sup>b</sup>
I-205 EB, Midway Road and Mountain House Parkway	3,035 LOS B	0	3,035 LOS B	LOS E <sup>b</sup>
I-205 WB, Midway Road and Mountain House Parkway	4,449 LOS C	48	4,497 LOS D	LOS E <sup>b</sup>

<sup>a</sup> The traffic volume figures for Peak Construction (Year 2011) assume that all traffic volume increases result from construction-generated traffic and do not include an existing natural background increase in traffic. Due to economic conditions, it is assumed that background growth in traffic will not occur between now and the completion of construction activities in the first half of 2012.

<sup>b</sup> This LOS standard for roadways within the Congestion Management Program network (including State highways) is from: the Alameda County Congestion Management Agency's Congestion Management Program; and the Alameda County East Area Plan.

**TABLE 4**  
 Freeways: PM Peak Hour Trips and LOS during Peak Construction

Freeway Segment	PM Peak Hour Volume and LOS			LOS Standard
	Existing (Year 2009)	MEP-added Trips	Peak Construction (Year 2011) <sup>a</sup>	
I-580 EB, North Flynn Road and West Grant Line Road	6,961 LOS D	0	6,961 LOS D	LOS E <sup>b</sup>
I-580 WB, North Flynn Road and West Grant Line Road	3,615 LOS B	48	3,663 LOS B	LOS E <sup>b</sup>
I-580 EB, West Grant Line Road and Midway Road	6,912 LOS D	80	6,992 LOS D	LOS E <sup>b</sup>
I-580 WB, West Grant Line Road and Midway Road	3,590 LOS B	0	3,590 LOS B	LOS E <sup>b</sup>
I-580 EB, Midway Road and Mountain House Parkway	2,843 LOS C	32	2,875 LOS C	LOS E <sup>b</sup>
I-580 WB, Midway Road and Mountain House Parkway	1,081 LOS A	0	1,081 LOS A	LOS E <sup>b</sup>
I-205 EB, Midway Road and Mountain House Parkway	4,488 LOS D	48	4,536 LOS D	LOS E <sup>b</sup>
I-205 WB, Midway Road and Mountain House Parkway	3,178 LOS B	0	3,178 LOS B	LOS E <sup>b</sup>

<sup>a</sup> The traffic volume figures for Peak Construction (Year 2011) assume that all traffic volume increases result from construction-generated traffic and do not include an existing natural background increase in traffic. Due to economic conditions, it is assumed that background growth in traffic will not occur between now and the completion of construction activities in the first half of 2012.

<sup>b</sup> This LOS standard for roadways within the Congestion Management Program network (including State highways) is from: the Alameda County Congestion Management Agency's Congestion Management Program; and the Alameda County East Area Plan.

TABLE 5  
Roadways: Traffic Volumes and LOS during Peak Construction

Roadways	Boundaries of Segment	Existing AADT <sup>a</sup> (Year 2009)	LOS	MEP-added Trips	Peak Construction AADT <sup>a</sup> (Year 2011)		LOS Standard
					LOS		
Byron Highway	North Bruns Way and Bruns Road	13,261	C	38	13,299	C	High LOS C <sup>b</sup>
Bruns Road	Kelso Road and Christensen Road	286	B	372 <sup>e</sup>	622	B	LOS D <sup>d</sup>
Mountain House Road	Byron Bethany Road and West Grant Line Road	3,366	B	336	3,702	B	LOS D <sup>c</sup>
Kelso Road	Bruns Road and North Great Valley Parkway	663	B	336	999	B	LOS D <sup>d</sup>
West Grant Line Road	At the Alameda/San Joaquin County Line	8,365	C	38	8,403	C	LOS D <sup>c</sup>

<sup>a</sup> AADT stands for Annual Average Daily Traffic. These AADT figures include traffic traveling in both directions.

<sup>b</sup> This LOS standard for roads in semi-rural areas is from the Contra Costa County General Plan Growth Management Element.

<sup>c</sup> This LOS standard for arterials is from the Alameda County East Area Plan.

<sup>d</sup> This is not an arterial and therefore has no formal LOS standard. However, for the purposes of this analysis, the Alameda County East Area Plan's LOS D standard for arterials was applied to this roadway as a threshold for traffic impacts.

<sup>e</sup> This is a correction to the number in the AFC.

TABLE 6  
Peak Hour Delay and LOS on Study Intersections during Peak Construction

Study Intersection	PM Peak				LOS Standard <sup>e</sup>
	Year 2009		Year 2011 with MEP		
	Delay	LOS	Delay	LOS	
West Grant Line Road/I-580 EB Ramps <sup>a</sup>	9.6	A	10.9	B	LOS D <sup>d</sup>
West Grant Line Road/I-580 WB Ramps <sup>b</sup>	10.0	B	10.4	B	LOS D <sup>d</sup>
West Grant Line Road/Midway Road <sup>c</sup>	91.3	F	116.0	F	LOS D

<sup>a</sup> Controlling approach: southbound on West Grant Line Road

<sup>b</sup> Controlling approach: westbound on I-580 Ramp

<sup>c</sup> Controlling approach: northbound on Midway Road

<sup>d</sup> This intersection is subject to the LOS standard for both the road and the highway. In this case, the road standard of LOS D is more restrictive and will therefore be used as the threshold.

<sup>e</sup> Alameda County (<http://www.acgov.org/cda/planning/plans/EastCountyAreaPlancombined.pdf>)

Note: These figures are based on turning movement counts from the Altamont Motorsports Park Rezoning Draft Environmental Impact Report.

These are the only intersections in the vicinity of the MEP for which turning movements are available. Furthermore, availability was restricted to PM peak hour counts.

Alameda County uses LOS D as an acceptable LOS for intersection operations. The only intersection in the study area that would not meet this criterion during peak construction would be the West Grant Line Road/Midway Road intersection. The traffic analysis presented in the AFC conservatively assumed all construction worker traffic originating from San Joaquin County / Central Valley would bypass the I-205 west / Mountain House Parkway interchange and exit at the I-580 west / West Grant Line Road interchange and proceed to the MEP site through the West Grant Line Road / Midway Road intersection. This intersection currently operates at LOS F, and will continue to operate at LOS F. While the LOS will not change, peak construction would increase the delay by almost 25 seconds. Only the minor street (Midway Road) traffic would be affected by this increase in delay, and a maximum of 12 peak-hour vehicles would be making this movement.

While the number of affected vehicles is small, and there are no specific guidelines about whether this is a significant impact, Mariposa Energy has conducted an additional intersection analysis to evaluate the potential reduction in delays if construction worker traffic originating from San Joaquin County / Central Valley via I-205 would be encouraged to exit at the I-205 west / Mountain House Parkway interchange rather than proceed to the I-580 west / West Grant Line Road interchange. The potential for cumulative impacts associated with the use of the I-205 west / Mountain House Parkway interchange and the projects identified in the Traffic and Transportation Cumulative Impacts Section of the SSA (CEC, 2010) were also addressed in the additional traffic analysis. The additional analysis is presented in the following section.

### 2.1.3.2 Revised Findings Associated with TRANS-3 Mitigation

#### Potential Local Impacts

The updated traffic analysis was based on the following traffic route assumptions for the MEP construction workforce traffic commuting to the MEP site:

- 10 percent via Byron Highway (originating from Contra Costa County)
- 30 percent via I-580 east / West Grant Line Road (originating from Alameda County / San Francisco Bay Area)
- 20 percent via I-580 west / West Grant Line Road (originating from San Joaquin County/Central Valley)
- 30 percent via I-205 west / Mountain House Parkway (originating from San Joaquin County / Central Valley)
- 10 percent via 11th Street / I-205 west/Mountain House Parkway (originating from Tracy and beyond)

The main difference between the AFC and this revised analysis is the use of Mountain House Parkway and West Grant Line Road to access Mountain House Road instead of using the I-580 / West Grant Line Road exit. This route makes use of the Mountain House Parkway interchanges on I-205 and I-580 and the intersection of West Grant Line Road and Mountain House Parkway for construction workers and non-permitted truck traffic originating from areas south and east of the project site.

The additional intersections included in the study are located in San Joaquin County. According to the San Joaquin County Traffic Impact Study Guidelines (June 2002), all “intersections shall operate at an overall LOS D or better on minor arterials and roadways of higher classification; and LOS C on all other roads. [...] The methods contained in the Transportation Research Board 1997 Highway Capacity Manual (or latest edition) shall be used to determine the LOS”. Table 7 presents the LOS criteria from the 2000 Highway Capacity Manual. The street classification of both Mountain House Parkway and Grant Line Road is “Major Arterial/Expressway/Boulevard” (City of Tracy General Plan Draft EIR), so the minimum LOS threshold for those intersections in San Joaquin County is LOS D.

TABLE 7  
Level of Service Criteria for Intersections

Level of Service	Signalized Intersection Delay per Vehicle (in seconds)	Unsignalized Intersection Delay per Vehicle (in seconds)
A	< 10.0	≤10.0
B	>10.0 and <20.0	>10.0 and ≤15.0
C	>20.0 and <35.0	>15.0 and ≤25.0
D	>35.0 and <55.0	>25.0 and ≤35.0
E	>55.0 and <80.0	>35.0 and ≤50.0
F	>80.0	>50.0

Source: Highway Capacity Manual 2000, Chapters 16 and 17

The results of the comparative analysis for intersection operations are presented in Table 8. One intersection would continue to operate at an unacceptable LOS:

- West Grant Line Road / Midway Road will continue to operate at LOS F; however, the projected increase in delay has been reduced from approximately 24 seconds to 13 seconds compared to the existing conditions)

The resulting delay from the MEP traffic at the West Grant Line Road / Midway Road intersection was reduced by 11 seconds in the revised analysis, with the same number of vehicles (12 vehicles) affected by this delay. The remaining intersections evaluated in the traffic analysis would operate at an acceptable LOS. Therefore, the use of the I-205 west / Mountain House Parkway interchange would reduce the delay at the West Grant Line Road / Midway Road without creating a significant delay at the I-205 west / Mountain House Parkway interchange or the intersection of West Grant Line Road and Mountain House Parkway.

TABLE 8  
Peak Hour Delay and LOS on Study Intersections during Peak Construction with Revised Trip Distribution

Study Intersection	Control	PM Peak										LOS Standard
		Existing*		Existing + MEP (original route)		Existing + MEP (revised route)		Existing + Cumulative Projects		Existing + MEP + Cumulative Projects		
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	
W. Grant Line Rd/ Midway Rd	Unsignalized	<b>91.3</b>	<b>F</b>	<b>116.0</b>	<b>F</b>	<b>104.7</b>	<b>F</b>	<b>94.7</b>	<b>F</b>	<b>109.4</b>	<b>F</b>	LOS D
W. Grant Line Rd/ I-580 WB Ramps	Unsignalized	10.0	B	10.4	B	10.2	B	10.1	B	10.3	B	LOS D
West Grant Line Rd/ I-580 EB Ramps	Unsignalized	9.6	A	10.9	B	10.0	B	9.7	A	10.2	B	LOS D
West Grant Line Rd/Mountain House Pkwy	Signalized	28.7	C	N/A	N/A	28.1	C	28.7	C	28.1	C	LOS D
Mountain House Pkwy/ I-205 WB Ramps	Signalized	5.5	A	N/A	N/A	5.7	A	6.4	A	6.7	A	LOS D
Mountain House Pkwy/ I-205 EB Ramps	Signalized	4.6	A	N/A	N/A	4.3	A	4.7	A	4.4	A	LOS D
Mountain House Pkwy/ I-580 WB Ramps	Unsignalized	14.2	B	N/A	N/A	14.3	B	14.3	B	14.4	B	LOS D
Mountain House Pkwy/ I-580 EB Ramps	Unsignalized	31.3	D	N/A	N/A	32.1	D	33.2	D	34.0	D	LOS D

\*These figures are based on turning movement counts from the Altamont Motorsports Park Rezoning Draft Environmental Impact Report. Therefore, these are the only intersections in the vicinity of the MEP for which turning movements are available and availability was limited to PM peak hour counts.

**BOLDFACE** means that the intersection is operating at an unacceptable LOS

### **Potential Regional Impacts**

Staff identified the following projects that could potentially cause cumulative impacts to traffic LOS, due to their location, when combined with the MEP project: the Altamont Motorsports Park Rezone, East Altamont Energy Center, GreenVolts Solar Field, the Mountain House Community, and the GWF Tracy Combined Cycle Power Plant Project (CEC, 2010). Based on Staff's assessment, these projects are located in such a way that any vehicle trips they generate would share the transportation network with trips generated by the MEP. As part of the revised traffic analysis, Mariposa Energy has compiled the following updates for each of the five projects and their current potential to result in a cumulative impact which would require the implementation of mitigation measures outlined in TRANS-3, Item 1:

#### ***Altamont Motorsports Park Rezone***

As stated in the SSA, the project is currently on hold, and the raceway is closed (CEC, 2010). It is unlikely that the permit renewal would be approved before construction of the MEP (CEC, 2010). Therefore, staff is reasonably certain that the Altamont Motorsports Park Rezone would not combine with the MEP project to create cumulative impacts during MEP construction (CEC, 2010).

#### ***East Altamont Energy Center***

As noted in the December 2010 SSA, the East Altamont project was predicted to have generated 512 daily one-way trips during the average construction period (CEC, 2010). The project would have generated approximately 900 daily one-way trips during peak construction (CEC, 2010). This would have been approximately two and a half times more than the number of peak trips generated by MEP. As concluded in the SSA, the construction trips generated by the East Altamont Energy Center and the proposed MEP would have combined to create a noticeable increase in traffic, especially at the Grant Line Road interchange on I-580 (CEC, 2010). To mitigate this potential impact, TRANS-3 was proposed. However, on March 23, 2011, Calpine Corporation terminated the certification for the East Altamont Energy Center (Appendix C). Therefore, the mitigation measures outlined in TRANS-3 will not be required to mitigate any potential cumulative impacts associated with the East Altamont Energy Center and the MEP project. Furthermore, the elimination of the East Altamont Energy Center construction traffic trips significantly reduces the potential for additional traffic at the Grant Line Road interchange on I-580 and reduces the potential for increased delays at the West Grant Line Road / Midway Road intersection.

#### ***GreenVolts Solar Field***

The GreenVolts Proposed Mitigated Negative Declaration & Initial Study (May 2008) estimated 20 truck deliveries per day for the first two weeks of construction, then two trucks per day following the initial two weeks of construction and two to 20 construction workers would be also required throughout the project. As noted in the SSA, Andrew Young of the Alameda County Planning Department stated that the project was currently being revised, but that it is expected to generate similar levels of traffic as the previously proposed project (CEC, 2010). Based on a drive-by survey of the construction site by CH2M HILL on May 5, 2011, it appears the construction activities are currently underway at the project site. Based on this observation, it is assumed the GreenVolts Solar Field project will be beyond the initial 2-week peak period by the time MEP construction commences. Therefore, the revised traffic analysis conservatively assumed that two truck trips (i.e., three trips with a

PCE of 1.5 applied) and 20 worker vehicles would all use the West Grant Line Road / I-580 eastbound and westbound ramps (i.e., resulting in the most conservative estimate for delays at the West Grant Line Road / Midway Road intersection.

### ***Mountain House Community***

According to the SSA, the Mountain House Community Services District (MHCS D) expects construction activities to be ongoing during the timeframe of MEP construction, although many of the specifics are unknown about which particular projects the developer will propose and build during this period (CEC, 2010). The MHCS D expects approximately 50 to 100 homes per year will be constructed over the next several years, in accordance with past construction trends (CEC, 2010). The traffic analysis presented in the AFC was based on traffic counts from 2007 (Mariposa Energy, 2009). Construction of the Mountain House Community began prior to 2007 and it is assumed the current rate of residential development within the MHCS D is at or below the rate of residential development in 2007. Based on this assumption, the cumulative traffic trips associated with the Mountain House Community construction activities have already been included in the baseline traffic numbers. Accordingly, the predicted impacts presented in Section 2.1.3.1 would not require any additional mitigation measures to reduce impacts associated with the simultaneous construction of MEP and the Mountain House Community.

### ***GWF Tracy Combined Cycle Power Plan Project:***

The GWF Tracy Combined Cycle Power Plant Project is located approximately 8 miles southeast of the MEP, just off of West Schulte Road near Tracy. The project, an expansion of an existing peaker plant, was approved in March 2010 (CEC, 2010). The project began construction in the spring of 2011 and construction is expected to continue for approximately 22 months. Peak construction would take place during Month 17 of construction (around July 2012) and generate approximately 1,388 average daily trips and 416 trips during each peak hour period (morning and evening) (CEC, 2010). Construction traffic would access the site regionally via: I-5 from the north and south; I-580 from the west and southeast; and I-205 from the north, which connects with I-580 and I-5 (CEC, 2010).

As discussed in the SSA, cumulative impacts could result from the overlap of the GWF Tracy and MEP construction schedules; especially on parts of I-205 that already have poor LOS during peak hours (CEC, 2010). To evaluate the potential for a cumulative impact, a revised traffic analysis was conducted. Based on the GWF Tracy Combined Cycle Final Staff Assessment, it is estimated that GWF Tracy will have approximately 225 worker vehicles and 224 truck deliveries per day during the peak MEP construction activities. The trip distribution assumed approximately 75 percent of the trips outbound and 7 inbound truck trips would overlap with the MEP traffic route. The results of the revised traffic analysis are presented in Tables 9 and 10. Based on the results of the revised traffic analysis, implementation of TRANS-3 would not be necessary to reduce MEP construction traffic impacts.

The results of the comparative analysis for freeway operations are presented in Tables 9 and 10. All segments operate at an acceptable LOS, even with the addition of the cumulative projects. In conclusion, construction traffic from several projects in the vicinity of MEP would not result in cumulative traffic impacts. Therefore, implementation of TRANS-3, Item 1, would not be necessary to reduce cumulative traffic impacts to less than significant.

TABLE 9

Freeways: AM Peak Hour Trips and LOS during Peak Construction with Revised Trip Distribution

Freeway Segment	AM Peak Hour Volume and LOS					
	Existing (Year 2009)	MEP-added Trips	Peak Construction <sup>a</sup>	Cumulative Project Trips	Cumulative + MEP	LOS Standard <sup>b</sup>
I-580 EB, North Flynn Road and West Grant Line Road	1,282 LOS A	48	1,330 LOS A	11	1,341 LOS A	LOS E
I-580 WB, North Flynn Road and West Grant Line Road	7,854 LOS E	0	7,854 LOS E	0	7,854 LOS E	LOS E
I-580 EB, West Grant Line Road and Midway Road	1,273 LOS A	0	1,273 LOS A	0	1,273 LOS A	LOS E
I-580 WB, West Grant Line Road and Midway Road	7,800 LOS D	32	7,832 LOS D	64	7,896 LOS D	LOS E
I-580 EB, Midway Road and Mountain House Parkway	312 LOS A	0	312 LOS A	0	312 LOS A	LOS E
I-580 WB, Midway Road and Mountain House Parkway	3,011 LOS D	32	3,043 LOS D	64	3,107 LOS D	LOS E
I-205 EB, Mountain House Parkway and MacArthur Drive*	2,981 LOS B	0	2,981 LOS B	0	2,981 LOS B	LOS E
I-205 WB, Mountain House Parkway and MacArthur Drive*	4,370 LOS C	63	4,433 LOS C	52	4,485 LOS D	LOS E

<sup>a</sup> The traffic volume figures for Peak Construction (Year 2011) assume that all traffic volume increases result from construction-generated traffic and do not include an existing natural background increase in traffic. Due to economic conditions, it is assumed that there was no background growth in traffic between 2009 and the completion of construction activities in the first half of 2012.

<sup>b</sup> This LOS standard for roadways within the Congestion Management Program network (including State highways) is from the Alameda County Congestion Management Agency's Congestion Management Program; and the Alameda County East Area Plan.

\*New segment added to the study

TABLE 10  
Freeways: PM Peak Hour Trips and LOS during Peak Construction with Revised Trip Distribution

Freeway Segment	PM Peak Hour Volume and LOS					
	Existing (Year 2009)	MEP-added Trips	Peak Construction <sup>a</sup>	Cumulative Project Trips	Cumulative + MEP	LOS Standard <sup>b</sup>
I-580 EB, North Flynn Road and West Grant Line Road	6,961 LOS D	0	6,961 LOS D	0	6,961 LOS D	LOS E
I-580 WB, North Flynn Road and West Grant Line Road	3,615 LOS B	48	3,663 LOS B	11	3,674 LOS B	LOS E
I-580 EB, West Grant Line Road and Midway Road	6,912 LOS D	32	6,944 LOS D	64	7,008 LOS D	LOS E
I-580 WB, West Grant Line Road and Midway Road	3,590 LOS B	0	3,590 LOS B	0	3,590 LOS B	LOS E
I-580 EB, Midway Road and Mountain House Parkway	2,843 LOS C	32	2,875 LOS C	64	2,939 LOS C	LOS E
I-580 WB, Midway Road and Mountain House Parkway	1,081 LOS A	0	1,081 LOS A	0	1,081 LOS A	LOS E
I-205 EB, Mountain House Parkway and MacArthur Drive*	4,408 LOS D	63	4,471 LOS D	52	4,523 LOS D	LOS E
I-205 WB, Mountain House Parkway and MacArthur Drive*	3,121 LOS B	0	3,121 LOS B	52	3,173 LOS B	LOS E

<sup>a</sup> The traffic volume figures for Peak Construction (Year 2011) assume that all traffic volume increases result from construction-generated traffic and do not include an existing natural background increase in traffic. Due to economic conditions, it is assumed that there was no background growth in traffic between 2009 and the completion of construction activities in the first half of 2012.

<sup>b</sup> This LOS standard for roadways within the Congestion Management Program network (including State highways) is from the Alameda County Congestion Management Agency's Congestion Management Program; and the Alameda County East Area Plan.

\*New segment added to the study

## 2.1.4 Emergency Access

Regional and local emergency access to MEP are expected to be adequate. Regionally, emergency vehicles could access the site from I-580, I-280, and Byron Highway. The most direct access would be from Byron Highway directly onto Bruns Road and into the project site. Several county roads built to County standards also provide local access to the project site.

Alameda County Fire Department (ACFD) Station 8, located at 1617 College Avenue in Livermore, will be the primary responding station. Station 8 is located 19 miles from MEP and the response time to an emergency at the project site is approximately 30 minutes. There are also three hazardous materials response (hazmat) teams in Alameda County, based at Stations 4, 12 and 20. The first responding hazmat team will be Station 20, located at 7000 East Avenue in Livermore. Station 20 is 16 miles from MEP, with a response time of about 25 minutes. ACFD also has a mutual aid agreement with Tracy Fire Department (TFD). The mutual aid agreement calls for TFD to dispatch resources, if available, from

Station 98, located at 911 Tradition Street in the community of Mountain House. Station 98 is approximately 4.2 miles from the project site. The response time from Station 98 to the project site is approximately 12 minutes. Adequate emergency vehicle access would be maintained during the construction of MEP because roadways affected would be maintained at an acceptable service level through the implementation of the present TCP.

Onsite circulation of emergency vehicles would be subject to site plan review by the Alameda County Fire Department per conditions of certification in the Worker Safety and Fire Protection section of the Commission Decision (CEC, 2011).

### 2.1.5 Offsite Parking

Vehicle parking and laydown areas for materials delivery and storage have been identified for MEP. These temporary facilities would include the following:

- A 9.2-acre worker parking and laydown area located along the eastern side of the project site, and
- A 1-acre water supply pipeline worker parking and laydown area located at the Byron Bethany Irrigation District (BBID) headquarters facility on Bruns Road (approximately 1.3 miles north of the project site).

The 9.2-acre temporary onsite parking and laydown area would adequately accommodate construction parking and materials delivery and storage; no offsite parking will be required. On average, for every parked vehicle, a parking lot must have 350 square feet of space, which includes both the actual parking space and room for circulation. During peak construction, approximately 159 construction workers would drive and require parking onsite. Using the standard of 350 square feet for every parking space, approximately 1.28 acres would be needed to provide a parking space for every construction worker vehicle. Because the main parking and laydown area is 9.2 acres, there would be sufficient room remaining for truck deliveries and materials storage. The construction parking and laydown design drawing is included in Appendix D. Alameda County's parking requirement of one space for every two employees (Alameda County Code, 2009) would be met and exceeded. The 1-acre pipeline worker parking/laydown area would likely be adequate for the lower volume of materials and workers needed for these activities.

## 2.2 Operational Impacts

During operations, MEP is expected to generate no more than four vehicle trips per day (three daily employees with an 8 a.m. to 4 p.m. shift, and an operator with a 7 a.m. to 7 p.m. shift). Other project-related trips (i.e., delivery trucks, visitors, and other business-related trips) are expected to be minimal and would occur during regular business hours. The existing state highway and county roadway system would not be affected by any increase in commute traffic associated with the operation of MEP. The Transportation Systems Element of the Alameda County East County Area Plan and Chapters 15.44 and 15.48 of the Alameda County Code require fair share traffic impact fees for new development; TRANS-6 requires that the applicant pay these as necessary. As discussed in Section 2.1, adequate parking will be available for the employees and visitors.

## 2.3 Linear Facilities Construction Impacts

Construction of MEP includes a 1.8-mile-long water pipeline. Pipeline construction would begin at the proposed pump-station at the northwest corner of the BBID property and would be located on BBID property east of the Bruns Road right-of-way until it reaches the BBID facility. From that point, the pipeline would be located within the Bruns Road right-of-way just off the edge of the northbound travel lane of Bruns Road, terminating at the MEP site. Other linear facilities that would be part of MEP include a 0.7-mile electrical transmission line running north from the MEP switchyard over Kelso Road and connecting to the Kelso Substation and a 580-foot-long natural gas line connecting to an existing PG&E gas line within the 158-acre parcel. Per TRANS-4, the Applicant will obtain any necessary encroachment permits to perform the work.

Because a portion of the water pipeline will be installed in the Bruns Road northbound travel lane, construction of the water pipeline could cause significant traffic impacts to Bruns Road. Also, the construction of the electrical transmission line over the Kelso Road right-of-way would cause traffic impacts to Kelso Road. The provisions provided in Sections 3 and 4 of this TCP will mitigate these potential impacts and address temporary road closure during construction, per TRANS-3.

# Traffic Control Plan

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## 3.1 General Requirements

This section outlines the traffic control required during the construction of MEP. The traffic control is related to the impacts discussed in Section 2. This section addresses the traffic control requirements for construction that have the potential to impact offsite traffic.

All construction area traffic controls implemented for road restoration and modification will conform to the requirements in the 2009 U.S. Department of Transportation Manual on Uniform Traffic Control Devices (MUTCD) (Federal Highway Administration, 2009) and the 2010 *California Manual on Uniform Traffic Control Devices (CA Supplement)* (Caltrans, 2010), as well as the current edition of the *Work Area and Traffic Control Handbook (WATCH)* (APWA, 2009). Traffic control signage shall be used and will be selected based on the appropriate traffic conditions, duration of operation, and physical constraints. Signage and traffic control design will follow the examples of typical applications for utility operations found in the MUTCD and CA Supplement. The following signs may be utilized during construction (but not limited to):

- Construction Work Ahead
- One Lane Traffic Ahead
- Right Lane Closed Ahead
- Detour
- Flagger

## 3.2 Traffic Control for Construction

It is anticipated that linear construction may result in temporary traffic and/or pedestrian disruption as a result of lane/shoulder/sidewalk closures that may be needed to accommodate construction. If construction requires a lane closure that cannot maintain one travel lane in each direction, the use of flagmen would be required. The construction contractor will be required to provide traffic control to maintain a safe environment for vehicles traveling through the work zone and construction workers inside the work zone. The contractor will be required to submit details of the specific traffic control measures during construction. During excavation, the pits must be protected and the driver must be made aware of the construction ahead. The specific work hours in which the contractor may implement the traffic control plan will need to be approved by the corresponding agency. The proposed signage and flag control plans for the BBID water pipeline construction along Bruns Road and the transmission line crossing over Kelso Road are included in Appendix E.

Compliant with TRANS-2, the Applicant will repair and/or reconstruct any portions of Byron Road, Byron Bethany Road, Byron Highway, Bruns Road, Kelso Road, Mountain House Parkway, and West Grant Line Road that are damaged by project construction due to overweight, oversize construction vehicles, or because of the construction of the project

linears. Based on comments received from the Contra Costa County Public Works Department, a Pavement Condition Index (PCI) will also be conducted before and after the project. The preconstruction condition of these roads will be documented using video and submitted to the counties of Alameda, Contra Costa, and San Joaquin for review and approval.

### **3.3 Heavy Haul Mitigation Measures**

As stated in Section 2.1.2, approximately 28 oversized or heavy loads would be delivered during project construction by truck. The Applicant proposes to conduct the majority of the heavy hauls between the hours of 9:00 a.m. and 3:00 p.m. to minimize the disruption of traffic flow. All necessary permits will be obtained from Caltrans, other state or federal agencies and/or the affected local jurisdiction. The permitting process will ensure that all load/size restrictions on the roads were verified by the appropriate jurisdiction, which will validate the route(s) to be used. The permitting process will also determine if pilot vehicles are necessary to escort the oversized loads to the project site. Consideration will also be given to transit and emergency vehicle services. Passage of emergency vehicles shall be provided at all times regardless of the controlled traffic conditions in place at the time. All construction area traffic controls implemented will conform to the requirements in the MUTCD and the CA Supplement.

## SECTION 4

# Mitigation Strategies

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To mitigate any potential traffic impacts, multiple strategies will be put into place to reduce the risk of congestion and ensure traffic safety. The categories of strategies implemented are:

- Planning strategies (e.g., appropriate scheduling and routing of construction traffic)
- Communication strategies
- Traffic control strategies

The TRANS-3 items listed in Section 1 have been organized into the three mitigation strategy categories and discussed in the sections below.

## 4.1 Planning Strategies

### TRANS-3, Item 1

In the COC, the CEC suggested a work schedule designed to ensure that the project does not have a significant impact on LOS on the local and regional transportation network. The COC indicated that the project owner could use one of the following measures to reduce impacts: staggered work shifts, off-peak work schedules (arriving or departing from about 6:30 p.m. to 6:00 a.m. and from about 9:00 a.m. to 3:30 p.m.), and/or a park-and-ride program for construction employees.

The current workers shift is scheduled from 7:00 a.m. to 4:30 p.m. Based on conversations with CEC staff, the potential for impacts associated with MEP would occur when the number of workers exceeded 120 workers. As shown in Appendix A, the expected number of craft workers will be less than 60 workers for approximately 5 out of the 13 months of construction and less than 120 workers for approximately 8 out of the 13 months of construction. Therefore, MEP would have the potential to affect the local and regional transportation network for approximately 5 months. However, based on the revised traffic analysis presented in Section 2.1.3.1, the local and cumulative regional impacts associated with the peak construction trips and construction trips associated with the cumulative projects in the vicinity of MEP would also be less than significant without the implementation of staggered work shifts, off-peak work schedules, and/or a park-and-ride program, with the exception of the unacceptable LOS at the Midway Road / Grant Line Road intersection. With the use of the I-205 / Mountain House Parkway interchange, the delay to the intersection of Midway Road and Grant Line Road would be reduced by approximately 11 seconds compared to the original AFC and SSA. Therefore, staggered work shifts, off-peak work schedules, and/or a park-and-ride program have not been proposed at this time.

### TRANS-3, Item 3

The project construction is scheduled to start June 1, 2011, and end June 30, 2012. This project schedule has been included in the TCP to assist Caltrans District 4 and the relevant

local jurisdictions reviewing this TCP with the scheduling of other construction activities to minimize overlap with MEP construction activities.

### TRANS-3, Item 4

The timing of heavy equipment and building material delivery will be scheduled from 9:00 a.m. to 3:00 p.m. to avoid peak traffic hours.

### TRANS-3, Item 8

Construction worker vehicles and truck traffic (including those transporting hazardous materials) will be encouraged to use specific routes to minimize traffic operations impacts. Information on recommended routes will be provided to workers and delivery drivers, using the following guidelines:

- **Construction worker vehicles:**
  - From Contra Costa County: use Highway 4, then merge right onto Byron Highway and turn right onto Bruns Road. (Per the requirements of BIO-10, construction workers arriving [or departing] the project site before sunrise and after sunset during wet-season construction [mid-October to mid-June], will be directed to continue on Byron Highway, turn right on Mountain House Road, turn right on Kelso Road, and turn left onto Bruns Road.)
  - From San Joaquin County:
    - **West I-580**, exit Mountain House Parkway, travel north and turn left onto West Grant Line Road, turn right onto Mountain House Road, turn left onto Kelso Road, and then turn left onto Bruns Road.
    - **West I-205**, exit at Mountain House Parkway, travel north and turn left onto West Grant Line Road, turn right onto Mountain House Road, turn left onto Kelso Road, and then turn left onto Bruns Road.
    - **Highway 4**, turn left onto Byron Highway and turn right onto Bruns Road.
  - From Alameda County: **East I-580**, exit West Grant Line Road, turn left onto Mountain House Road, turn left onto Kelso Road, and then turn left onto Bruns Road.
- **Truck Traffic.** The primary truck route and hazardous material delivery route would be via Byron Highway to Bruns Road. Trucks are prohibited from using Mountain House Road per county ordinance. Travel through the North Great Valley Parkway/Kelso Road intersection will be discouraged.
  - From Contra Costa County: use Highway 4, then merge right onto Byron Highway and turn right onto Bruns Road.
  - From San Joaquin County:
    - **West I-580**, exit Mountain House Parkway, travel north to Byron Highway, turn left on Byron Highway, and then turn left onto Bruns Road.

- **West I-205**, exit Mountain House Parkway, travel north to Byron Highway, turn left on Byron Highway, and then turn left onto Bruns Road.
  - **Highway 4**, turn left onto Byron Highway and turn right onto Bruns Road.
- From Alameda County: **East I-580**, take eastbound I-205, exit Mountain House Parkway, travel north to Byron Highway, turn left on Byron Highway, and then turn left onto Bruns Road.

With an effective communication program, construction traffic volumes at the West Grant Line Road/Midway Road intersection will be minimized, which will reduce impacts to a less than significant level.

### TRANS-3, Item 9

The heavy haul plan was described in Section 3.3, Heavy Haul Mitigation Measures.

### TRANS-3, Item 10

The timing of construction-related trips is as follows:

- Construction workers shifts are scheduled from 7:00 a.m. to 4:30 p.m.
- Truck deliveries and material movements are scheduled from 9:00 a.m. to 3:00 p.m.
- Heavy haul are scheduled from 9:00 a.m. to 3:00 p.m.

### TRANS-3, Item 11

No nighttime construction has been scheduled; therefore, nighttime construction permits will not be required.

### TRANS-3, Item 12

Temporary closure of travel lanes is expected to occur during the construction of the water pipeline and transmission line, which may disrupt street segments and intersections. Roads potentially affected include Bruns Road between Canal 45 and the site entrance road and Kelso Road in the vicinity of the PG&E Kelso Substation. The traffic control will be as described in **TRANS-3, Item 5**. The proposed signage and flag control plans for the BBID water pipeline construction along Bruns Road and the transmission line crossing over Kelso Road are included in Appendix E.

### TRANS-3, Item 13

Traffic diversion plans will be devised as needed in coordination with Alameda County, San Joaquin County, Contra Costa County, and the City of Tracy to ensure access during temporary lane/road closures. The plan may include using signage and traffic control methods found in the MUTCD and CA Supplement.

### TRANS-3, Item 17

The existing site entrance design does not allow longer/wider trucks to turn into the site at the end of Bruns Road. Therefore, the site entrance has been redesigned so that the geometry can accommodate large truck turning radii.

### **TRANS-3, Item 18**

During peak construction, approximately 159 construction workers would drive and require parking onsite. Using the standard of 350 square feet for every parking space, approximately 1.28 acres would be needed to provide a parking space for every construction worker vehicle. Because the main parking and laydown area is 9.2 acres, there would be sufficient room remaining for truck deliveries and materials storage. The construction parking and laydown design drawing is included in Appendix D. This layout will remain the same throughout construction.

## **4.2 Communication Strategies**

### **TRANS-3, Item 2**

The Applicant will promote carpooling by providing a common location for workers to exchange information about ridesharing.

### **TRANS-3, Items 14 and 16**

Coordination with business owners will be necessary when access to driveways cannot be maintained. It is not expected that any project construction activities would block driveways; however if this becomes necessary, it is expected that impacts will be short-term. The project owner will notify business owners prior to construction of MEP and will work with business owners to lessen any inconvenience as much as possible. In particular, residents, businesses, emergency providers and hospitals that would be affected by the partial or complete road closure will receive advance notification from the project owner.

### **TRANS-3, Item 15**

No special traffic control issues have been identified for emergency access. No full closures of any road in the project area are anticipated, but if any full closures are needed, the contractor will be required to provide advance notification to emergency providers.

### **TRANS-3, Item 19**

In addition to facilitating carpooling, the project owner and contractor(s) will display information on available public transportation in common work areas.

## **4.3 Traffic Control Strategies**

### **TRANS-3, Item 5**

The 2010 California MUTCD has a variety of typical applications for work zones, including closures with and without flaggers. If the contractor is required to reduce the roadway to one lane of travel (i.e., during the construction of the water pipeline along Bruns Road), flagger control will be used. Flaggers will be used as necessary to control the flow of traffic through the construction area and will be used in all cases where traffic is being routed through the construction zone under one-way control. Flagger stations will be located far enough ahead of the workspace so that approaching traffic has sufficient distance to stop before entering

the workspace. All flaggers will be trained as required by Cal/OSHA regulations and will be prepared to provide verification of training. The specific work hours in which the contractor may implement flag control will need to be approved by the corresponding agency. The proposed signage and flag control plans for the BBID water pipeline construction along Bruns Road and the transmission line crossing over Kelso Road are included in Appendix E.

Because truck deliveries will be turning left from Byron Highway, signs will be placed along Byron Highway at Bruns Road to warn drivers of turning trucks. Signs will also be placed on Kelso Road during the construction of the transmission line (Appendix E).

### **TRANS-3, Item 6**

Condition of Certification BIO-10 includes additional traffic control requirements.

**TRANS-3, Item 6** incorporates the following requirements relevant to traffic and transportation:

- All off-road access (for construction or maintenance purposes) must be coordinated with the Designated Biologist so the vehicle route can be mapped and marked.
- A 10-mile-per-hour speed limit sign will be placed at all construction sites (except on roads with posted speed limits), in accordance with the MUTCD's prescriptions on sign placement. On roads with posted speed limits, construction traffic shall go the minimum safe speed.
- Traffic cones will be placed along the Construction Control Work Zone limits (as described in the MUTCD) on Bruns Road to protect biological monitors who are walking along the road. If the survey is done by driving at reduced speeds, a shadow vehicle may be used, as described in the MUTCD (Mobile Operations on a Two-Lane Road Typical Application TA-17). Vehicles will avoid pulling off the road unless the shoulder or pull-out is clear of California Tiger Salamanders or California Red Legged Frogs.
- During wet-season construction (mid-October to mid-June), flyers will be distributed directing construction workers to use Kelso Road and Mountain House Road east of the project site to get to and from Byron Highway if they are going to arrive or depart the project site before sunrise and after sunset.

### **TRANS-3, Item 7**

Placement of necessary signage, lighting, and traffic control devices at the project construction site and laydown areas will be planned for as needed and implemented according to the MUTCD's guidelines.

## SECTION 5

# References

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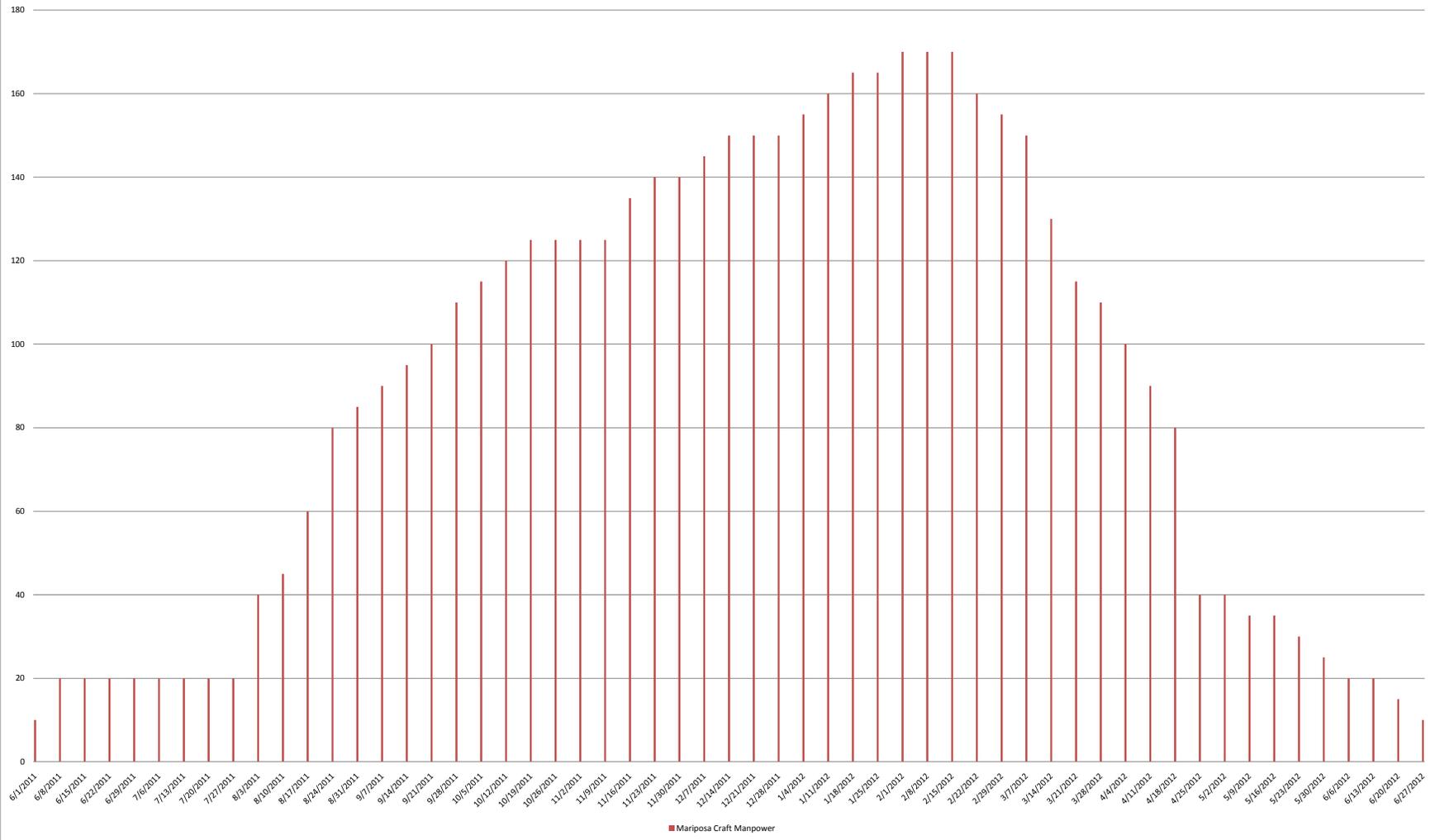
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**Appendix A**  
**Worker Trips**

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### Mariposa Craft Manpower



**Appendix B**  
**Agency Comments**

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April 11, 2011

Chris Curry  
Mariposa Energy LLC  
333 S. Grand Ave, Suite 1570  
Los Angeles, CA 90071

Dear Mr. Curry:

RE: Mariposa Energy Project –  
Draft Traffic Control Plan

Thank you for the opportunity to review the Draft Traffic Control Plan (TCP) for the proposed Mariposa Energy Project (MEP) submitted with your letter dated March 18, 2011. The Contra Costa County Public Works Department offers the following comments:

1. Restoration of All Public Roads, Easements, and Right-of-Ways:

In accordance with Condition of Compliance (COC) TRANS-2, the project owner shall restore any roadway damage caused by development of the project. The most significant impact is anticipated to Bruns Road from heavy use by trucks and construction equipment. The project owner shall be required to enter into a Construction Road Maintenance Agreement with Contra Costa County to mitigate construction traffic impacts. Both visual (photo/video) documentation and the Pavement Condition Index (PCI) evaluation shall be performed before and after the project.

Please provide us with the proposed schedule for project construction as soon as it's available.

2. Linear Facilities:

The project includes construction of a 1.8 mile-long water pipeline that will run within the Bruns Road right-of-way. The project owner shall be required to enter into a franchise agreement for this pipeline. Improvement plans showing location of the water line shall be submitted for review by our office prior to issuance of an encroachment permit for the pipeline installation.

3. Traffic control during construction:

Any oversize, overweight loads will require transportation permits specific to each load. A need for pilot cars or other traffic control measures will be determined during the permitting process. Any signs or message board installations (as any work within the right-of-way) shall be subject

to an encroachment permit.

Please let me know if you have any questions or need clarification on any of the above comments. You can reach me at (925) 313-2316.

Sincerely,



Slava Gospodchikov  
Senior Civil Engineer  
Engineering Services Division

SG:mg  
G:\engsvc\Slava\Letters\letter to Chris Curry.docx

c: J. Bueren, Public Works Director  
W. Lai, Engineering Services Division  
P. Roche, DCD



City of Tracy  
333 Civic Center Plaza  
Tracy, CA 95376

DEVELOPMENT &  
ENGINEERING SERVICES

MAIN 209.831.6400  
FAX 209.831.6439  
[www.ci.tracy.ca.us](http://www.ci.tracy.ca.us)

April 18, 2011

Mr. Keith McGregor  
CH2M Hill  
2485 Natomas Park Drive  
Suite 600  
Sacramento, CA 95833

**RE: Mariposa Energy Project – Draft Construction Traffic Control Plan**

Dear Mr. McGregor:

This letter is in response to the Draft Construction Traffic Control Plan for the Mariposa Energy Project (09-AFC-3c) received by the City of Tracy on March 21, 2011.

Review of the report raises concerns regarding the use of Lammers Road between Eleventh Street and Byron Road for construction traffic of your project. As you are aware, main portions of Eleventh Street and Lammers Road between the City limits are not designated as a truck route. The only purpose of designating this segment of Lammers Road as a truck route was to allow any trucks exiting off I-205 at Eleventh Street to go back to I-205 through county roads, since Eleventh Street east of Lammers Road is not a truck route. However, in your proposal, you want to detour construction trucks to use this segment of Lammers Road for your project. Use of Lammers Road for repetitive construction truck loads will result in damage of the existing pavement that is not designed for such loads. Furthermore, this segment of street is adjacent to residential properties and any diversion of truck traffic will cause an inconvenience to the residents and create noise concerns. The City would highly recommend that Mariposa Energy explore and use other alternative routes outside the City limits for construction traffic.

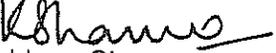
If Mariposa Energy would still like to pursue use of this segment of Lammers Road for construction traffic, the City will require Mariposa Energy to enter into an agreement with the City for improving the existing structural section of street to accommodate the heavy repetitive loads prior to the start of construction and after completion of construction of the project. The scope of work will include, but will not be limited to, design and construction of pavement structure and traffic control. The agreement will require approval of the City Council.



Mr. Keith McGregor  
Page 2

Should you have any questions or need further information, please contact me or Ripon Bhatia at (209) 831-6400.

Sincerely,

  
Kuldeep Sharma  
City Engineer

cc: Andrew Malik, Development and Engineering Services Director  
Ripon Bhatia, Senior Civil Engineer

## McGregor, Keith/SAC

---

**From:** Craig Hoffman [CHoffman@energy.state.ca.us]  
**Sent:** Thursday, April 21, 2011 1:19 PM  
**To:** Urry, Doug/SAC; McGregor, Keith/SAC  
**Subject:** Mariposa Compliance Comments TRANS-3 Draft Construction Traffic Control Plan  
**Attachments:** Mariposa\_TRANS-3\_4.13.11.docx; Traffic Control Plan Example.pdf

Doug and Keith.

Please see Andrea's comments on the traffic control plan.

Craig Hoffman  
Project Manager

California Energy Commission  
Siting, Transmission and Environmental Protection Division  
1516 Ninth Street, MS 15  
Sacramento, CA 95814  
phone: 916-654-4781  
fax: 916-654-3882

>>> Andrea Koch 4/21/2011 11:28 AM >>>  
Hi Craig.

Here they are. I've also attached the Pico Power Project Traffic Control Plan as an example.  
Let me know if you have any questions.

Thanks!

Andrea

Andrea Koch-Eckhardt  
Environmental Planner  
916-654-3850  
[akoch@energy.state.ca.us](mailto:akoch@energy.state.ca.us)

CA Energy Commission  
Siting, Transmission, and Environmental Protection Division  
1516 Ninth Street, MS 40  
Sacramento, CA 95814-5504

TO: **Craig Hoffman**, Compliance Manager

FROM: **Andrea Koch**, Planner (Traffic and Transportation)

PROJECT: **Mariposa, 09-AFC-03**

SUBJECT: **TRANS-3 Draft Construction Traffic Control Plan**

Hi Craig.

Here are my comments:

The Draft Traffic Control Plan was submitted as a blue sheet, but it should actually be a green sheet because the Commission has not yet issued their Final Decision. Once the Commission issues their Final Decision, the project owner must submit the Traffic Control Plan again. The Traffic Control Plan should include revisions addressing the comments below:

**Background:** The first page, in the introductory letter to Craig Hoffman, notes that a hard copy of the Traffic Control Plan (TCP) will be sent to the Officer on Duty at the Caltrans Northern Region Transportation Permit Office. However, Condition of Certification TRANS-3 requires that Caltrans District 4 be provided a copy of the TCP for review and comment.

**Comment 1:** Include the specific person from Caltrans District 4 who will be sent a copy of the Traffic Control Plan for review. (This will make it easier to follow up with the Caltrans reviewer for any comments.)

**Background:** On page 4-1 of the TCP, the applicant states that complying with the requirement of TRANS-3 for staggered work shifts, off-peak work schedules, and/or a park-and-ride program is unnecessary. The applicant states: "This item will not be required with the implementation of TRANS-3, Item 8 because the only significant impact (unacceptable LOS at the Midway Road/Grant Line Road intersection) will be mitigated to a less-than-significant level." (TRANS-3, Item 8 refers to the requirement that routes shall avoid use of the West Grant Line Road and Midway Road intersection during peak hours.)

However, staff is still requiring the use of staggered work shifts, off-peak work schedules, and/or a park-and-ride program, as stated in TRANS-3. There are several reasons for this:

- The staff analysis lists TRANS-3 as mitigation for any cumulative traffic impacts resulting from the MEP in combination with other nearby projects, not just for mitigation of LOS impacts at the Midway Road/Grant Line Road intersection.
- Complete avoidance of the Midway Road/Grant Line Road intersection during the peak hour construction commute would reroute trips in a way not analyzed for impacts. For example, this reroute would shift trips to the intersections of I-580/Mountain House Parkway, I-280/Mountain House Parkway, and Grant Line Road/Mountain House Road. None of these intersections were analyzed in the AFC or Final Staff Analysis. Because impacts are unknown, we cannot change construction trip routes without an amendment.

**Comment 2:** Please revise the Traffic Control Plan (TCP) to show, in accordance with TRANS-3, use of one or more of the following measures during construction to reduce impacts to LOS: staggered work

shifts, off-peak work schedules (arriving or departing from about 6:30 pm – 6:00 am and from about 9:00 am – 3:30 pm), and/or a park-and-ride program for construction employees. Do not show rerouting of all construction traffic to Mountain House Parkway.

**Background:** The Traffic Control Plan includes on page 3-1 a list of traffic control signs that may be used and discusses the potential use of flagmen. On pages 4-5 and 4-6, there is a discussion about use of speed limit signs and cones along Bruns Road. However, the TCP does not show placement of the signs and flagmen.

**Comment 3:** Please include a map of the project vicinity showing placement of specific traffic control signs and flagmen. (The applicant should use the Pico Power Project Traffic Control Plan as an example.)

**Background:** Page 4-6 of the TCP states: “During wet-season construction (October-April), flyers will be distributed directing construction workers to use Kelso Road and Mountain House Road east of the project site to get to and from Byron Highway if they are going to arrive or depart the project site before sunrise and after sunset.”

**Comment 4:** Please revise this sentence to indicate the wet season extending from mid-October to mid-June. (This is not the applicant’s fault; there was an error in the Biological Resources section of the staff analysis that makes definition of the wet season confusing.)

**Background:** Pages 4-4 and 4-5 of the TCP describe the parking and laydown areas.

**Comment 5:** Please include a map of the project site showing the parking and laydown areas for all stages of construction.

Please let me know if you have any questions. Thanks!

## McGregor, Keith/SAC

---

**From:** Bory, Maly-Ann/BAO  
**Sent:** Monday, April 25, 2011 12:59 PM  
**To:** McGregor, Keith/SAC  
**Subject:** MEP - CHP comment

Here's the CHP officer's input.

Thank you,

Maly

Maly-Ann Bory, P.E. (CA)  
Associate Engineer  
CH2M HILL/Bay Area Office  
155 Grand Avenue  
Suite 800  
Oakland, CA 94612  
Direct: (510) 587 7623  
Fax: (510) 622 9047

-----Original Message-----

From: Bruce Hooley [<mailto:BHooley@chp.ca.gov>]  
Sent: Monday, April 25, 2011 12:33 PM  
To: Bory, Maly-Ann/BAO  
Cc: Ron Lum  
Subject: Draft Traffic Control Plan - Mariposa Energy Project

Molly

As discussed on the phone, the California Highway Patrol (CHP) remains neutral and have no comments for submission into your draft plan - the roadway use would fall under the Departments having jurisdiction over the particular roadway - i.e., CalTrans, the County Roads Departments, or the City Public Works Departments.

Thanks

Bruce G. Hooley  
Sergeant  
Golden Gate Division  
Commercial Operations Unit  
(707) 373-7681

## McGregor, Keith/SAC

---

**From:** Alex Chetley [achetley@sjgov.org]  
**Sent:** Wednesday, April 27, 2011 2:01 PM  
**To:** Bory, Maly-Ann/BAO  
**Cc:** McGregor, Keith/SAC  
**Subject:** RE: Mairposa Energy Project

The recommendation from Dept of Public Works, transportation engineering division is West Grant Line (from 580) to Mtn Hse Pkwy to Byron Highway.

Alex Chetley, P.E.  
Senior Civil Engineer  
San Joaquin County Public Works  
(209) 468-3023

---

**From:** [Maly-Ann.Bory@CH2M.com](mailto:Maly-Ann.Bory@CH2M.com) [<mailto:Maly-Ann.Bory@CH2M.com>]  
**Sent:** Wednesday, April 27, 2011 11:44 AM  
**To:** Alex Chetley  
**Cc:** [Keith.McGregor@CH2M.com](mailto:Keith.McGregor@CH2M.com)  
**Subject:** RE: Mairposa Energy Project

Hi Alex,

Thank you for your help coordinating with the other County department.

Our ultimate goal is to reach our site that is on Bruns Road (Alameda County) from I-580.

So, our proposed route for all deliveries (sorry, not heavy haul only as I said before) would be from I-580, exit at West Grant Line Road and either:

- continue on West Grant Line Road until we reach Byron Highway, or
- use West Grant Line Road up to Hansen Road, then turn left onto Hansen Road and then Byron Highway

We are going to submit an application for permit, but we'd like to know in advance if you think this will not be possible and will have to work out another route.

We initially were going to exit the freeway at 11<sup>th</sup> Street/Lammers Road in Tracy, but the City said that those were not really designated thru truck routes.

Thank you,

Maly

Maly-Ann Bory, P.E. (CA)  
*Associate Engineer*  
CH2M HILL/Bay Area Office  
155 Grand Avenue  
Suite 800  
Oakland, CA 94612  
Direct: (510) 587 7623  
Fax: (510) 622 9047

---

**From:** Alex Chetley [<mailto:achetley@sjgov.org>]  
**Sent:** Tuesday, April 26, 2011 10:23 AM  
**To:** Bory, Maly-Ann/BAO

**Cc:** Mark Hopkins; Scott Cooper

**Subject:** Mairposa Energy Project

We appreciate the opportunity to comment and review this project.

We have reviewed the traffic control plan for the above referenced project and take no exceptions to the measures as described, however, please be advised that any heavy haul or other transport movement utilizing San Joaquin County roadways will require transportation permit(s) issued by the Department of Public Works. Depending on the circumstances and details, the transportation permit may require special provisions with regard to the use of the County road network.

This needs to be conveyed to the contractor and subs on the project.

If you have any questions or comments, please contact me at (209) 468-3023.

Alex Chetley, P.E.

Senior Civil Engineer

San Joaquin County Public Works

**Appendix C**  
**East Altamont Energy Center**  
**Termination of Certification**

---



# CALPINE CORPORATION

4160 DUBLIN BOULEVARD  
SUITE 100  
DUBLIN, CA 94568  
925.557.2280 (M)  
925.479.9560 (F)

March 23, 2011

Joe Douglas  
Compliance Project Manager  
Siting, Transmission and Environmental Protection Division  
California Energy Commission  
1516 Ninth Street, MS-2000  
Sacramento, CA 95814

## DOCKET

01-AFC-4C

DATE	MAR 23 2011
RECD.	MAR 29 2011

Re: Calpine East Altamont Energy Center Power Plant Project (01-AFC-4C)

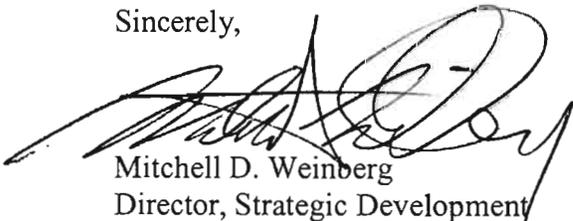
Dear Mr. Douglas:

On August 20, 2003, the California Energy Commission ("CEC") approved an Application for Certification by East Altamont Energy Center, LLC for the East Altamont Energy Center Power Plant Project. (CEC Order No. 03-0723-14) On August 13, 2008, the CEC issued a decision that approved a three-year extension, from August 19, 2008 to August 19, 2011, of the deadline for commencement of construction for the EAEC. The extension was for the limited purpose to allow the Project Owner to file a petition for modification of the EAEC. (Order No. 08-0813-8)

East Altamont Energy Center, LLC hereby notifies the CEC that (1) it no longer intends to build the EAEC, (2) does not intend to file a petition to modify the project and (3) will not seek any further extensions of the deadline for commencement of construction and, therefore, wishes to terminate the certification.

Please contact me if you have any questions.

Sincerely,



Mitchell D. Weinberg  
Director, Strategic Development

Cc: R. Antonopoulos  
G. Wheatland  
B. McBride

**Appendix D**  
**Construction Laydown and Parking Plan**

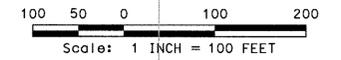
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**LEGEND**

1. SAFETY (12' x 60')
2. CBD (10 x 45')
3. SUPT. (24' x 60')
4. CONST. MGR. (24' x 60')
5. CONF. (12' x 60')
6. OWNER (24' x 60')
7. GE (12' x 60')
8. START-UP (24' x 60')

**NOTE:**  
 VALUES SHOWN ARE TRUNCATED STATE PLANE COORDINATES BASED ON NAD 83 CSP ZONE 5  
 EXAMPLE:  
 N 12600 = (NAD 83 N 2112600)  
 E 42200 = (NAD 83 E 6242200)  
 SEE CIVIL DRAWING C-S0001



RESPONSIBLE ENGINEER	NO.	DATE	REVISION	BY	CHK	REVISION APPROVAL		REV B	DATE	STATUS					
						DISCIPLINE	REVIEWED			DISCIPLINE	REVIEWED	ISSUED	REV	DATE	DM
PE #	A	3/11/11	ISSUED FOR REVIEW	EFC		DISCIPLINE	REVIEWED	DISCIPLINE	REVIEWED	ISSUED					
	B	4/15/11	ISSUED FOR REVIEW	EFC	TBJ	CIVIL		ELECTRICAL		PRELIMINARY					
						STRUCTURAL		INST & CONT.		FOR REVIEW AND APPROVAL	B	4-15-11	E/EP		97
						MECHANICAL		ARCH.		APPROVED FOR CONSTRUCTION					
						PROCESS		GEN. ARRANG.		REVISED & APPROVED FOR CONSTRUCTION					

**Diamond Generating Corporation**  
 A Subsidiary of Mitsubishi Corporation

**Mariposa Energy Project**

PROJECT NO. 415059

**CH2MHILL**  
 CH2MHILL Engineers, Inc.

GENERAL ARRANGEMENT  
 CONSTRUCTION LAYDOWN  
 AND PARKING PLAN

DWG. NO. G-PC001      REV. B

BAR IS ONE INCH ON ORIGINAL DRAWING.  
 0 1"

SCALE 1" = 100'

FILENAME: meppc001.dgn

PLOT DATE:

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.  
 REUSE OF DOCUMENTS:

**Appendix E**  
**Signage Plan**

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**TIDELANDS CONSTRUCTION COMPANY**

Contractor's License No. 730493

P.O. BOX 607

BRENTWOOD, CA 94513-0607

Ph : (925)516-4600

Fax : (925) 516-4602

*Submittal*

**TCC Job No.:** 2011-01 BBID/M.E.P.  
RAW WATER PUMP STATION  
AND PIPELINE

**Submittal No:** G-013  
**Revision No:**  
**Sent Date:** 5/27/11

**Type:** PLANS

**Submittal Title:** TRAFFIC CONTROL PLANS - BRUNS ROAD

**Project Specification Reference:** N/A

**Supplier:** TRENCH AND TRAFFIC SUPPLY

**Description:**

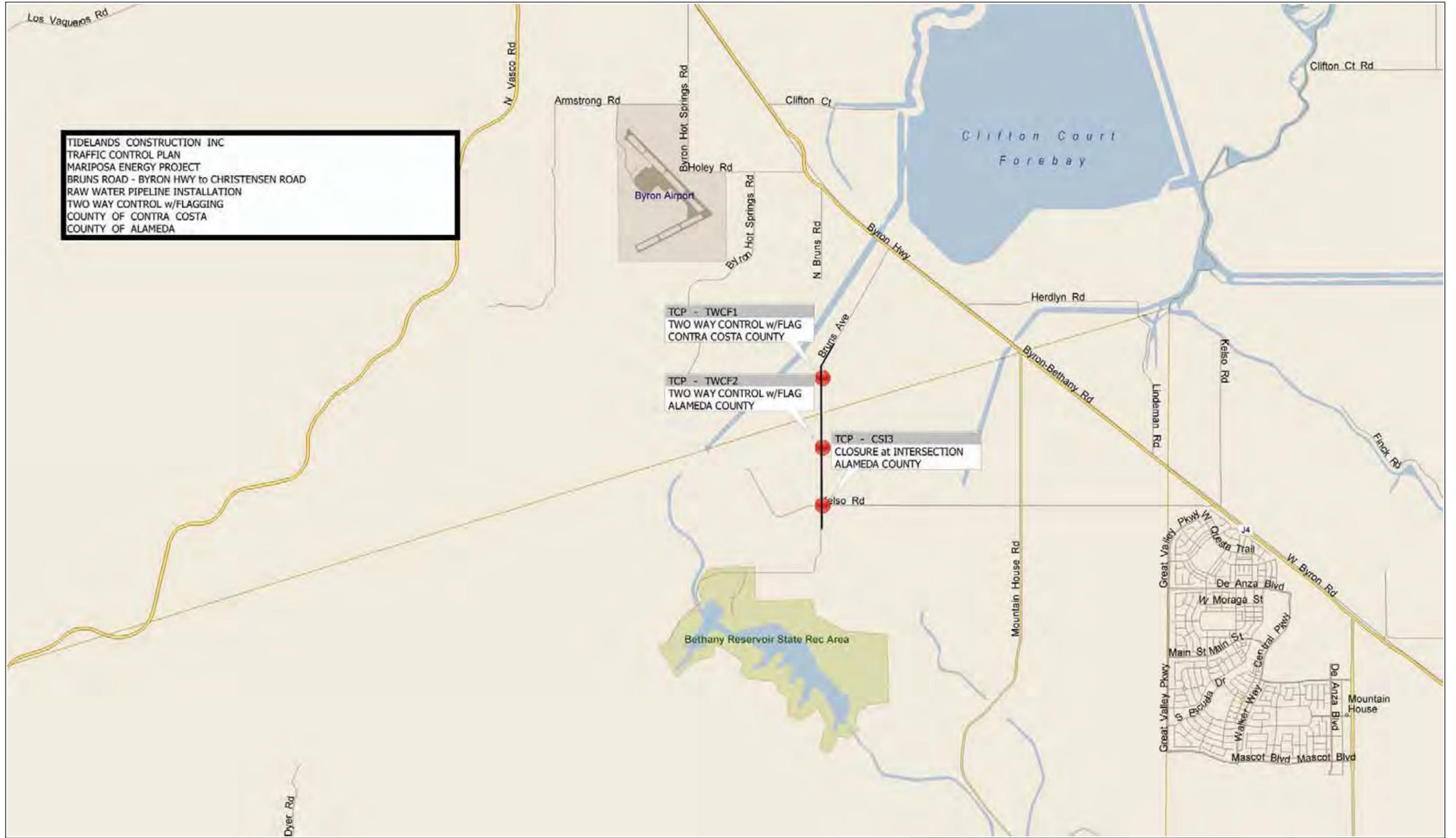
**Schedule Activity Number:**

**Contractor:**  
TIDELANDS CONSTRUCTION COMPANY

Contractor's Stamp

Engineer's Stamp

TIDELANDS CONST - MARIPOSA ENERGY PROJ - BRUNS RD & KELSO RD - WATER INSTALL - TWO WAY CONTROL w/FLAGGING - CONTRA COSTA / ALAMEDA



'TYPICAL' TWO WAY CONTROL w/FLAGGING(T13/TA10):  
 PEDESTRIAN CONTROL(TA28/29):  
 Raw Water Installation.  
 Bruns Road - Kelso Road to Byron Hwy.  
 Sta. 18+10 to Sta. 92+82

7:00 AM to 5:00 PM

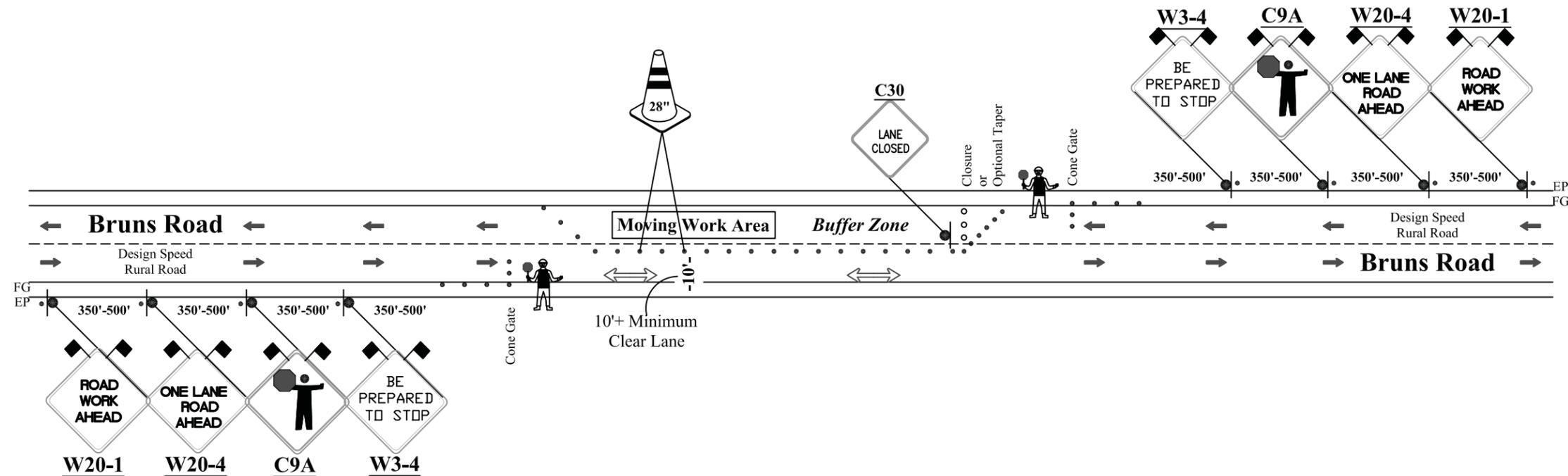
FLAGGERS TO ASSIST and/or ESCORT PEDESTRIANS and CYCLISTS AS NEEDED, REQUIRED OR DIRECTED DURING WORKING HOURS. ALL PATHWAYS OPEN DURING NON-WORKING HOURS.

NOTIFY & COORDINATE WITH COUNTY TRAFFIC ENGINEER WHEN ANY WORK IS PERFORMED WITHIN 200' OF SIGNALIZED INTERSECTION

REMOVE OR REDUCE CONTROL ZONE WHEN WORK AREA NO LONGER AFFECTS THAT AREA OF THE ROADWAY

THIS PLAN IS REVERSIBLE FOR EITHER SIDE OF THE ROADWAY

MAINTAIN ONE ACCESS TO BUSINESS AT ALL TIMES



GENERAL NOTES...

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CROSSWALKS, SIDEWALKS & BICYCLES:

LEGEND...

CONTACT: Greg Hull 510.773.0389 greg@tidelandsconstruction.com

**TIDELANDS CONST CO**  
 9020 Brentwood Blvd  
 Brentwood, CA. 94513  
 925.516.4600 Fax:925.516.4602

**EQUIPMENT**  
 ● Sign Symbol ◀ HIGH-LEVEL  
 ● TUBES, x CONES, BARRELS  
 H TYPE I'S ■ TYPE II'S  
 □ TYPE III'S ◀ ARROW PANEL

**PRE-WARNING SIGNS**  
 — 36" X 36" — "A" Lights  
 x 48" X 48" — "B" Lights  
 — Stand. Ints. — "C" Lights  
 — SUPER ENGINEER GRADE

**START DATE:**  
 TIME: 7:00 AM to 5:00 PM  
**DURATION:**  
 DWG: Two Way Control w/Flagging  
 DATE: 05/24/11  
 DRAWING NOT TO SCALE

TRAFFIC CONTROL DRAFT NO. TWCF1  
 CONTRACTOR: Tidelands Construction Inc  
 AGENCY: County of Contra Costa  
 LOCATION: Bruns Rd-Kelso Rd to Byron Hwy

A DRAFT by Philip M. Sponable  
**ATSSA**  
 #00225176 exp. 12/18/12

'TYPICAL' TWO WAY CONTROL w/FLAGGING(T13/TA10):  
 PEDESTRIAN CONTROL(TA28/29):  
 Raw Water Installation.  
 Bruns Road - Christensen Rd to Byron Hwy.  
 Sta. 18+10 to Sta. 92+82

7:00 AM to 5:00 PM

FLAGGERS TO ASSIST and/or ESCORT PEDESTRIANS and CYCLISTS AS NEEDED, REQUIRED OR DIRECTED DURING WORKING HOURS. ALL PATHWAYS OPEN DURING NON-WORKING HOURS.

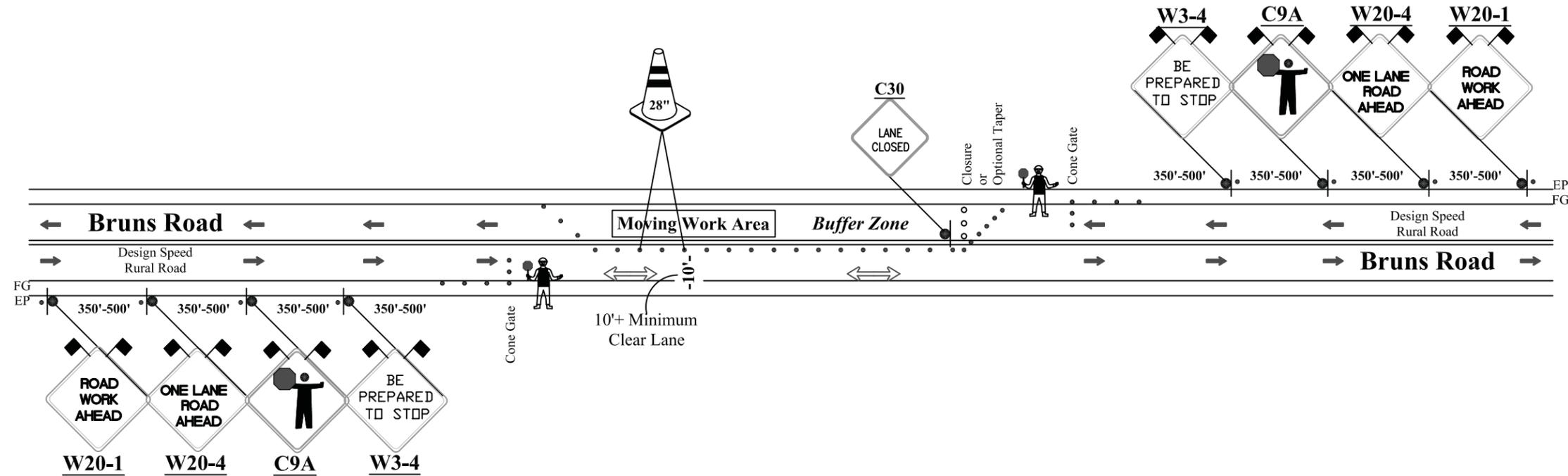


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MAINTAIN ONE ACCESS TO BUSINESS AT ALL TIMES



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CROSSWALKS, SIDEWALKS & BICYCLES:

NOTE: Place pedestrian & bike signage as needed or directed by the County Representative at appropriate locations.

Place no right/left turn signage at all affected driveways and side streets in traffic control zone.

LEGEND...

Sign.

Reflective Channelizer.

Type III Barricade.

**TIDELANDS CONST CO**  
 9020 Brentwood Blvd  
 Brentwood, CA. 94513  
 925.516.4600 Fax:925.516.4602

**EQUIPMENT**  
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 ● TUBES, x CONES, BARRELS  
 H TYPE I'S ■ TYPE II'S  
 □ TYPE III'S ◻ ARROW PANEL

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 — 36" X 36" — "A" Lights  
 x 48" X 48" — "B" Lights  
 — Stand. Ints. — "C" Lights  
 — SUPER ENGINEER GRADE

**START DATE:**  
 TIME: 7:00 AM to 5:00 PM  
**DURATION:**  
 DWG: Two Way Control w/Flagging  
 DATE: 05/24/11  
 DRAWING NOT TO SCALE

TRAFFIC CONTROL DRAFT NO. TWCF2  
 CONTRACTOR: Tidelands Construction Inc  
 AGENCY: County of Alameda  
 LOCATION: Bruns Rd-Christensen to Byron Hwy

A DRAFT by Philip M. Sponable  
**ATSSA**  
 #00225176 exp. 12/18/12

CONTACT: Greg Hull 510.773.0389 greg@tidelandsconstruction.com

**CLOSURE at SIDE of INTERSECTION(T13/TA10/TA/27):**  
**PEDESTRIAN CONTROL(TA28/29):**  
**Raw Water Installation.**  
**Bruns Road & Kelso Road.**

7:00 AM to 5:00 PM

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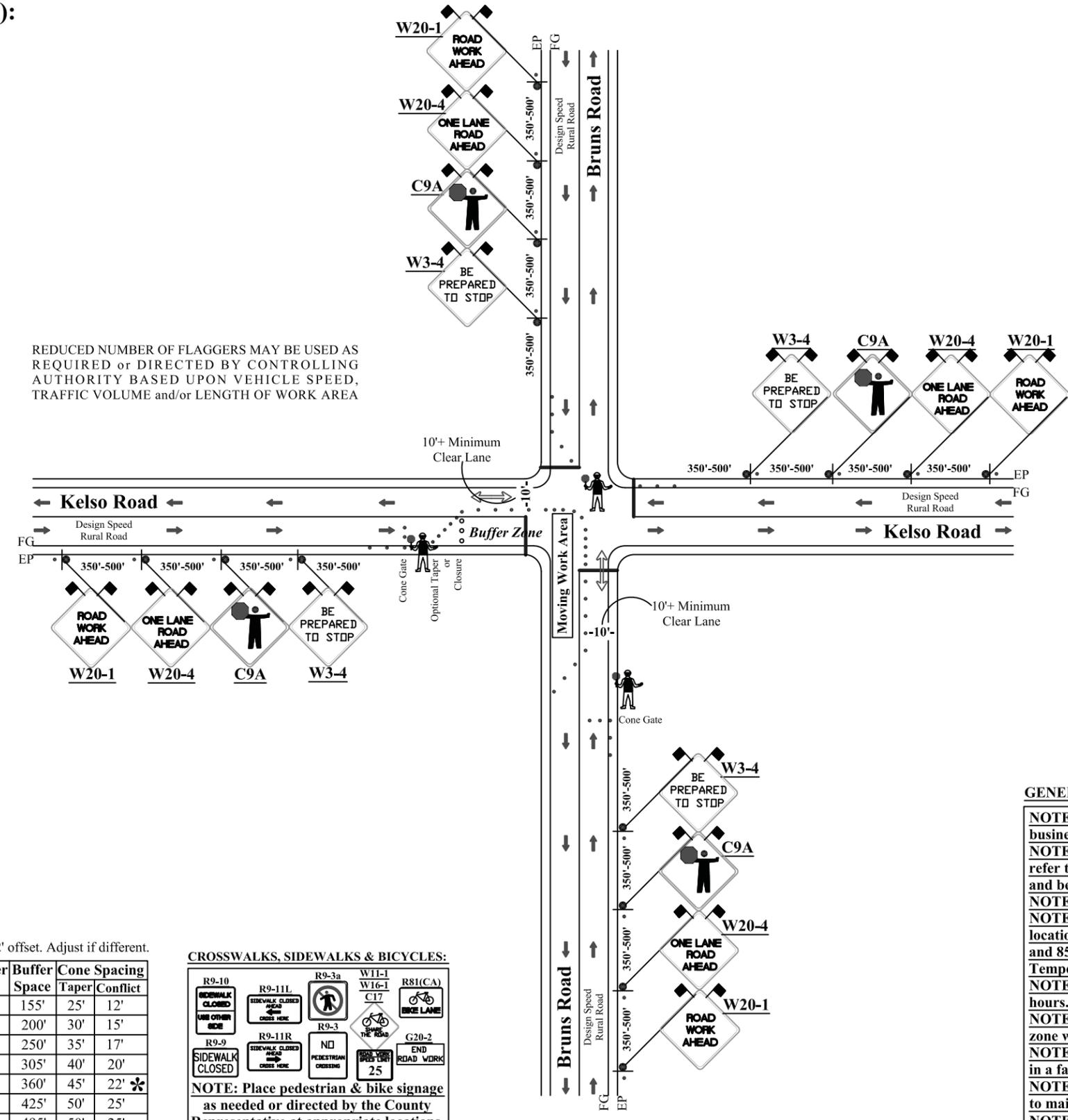
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REDUCED NUMBER OF FLAGGERS MAY BE USED AS REQUIRED or DIRECTED BY CONTROLLING AUTHORITY BASED UPON VEHICLE SPEED, TRAFFIC VOLUME and/or LENGTH OF WORK AREA



**LEGEND...**

Sign.	
Reflective Channelizer.	
Type III Barricade.	

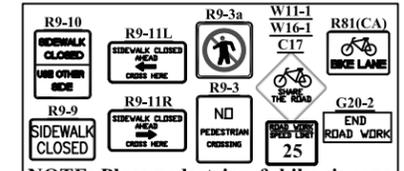
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**EQUIPMENT**

● Sign Symbol	▲ HIGH-LEVEL
● TUBES, X CONES, BARRELS	
H TYPE I'S	■ TYPE II'S
▢ TYPE III'S	▣ ARROW PANEL

**PRE-WARNING SIGNS**

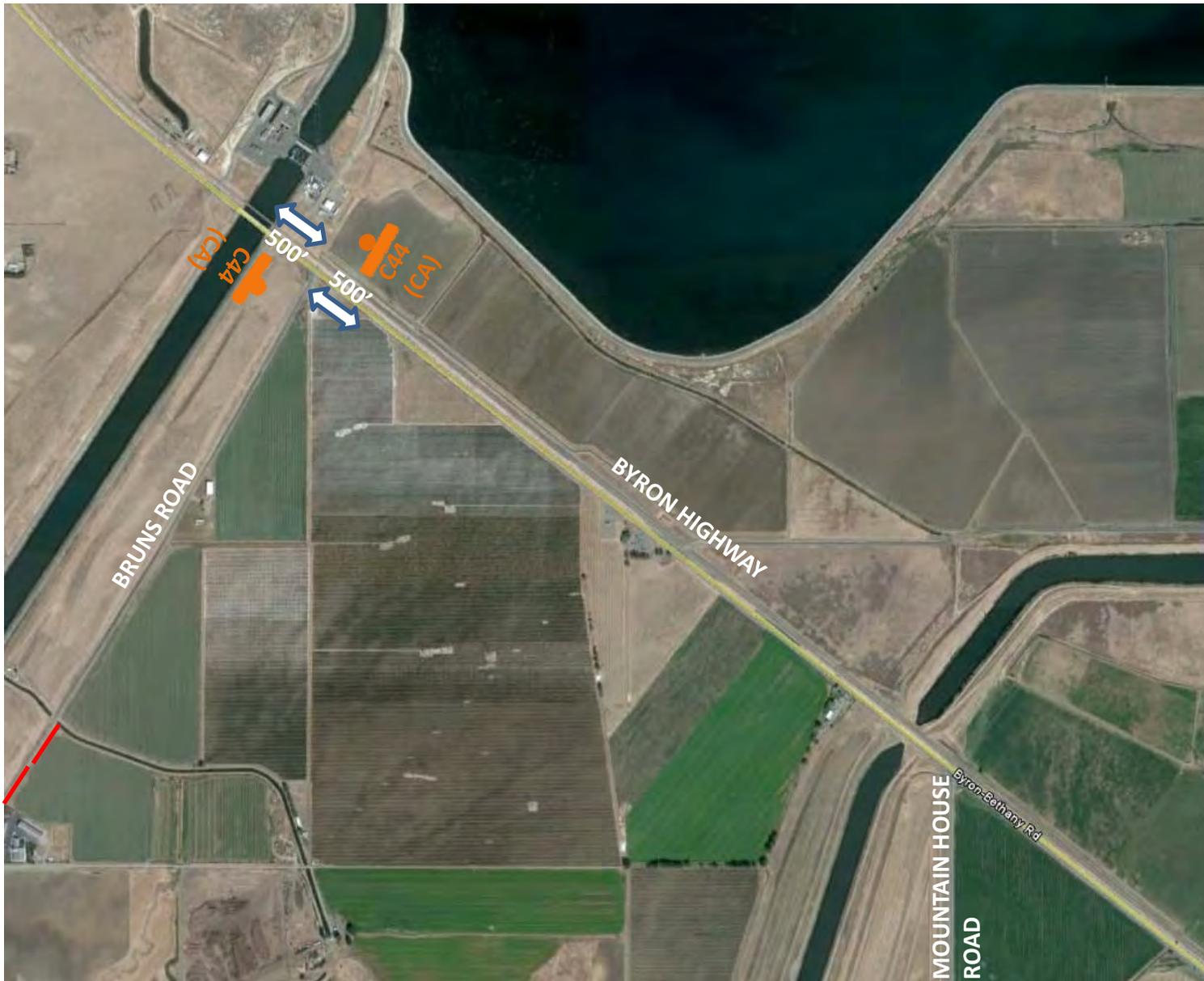
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x 48" X 48"	— "B" Lights
— Stand. Ints.	— "C" Lights
— SUPER ENGINEER GRADE	

**START DATE:** 7:00 AM to 5:00 PM  
**TIME:** 7:00 AM to 5:00 PM  
**DURATION:**  
**DWG:** Closure at Side of Intersection  
**DATE:** 05/24/11  
**DRAWING NOT TO SCALE**

**TRAFFIC CONTROL DRAFT NO. CSI3**  
**CONTRACTOR:** Tideland Construction Inc  
**AGENCY:** County of Alameda  
**LOCATION:** Bruns Road & Kelso Road

A DRAFT by Philip M. Sponable  
**ATSSA**  
 #00225176 exp. 12/18/12

CONTACT: Greg Hull 510.773.0389 greg@tidelandsconstruction.com



C44 (CA)

Slow-moving vehicles will be entering/exiting Bruns Road.

The proposed sign should be placed on an as-needed basis.

**Legend:**

Water pipeline 

Proposed Sign 

**Mariposa Energy Project**

Signage Plan No. 1

Not to scale



C44 (CA)

Transmission line stringing will not require lane closure. However, motorists should be warned about the possibility of trucks entering/exiting the property south of Kelso Road at this location.

The proposed sign should be placed on an as-needed basis.

**Legend:**

- Transmission Line
- Proposed Sign

**Mariposa Energy Project**

Signage Plan No. 2

Not to scale