

**Addendum to  
the Big Wave Wellness Center and Office Park Project EIR  
North Parcel Alternative**

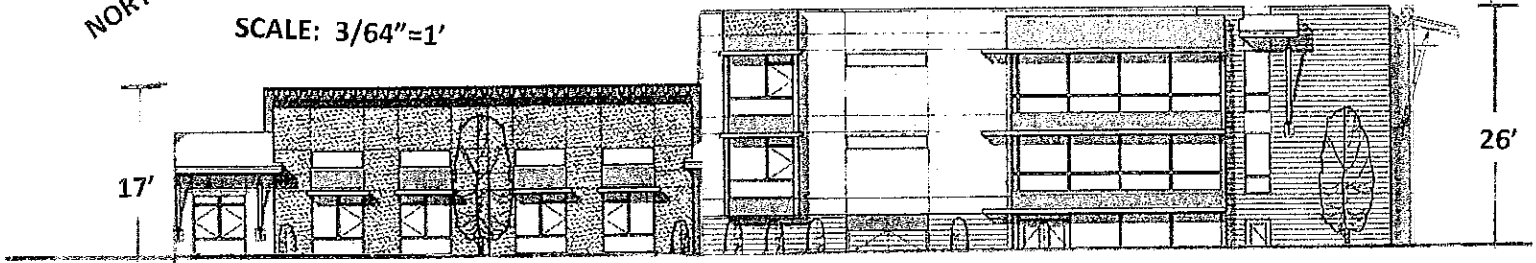
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**Attachment A**

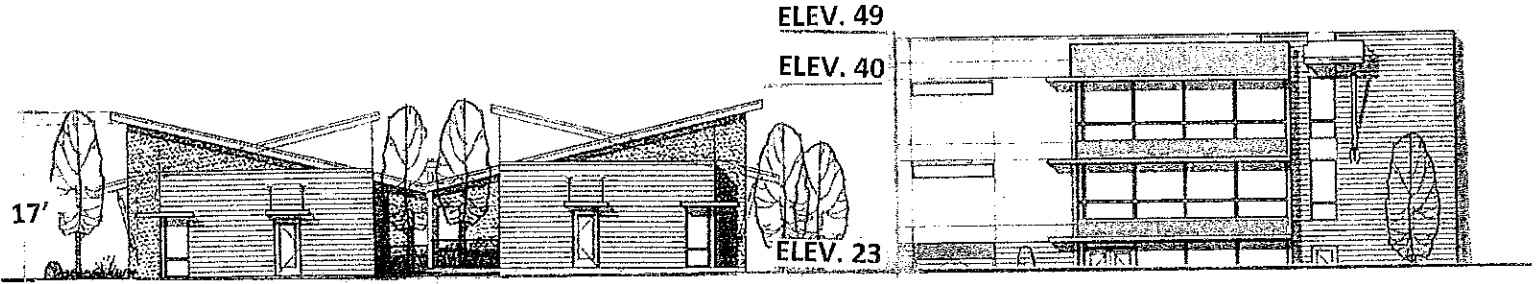
**Project Renderings and Floor Plans**



SCALE: 3/64"=1'

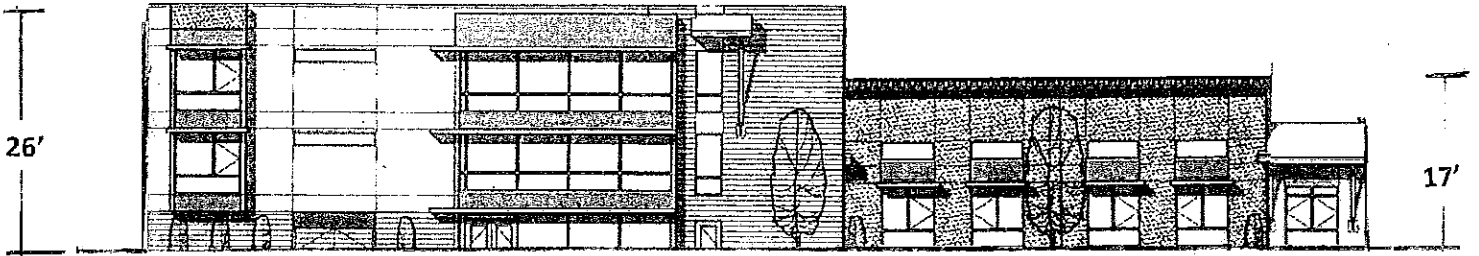


SOUTH ELEVATION

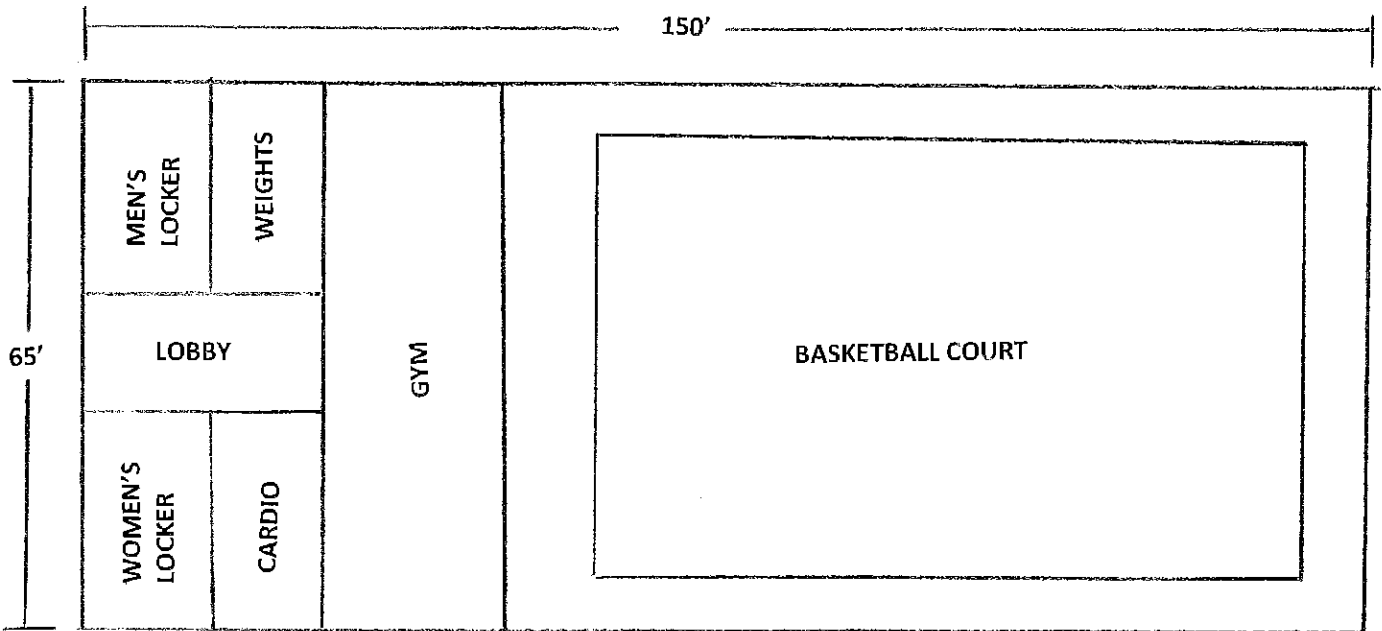


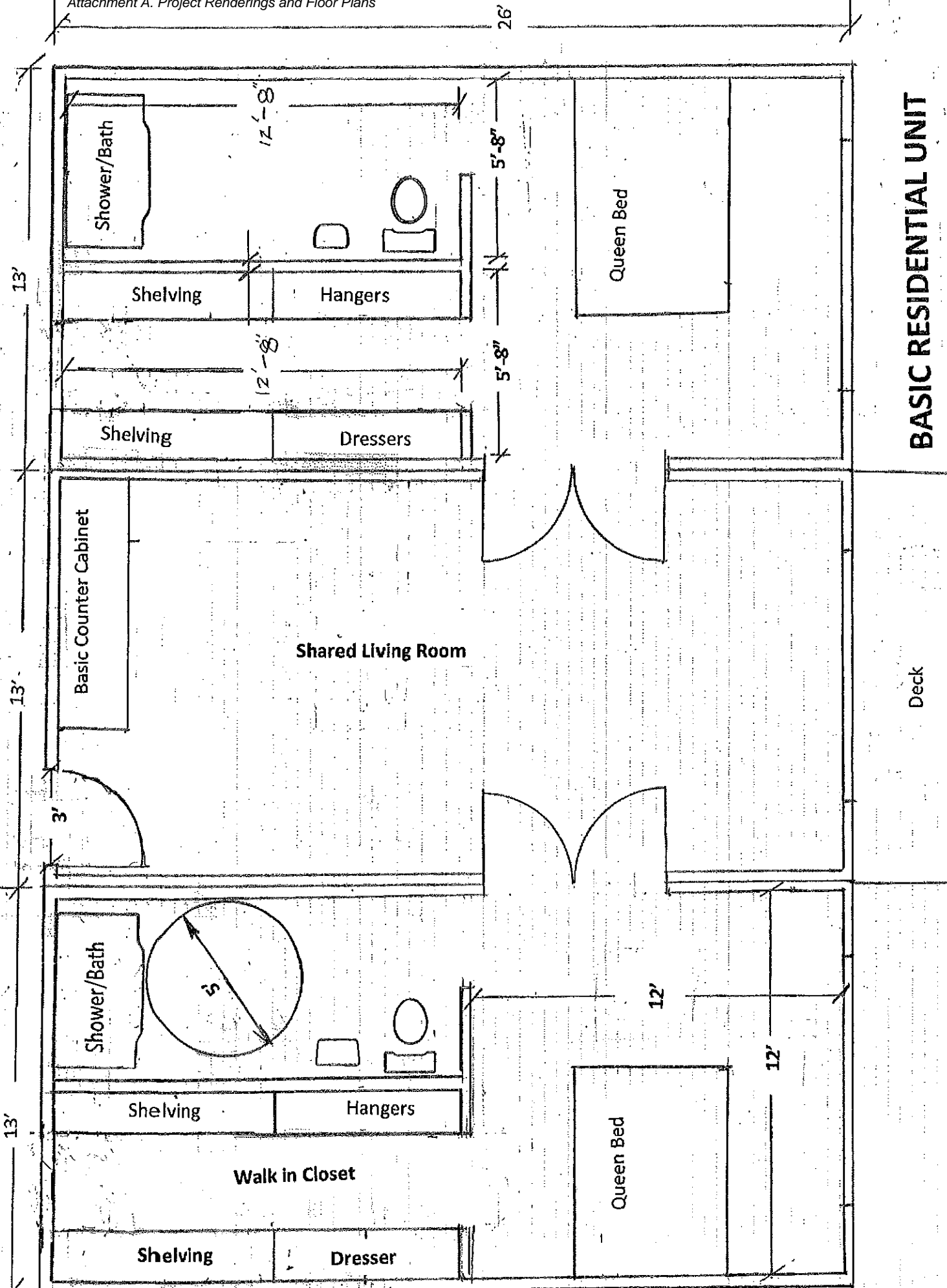
WEST ELEVATION

EAST ELEVATION



NORTH ELEVATION





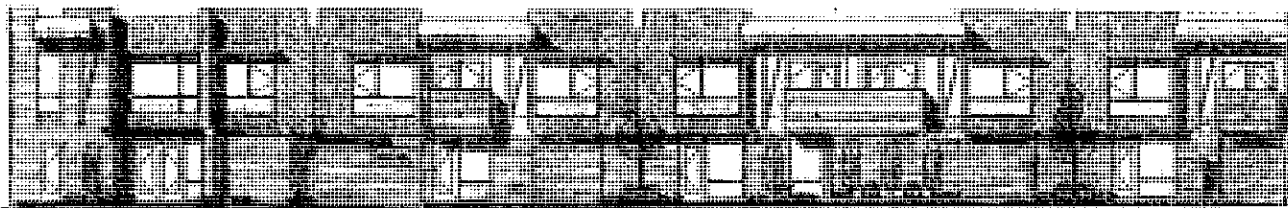
**BASIC RESIDENTIAL UNIT**

Deck

# WELLNESS CENTER- BUILDING 2

(13 RESIDENTIAL UNITS)

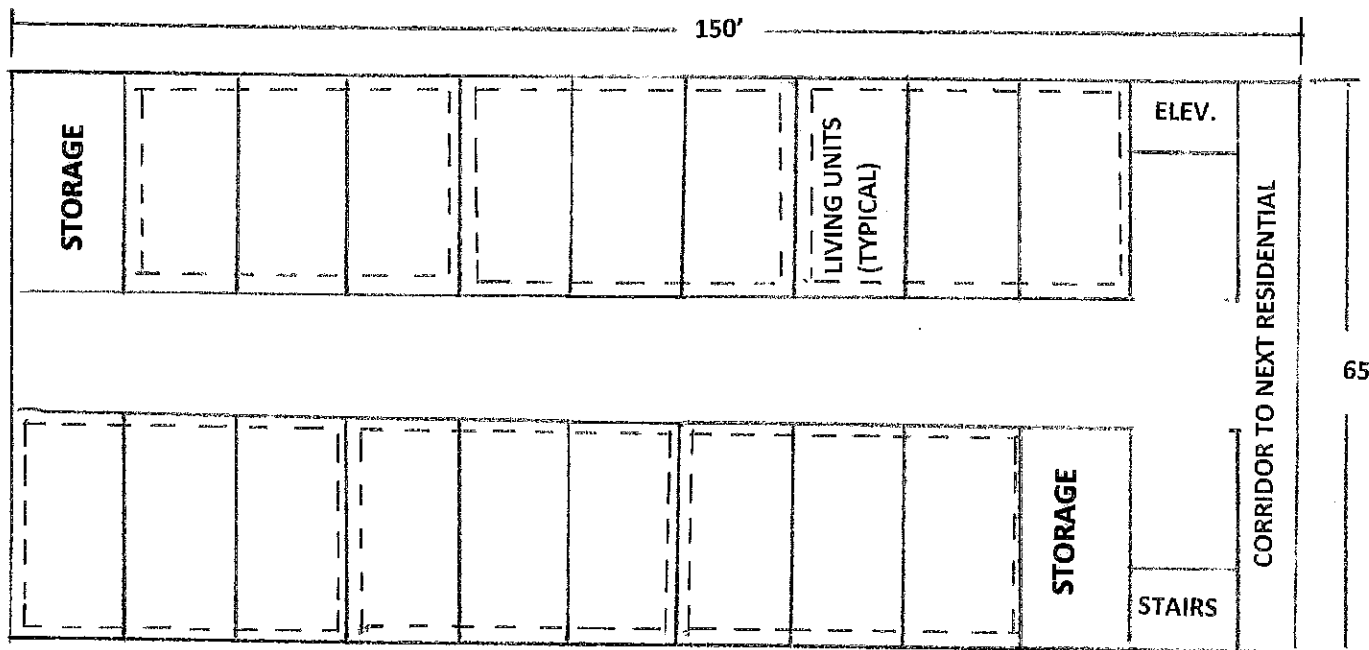
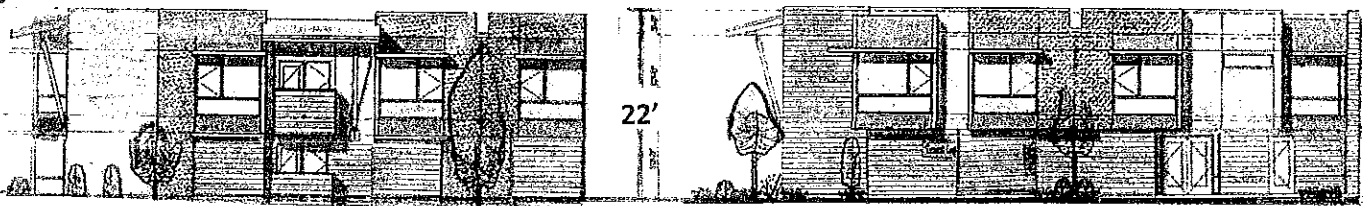
NORTH/SOUTH ELEVATION



EAST/WEST ELEVATION

ELEV. 45

ELEV. 22



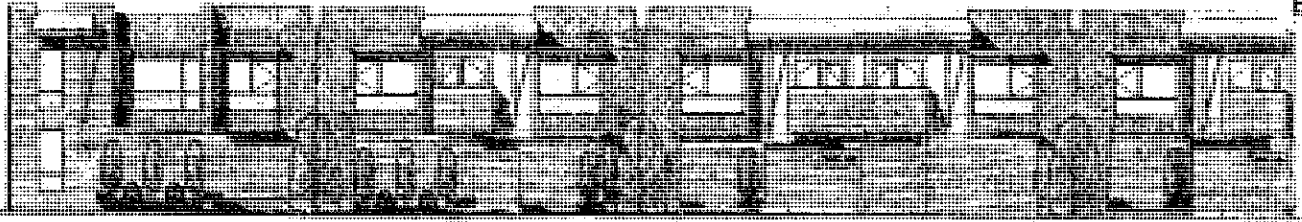
FLOOR PLAN FOR BUILDING 2 AND 3



# WELLNESS CENTER- BUILDING 3

(13 RESIDENTIAL UNITS)

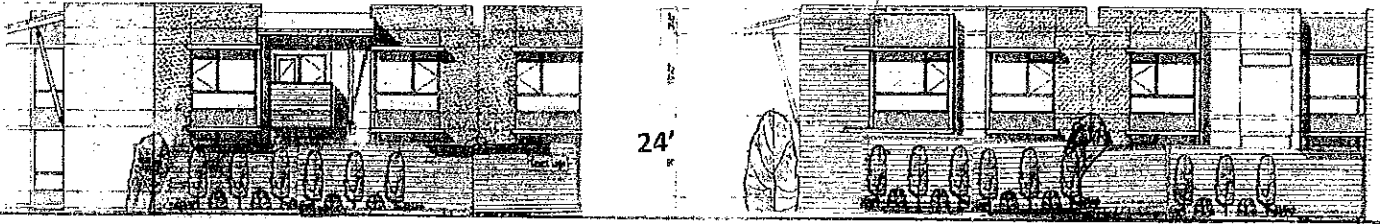
NORTH/SOUTH ELEVATION



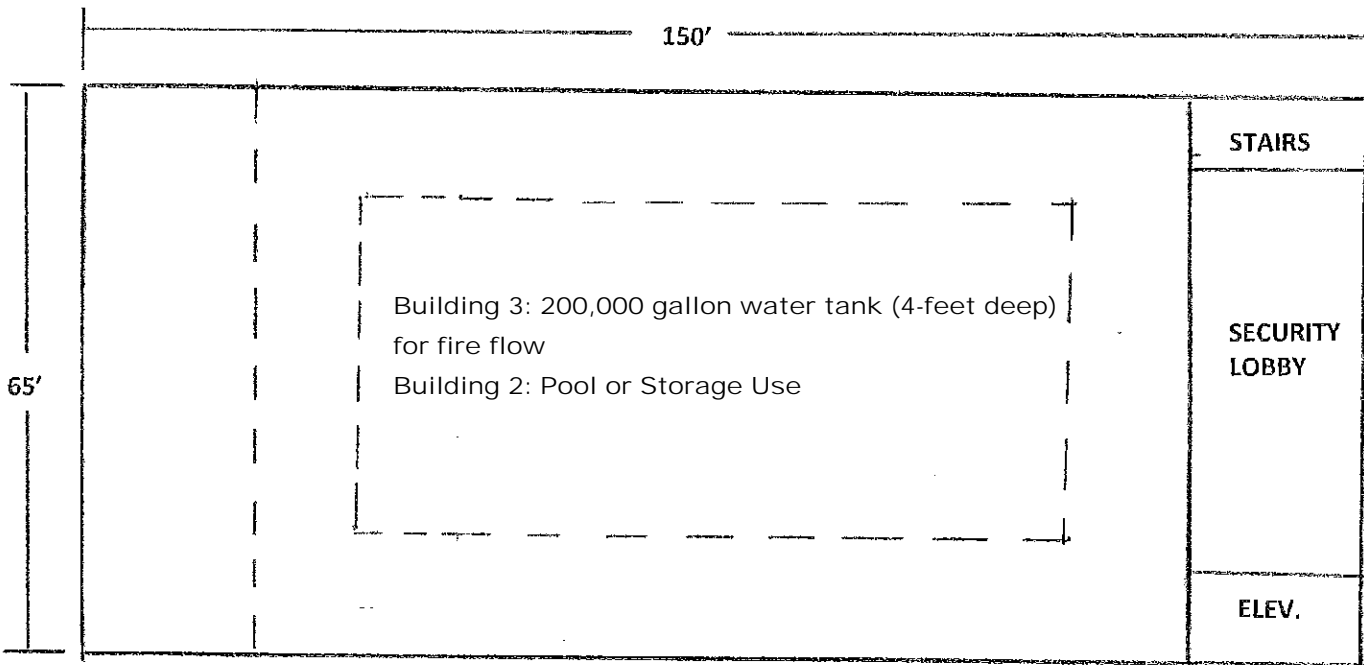
ELEV. 45

EL. 21'

EAST/WEST ELEVATION



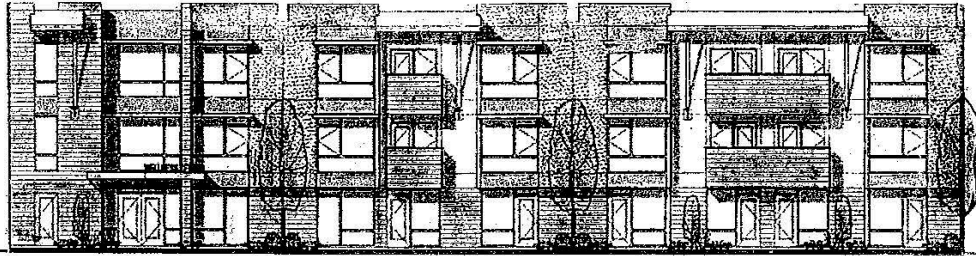
24'



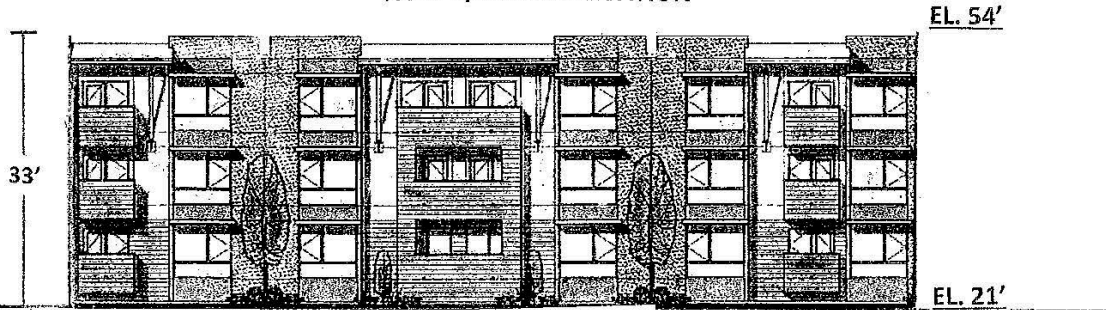
BASEMENT FOR BUILDING 2 AND 3

### WELLNESS CENTER-BUILDING 4

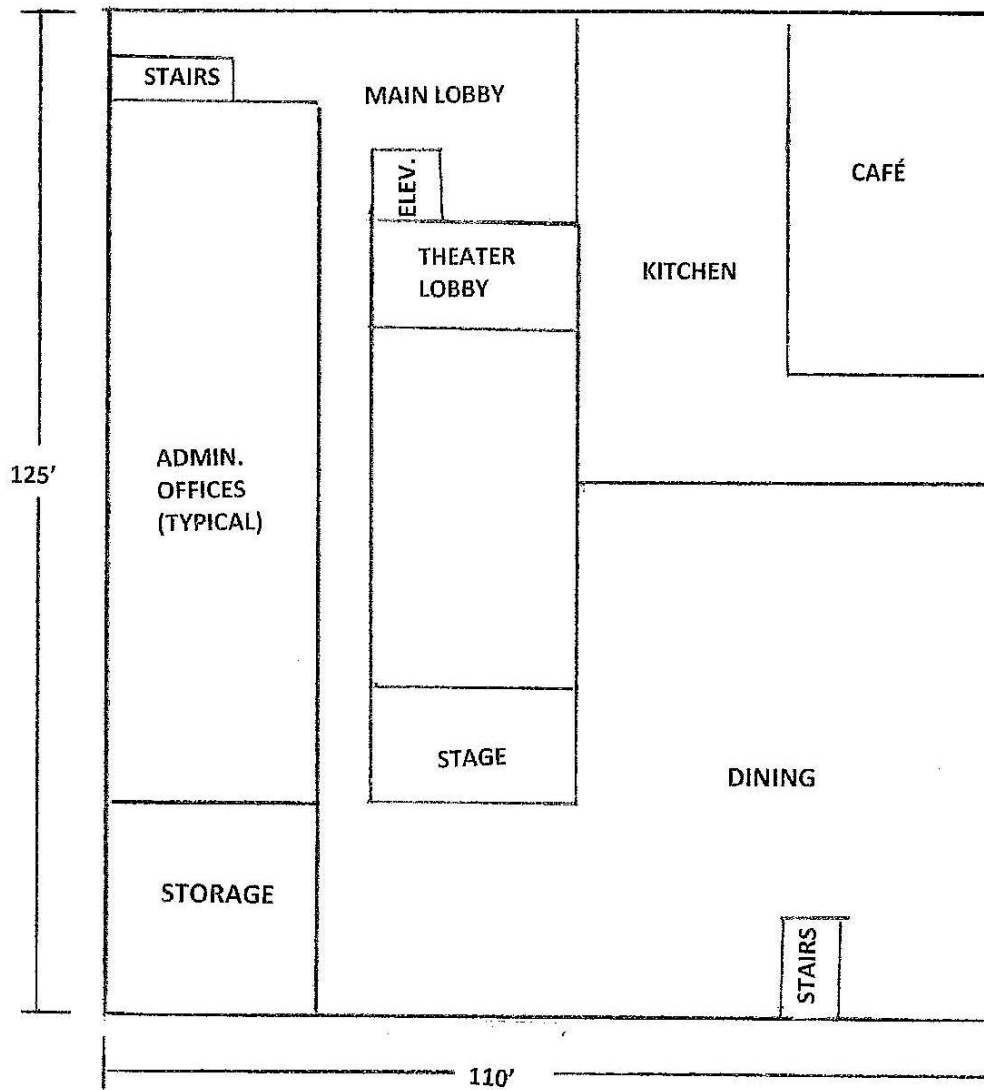
(30 RESIDENTIAL UNITS)

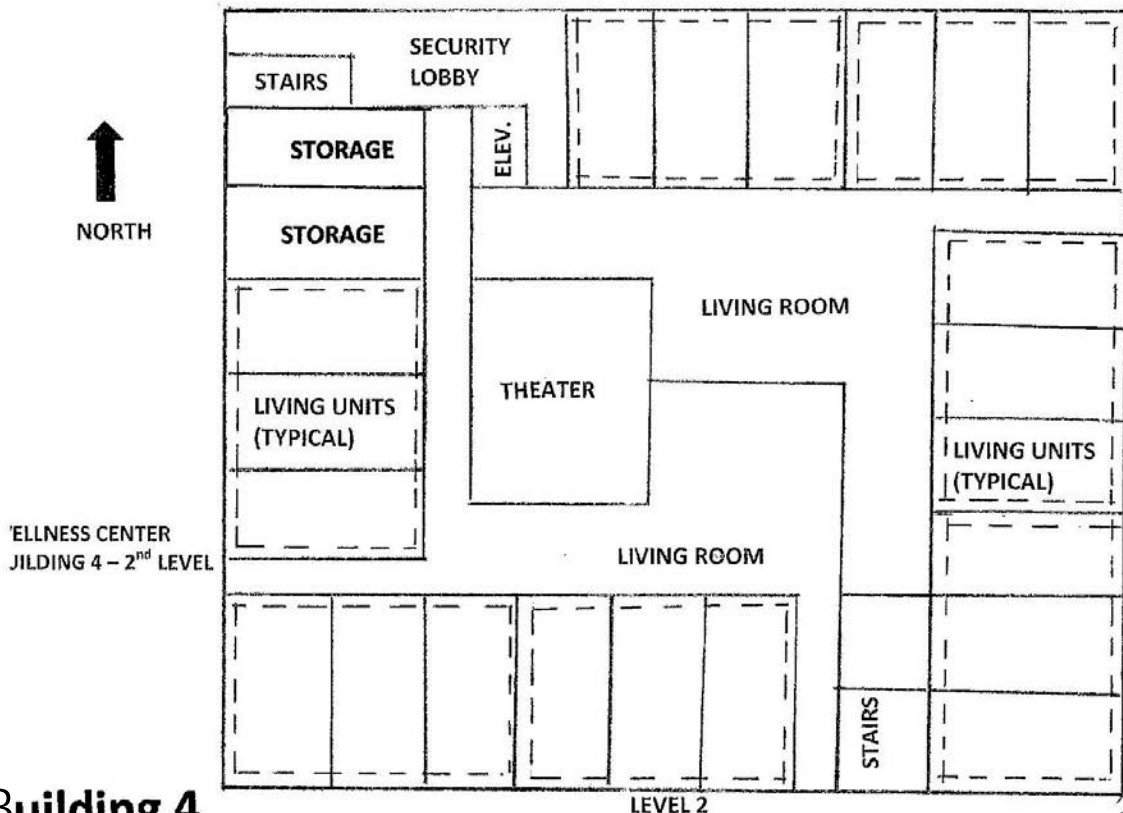


NORTH/SOUTH ELEVATION

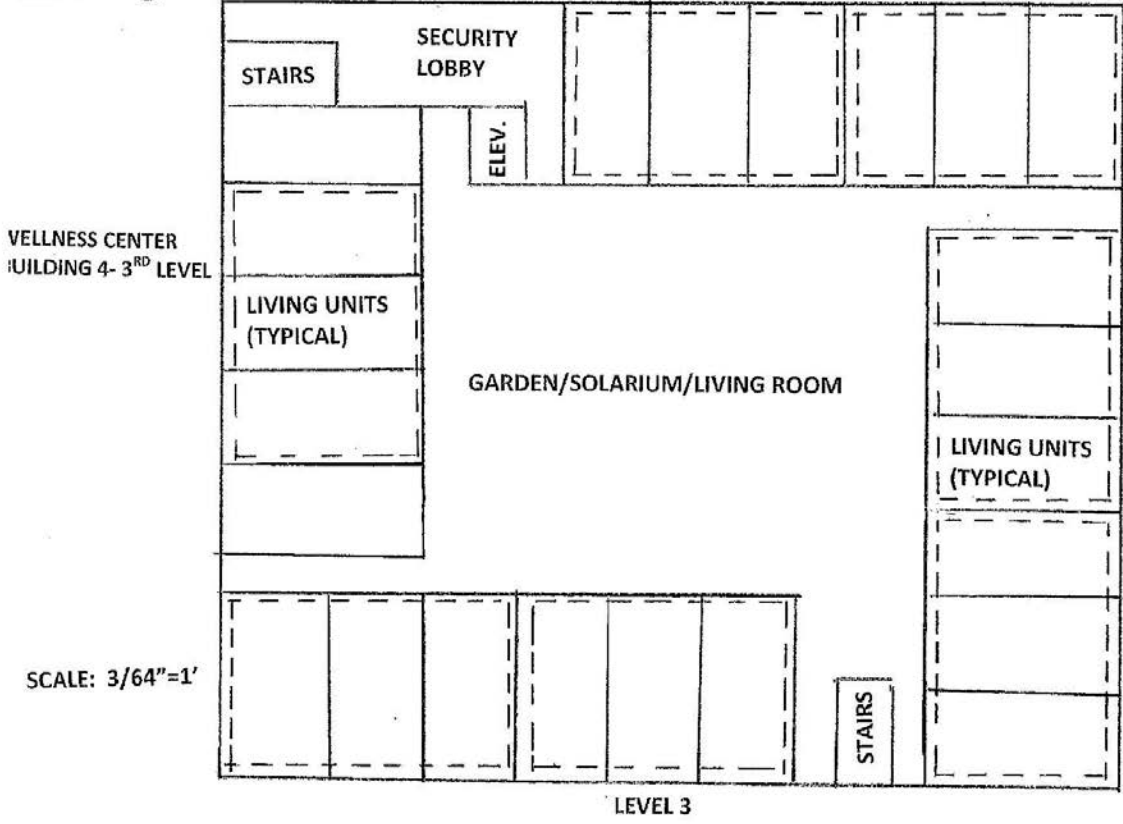


EAST/WEST ELEVATION





### Building 4



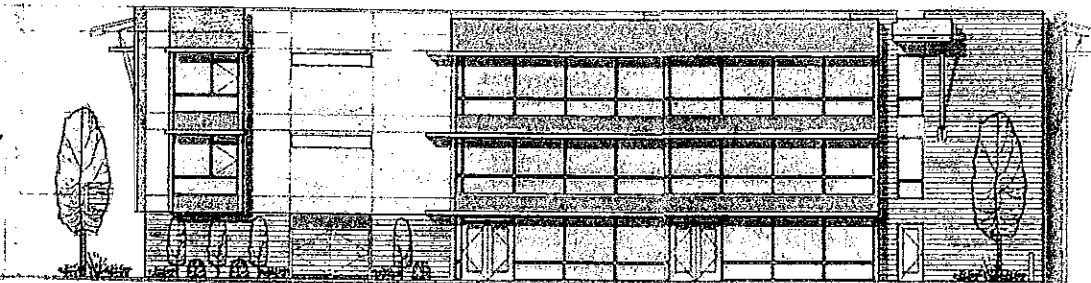
# BUSINESS BUILDINGS A, C, E



### NORTH/SOUTH ELEVATION

EL. 54'

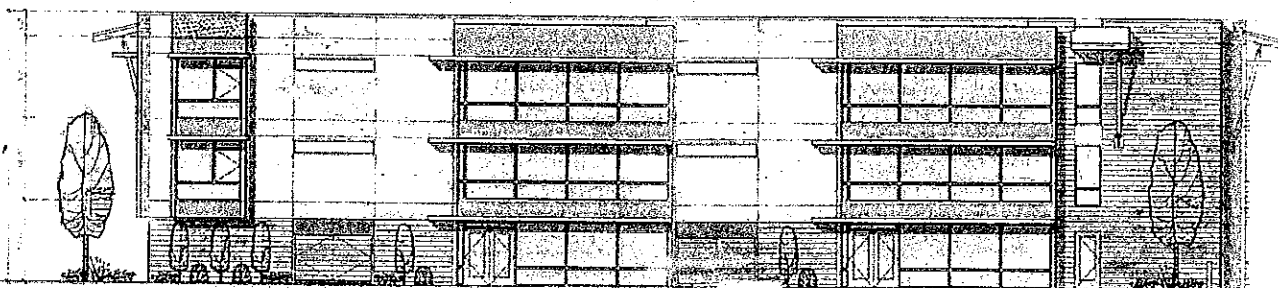
33'



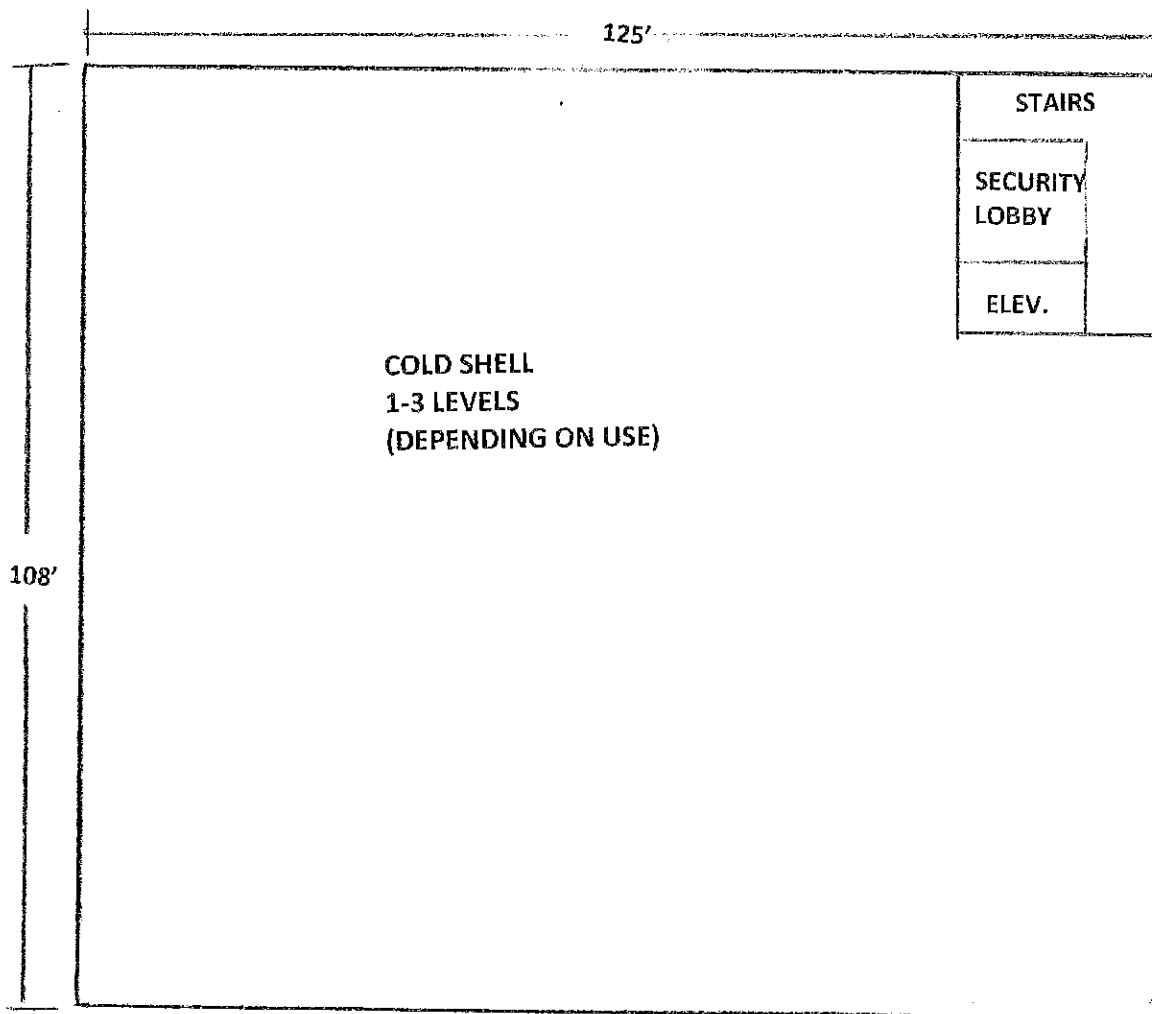
EL. 21'

### EAST/WEST ELEVATION

33'



125'

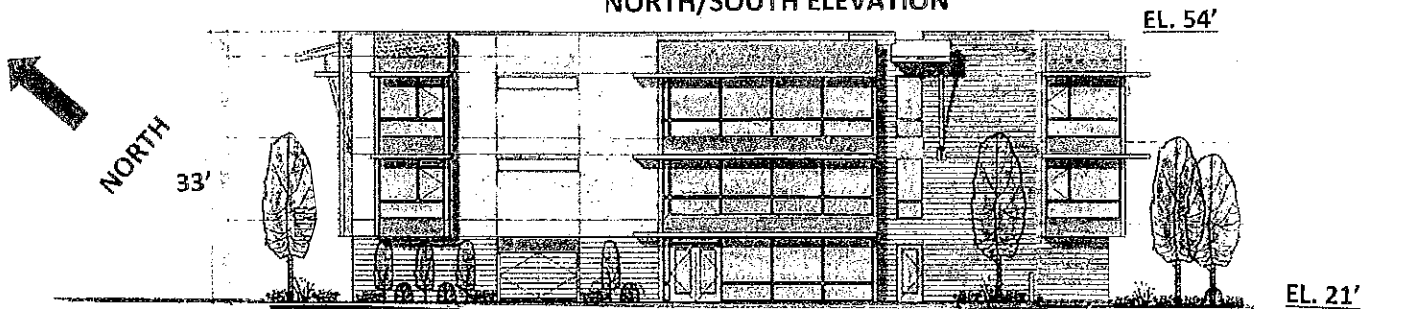


108'

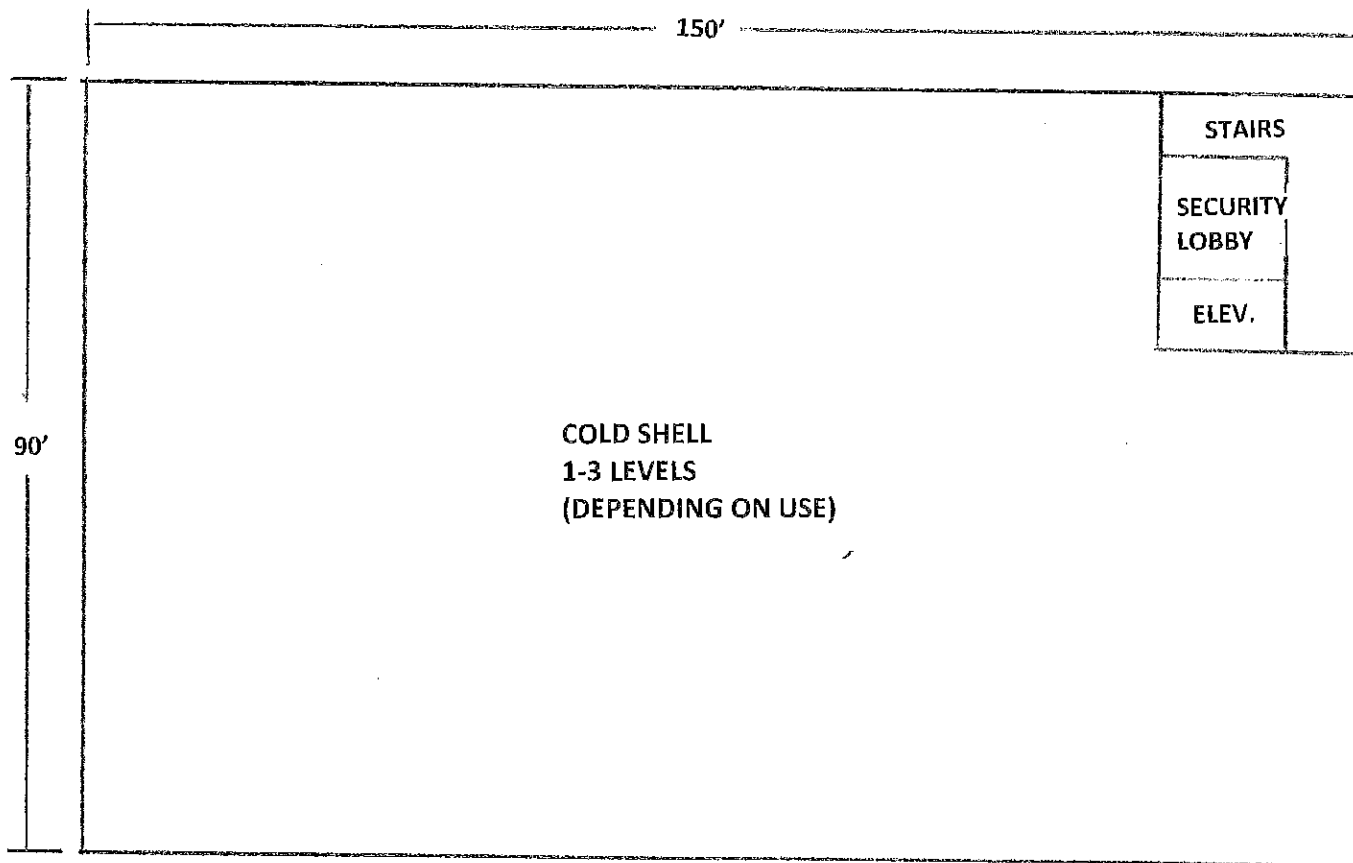
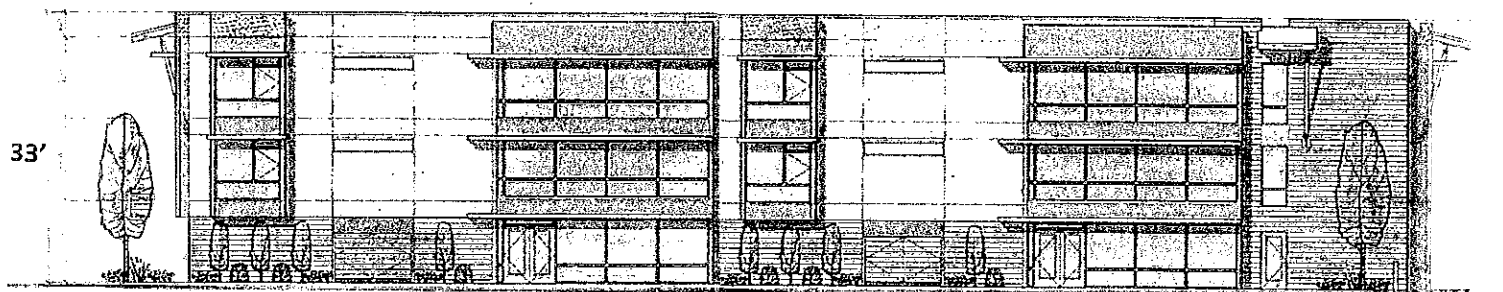


# BUSINESS BUILDINGS B, D

## NORTH/SOUTH ELEVATION



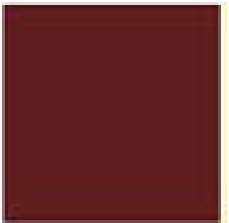
## EAST/WEST ELEVATION



Bay Ridge  
81593 (32)  
Base 100



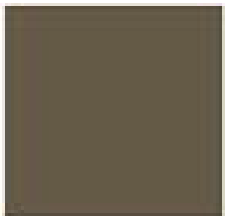
Southern Moss  
696 (42)  
Base 200



Country Lane Red  
Shake



Peacock Plume  
Kelly Moore

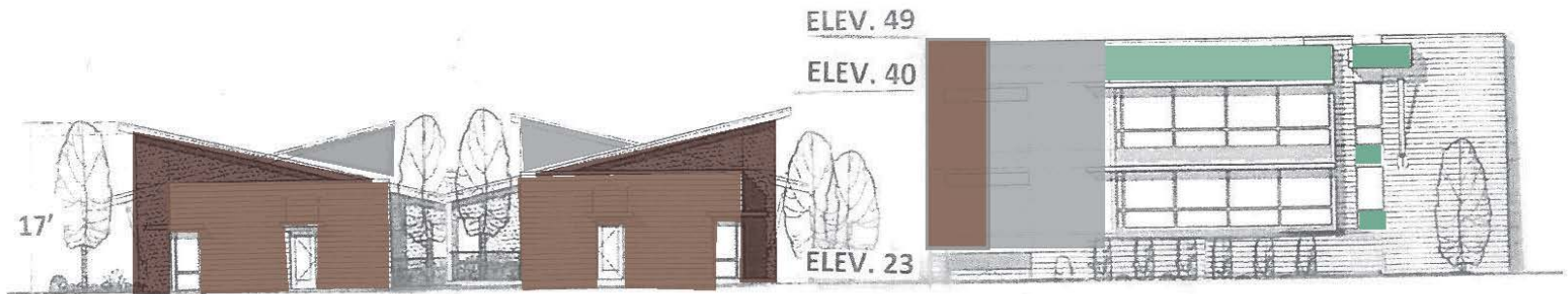


Timber Bark  
Natural Wood Siding

## WELLNESS CENTER- BUILDING 1 (GYM AND BASKETBALL)



SOUTH ELEVATION



WEST ELEVATION

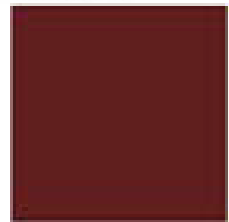
EAST ELEVATION



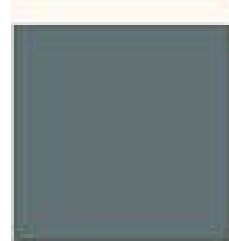
Bay Ridge  
81593 (32)  
Base 100



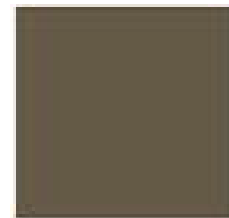
Southern Moss  
696 (42)  
Base 200



Country Lane Red  
Shake



Boothbay Blue  
Plank



Timber Bark  
Natural Wood Siding

## BUSINESS BUILDINGS A, C, E



NORTH/SOUTH ELEVATION

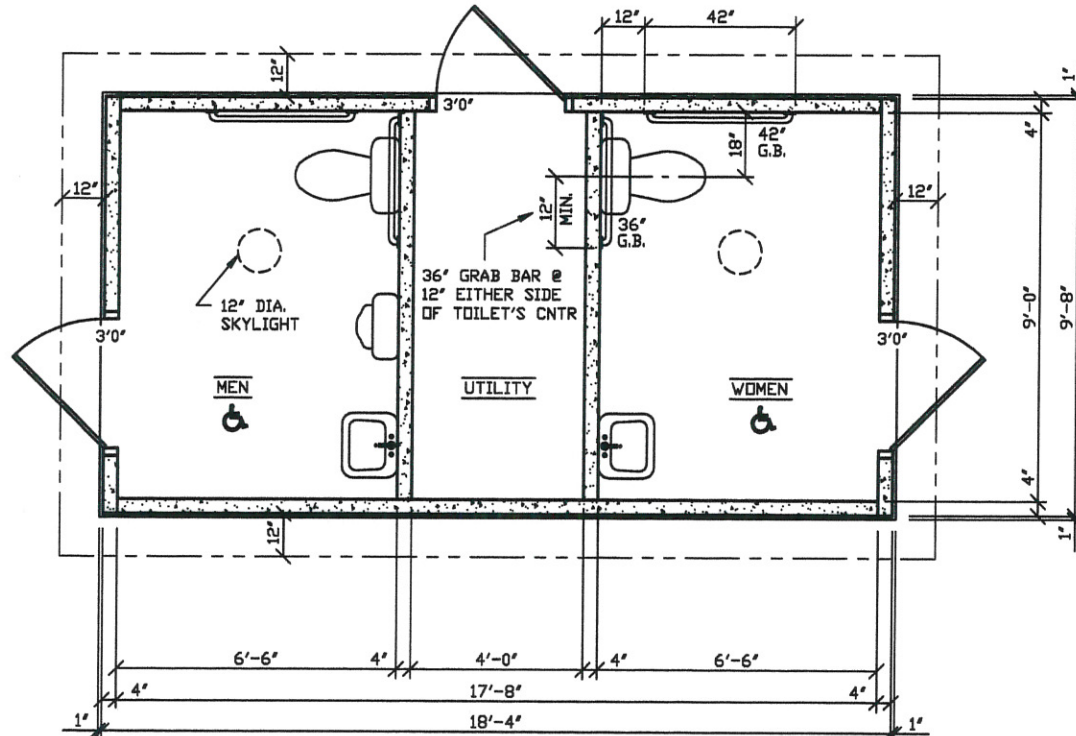


EAST/WEST ELEVATION





**Precast/Preassembled Reinforced Concrete Bathroom**



FLOOR PLAN  
 SCALE: 1/4" = 1'-0"

N.P.C.A. CERTIFIED PLANT  
 &  
 MEMBER OF:  
 NATIONAL & WISCONSIN PRECAST CONCRETE ASSOCIATIONS

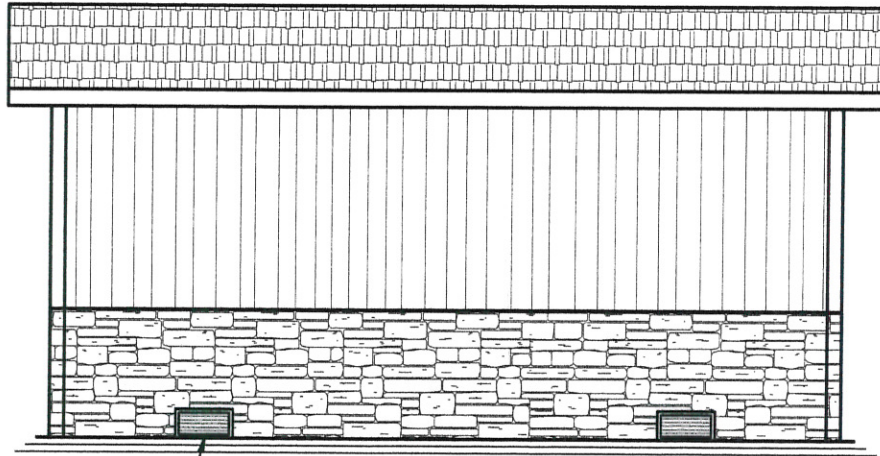
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**HUFFCUTT**  
 CONCRETE, INC

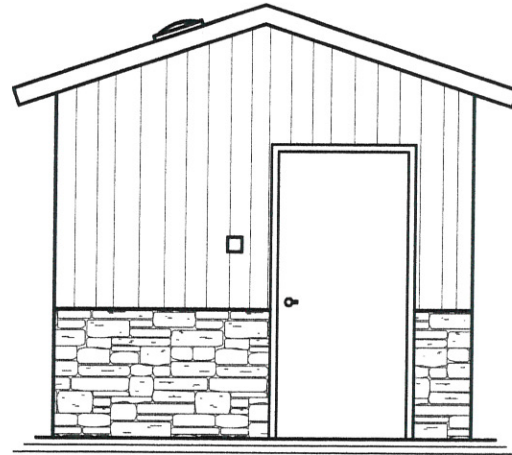


PROJECT:  
 RR200  
 BUILDING



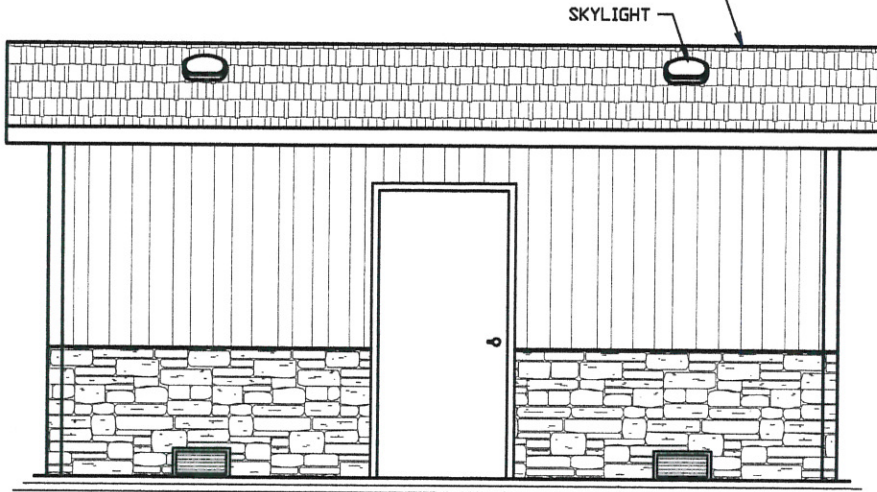
16' x 8' CAST ALUMINUM VENT

**FRONT ELEVATION**  
 SCALE: 1/4" = 1'-0"

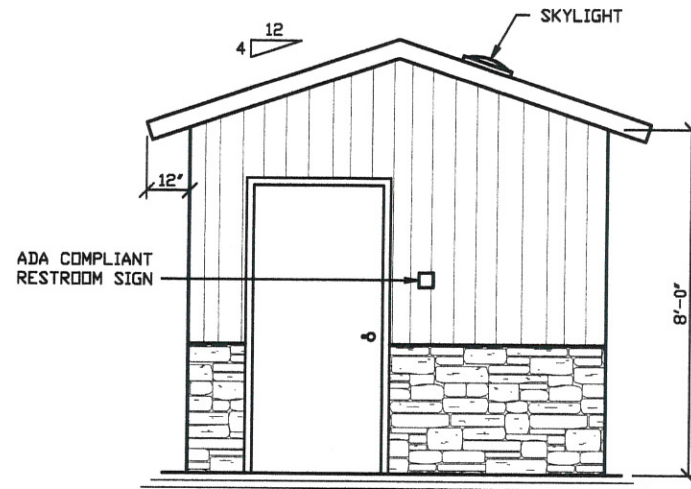


**LEFT ELEVATION**  
 SCALE: 1/4" = 1'-0"

5" CONCRETE ROOF PANELS WITH CEDAR SHAKE SHINGLE APPEARANCE



**REAR ELEVATION**  
 SCALE: 1/4" = 1'-0"



ADA COMPLIANT RESTROOM SIGN

**RIGHT ELEVATION**  
 SCALE: 1/4" = 1'-0"

N.P.C.A. CERTIFIED PLANT &  
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PROJECT:  
 RR200  
 BUILDING

2 4 2

**Addendum to  
the Big Wave Wellness Center and Office Park Project EIR  
North Parcel Alternative**

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**Attachment B**

**Riparian & Waters/Wetland Ecosystem Restoration Final  
Basis of Design Report**

***Final (100%) Basis of Design Report***

**Riparian & Waters/Wetland  
Ecosystem Restoration  
Big Wave Wellness Center and Office Park  
San Mateo County, California**



**March 18, 2012**

***Prepared for***



**Big Wave Group**  
1333 Jones Street  
Suite 307  
San Francisco, CA 94109

***Prepared by***

**Esa K Crumb**  
With  
**Peggy Fiedler, PhD.**

***Formerly With WSP Environment and  
Energy***

5920 McBryde Ave  
Richmond, CA 94805



## DISCLAIMER

Peggy Fielder and Esa Crumb provided professional guidance in the preparation of this 100% design report for use by the Big Wave Group. The initial basis of design report was prepared by WSP Environment and Energy, Ecosystem Services and Restoration. Ms. Fielder and Ms. Crumb contributed to the preparation of the draft versions of this basis of design report under WSP Environment and Energy.

Waters/wetlands boundaries, as described in a previous report by WSP (2008), are conditional upon final approval by the U.S. Army Corps of Engineers, San Francisco District and the California Coastal Commission. Results and conclusions of the waters/wetland delineation are based upon information provided by public domain (e.g., U.S. Geological Survey 7.5' topographic quadrangles, the Natural Resources Conservation Service Soil Surveys, and air photographs from various sources), as well as on-site reconnaissance, data collection, and analyses by standard methods. They represent the best professional judgment of the WSP Environment and Energy personnel.

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Esa Crumb  
*Ecologist*  
*Formerly with Ecosystem Science & Restoration Services*  
*WSP Environment and Energy*

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Date

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Peggy Fiedler, PhD  
*Wetland Ecologist*  
*Formerly with Ecosystem Science & Restoration Services*  
*WSP Environment and Energy*

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Date

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## EXECUTIVE SUMMARY

The Big Wave Wellness Center and Office Park Project (Project) consists of the construction of a residential village and an adjacent commercial property/office park complex. The residential village is designed to provide affordable housing and independent living for a developmentally disabled community, and the office park is designed similarly to provide a state-of-the-art “green”, LEED-certified working environment. The primary objective of the Project is to construct innovative living and work environment that foster independent and meaningful living/work experiences for disabled adults. The proposed Project also includes restoration of the waters of the U.S. including wetlands (i.e. waters/wetlands) and California Coastal Commission (state) wetlands on the property that are currently used in agricultural production.

This basis of design report outlines a restoration plan for the riparian/wetland ecosystem that encompasses the federal and state waters/wetlands and a 100-foot buffer that lie within the project area. This 100% restoration design describes a suite of activities that would increase waters/wetland ecosystem functions, and to develop a native, diverse, and aesthetically pleasing landscape. Best management practices for stormwater treatment are designed to incorporate retention/detention microdepressions planted with native species.

The riparian/wetland ecosystem restoration plan includes five elements:

1. Earthwork, including mass and fine grading,
2. Placement of large wood,
3. Planting and irrigation,
4. Weed management, and
5. Monitoring and adaptive management

The riparian/wetland ecosystem restoration design integrates the built environment with natural communities through utilization of native species for landscaping, locally adapted plant stock, and when possible use of plant material collected from the Project site and adjacent areas. Additionally, the project design encourages community involvement by offering educational opportunities for village residents in the restoration process as well as via foot path planned within the restoration buffer. If implemented as designed, the riparian/wetland ecosystem will result in an increase in the hydrologic, biochemical, native plant community, and faunal support/habitat functions of the currently farmed wetland areas. A monitoring and adaptive management program will be implemented to ensure success of the restoration efforts.

## **I. INTRODUCTION**

The Big Wave Wellness Center and Office Park (Project) consists of the construction of a residential village and an adjacent commercial property/office park complex. The residential village will provide affordable housing and independent living for a developmentally disabled community and the office park is designed similarly to provide a state-of-the-art “green” LEED-certified work environment. The primary objective of the project is to construct an innovative living and work environment that fosters independent and meaningful living/work experiences for disabled adults.

The proposed Project also includes a restoration plan for the riparian/wetland ecosystem which for the purposes of this Project includes: (a) restoration of the waters of the U.S., including wetlands, (b) California Coastal Commission (state) wetlands, and (c) a 100-foot wide buffer around these sensitive habitats. The majority of all three areas is currently used in agricultural production. For the purposes of this Project, a “riparian/wetland ecosystem” is defined as upland, transitional, and waters/wetland habitats, all of which will be restored in a complex mosaic within a 100-foot buffer adjacent to existing federal and state waters/wetlands. Restoration of the buffer will provide significant benefits to waters/wetland ecosystems functions, relative to existing conditions, particularly with respect to the native plant and animal communities. Of particular importance is the restoration of potential breeding habitat for the California red-legged frog (*Rana aurora draytonii*) and potential foraging habitat for the San Francisco garter snake (*Thamnophis sirtalis tetrataenia*). The restoration design integrates the built environment with natural communities through the utilization of native species for landscaping, locally adapted plant stock, and when possible use of plant material obtained from the Project site and adjacent habitat. Additionally, the Project design encourages community involvement by offering educational opportunities for village residents in the restoration process and through the inclusion of a an informal foot path within the restored buffer.

### **A. Project Site**

The Big Wave Project Site (Project Site) is located in unincorporated San Mateo County, adjacent to Princeton-by-the-Sea, California (**Figure 1**). The site consists of two agricultural fields totaling 19.5 ac. These fields are separated by a small, county-owned, intermittent stream that is an extension of San Mateo County’s Pillar Point Marsh. As such, it drains directly to the Pacific Ocean, entering the Pacific Ocean via Pillar Point Harbor immediately north of the mouth of Denniston Creek.

The Project Site is bordered to the northeast by the Half Moon Bay Municipal Airport (**Figure 2**) and to the south by Pillar Point Marsh, a nature reserve that is part of the County of San Mateo Fitzgerald Marine Reserve complex managed by the County’s Parks and Recreation Division. A public trailer park is immediately north of the Project Site along Airport Road. Elevation at the Project Site ranges from 9.0 to 27.7 feet NGVD. The agricultural fields are generally flat, but slope gently to the south and west.

## ***B. Existing Conditions at the Big Wave Project Site***

### ***1. Soils and Geomorphic Context***

The Project Site is situated on the uplifted Half Moon Bay marine terrace formation within a partially filled coastal basin. The coastal basin consists of Pleistocene coarse grained, alluvial fan and stream terrace deposits. Underlying sediments include poorly consolidated sand, gravel, and silt comprising the headward-most extent of old alluvial fans (Brabb and Pampeyan 1983). Montara Mountain, a northern spur of the Santa Cruz Mountain sequence of the Outer Coast Ranges, separates this low-lying coastal area from San Francisco Bay to the north and east.

Soils within the Project Site are mapped by the Natural Resources Conservation Service (NRCS, formerly U.S. Department of Agriculture Soil Conservation Service) as Denison clay loam on nearly level slopes (DcA) and Denison clay loam on nearly level slopes that are imperfectly drained (DdA) (NRCS 1961). These soils are derived from granitic alluvium, and have formed on low coastal terraces under the influence of herbaceous vegetation (grass). Denison clay loam soils occur on 0 to 2 percent slopes and the mapping unit has approximately 1 percent hydric inclusions, which typically are found in depressions across the mapping unit. Denison clay loam soils are generally highly fertile. Overall, Denison soils are classified as fine, smectitic (i.e., clay derived from the alteration of the minute glass in volcanic ash, formerly known as bentonite), isomesic (i.e., summer and winter temperatures differ by less than °C at 50 cm depth), pachic argixerolls (see Soil Survey Staff 2006).

### ***2. Climate***

The Project Site has a mild Mediterranean type climate maintained by persistent sea breezes. Temperatures rarely exceed 90°F and seldom drop below 32°F. Average daily temperatures (by month) range from 51°F to 59°F (NRCS 2007). Cloud coverage and fog are common during the evening and early morning hours, but typically dissipate during mid-day. Total average annual precipitation is 28 inches (NRCS 2007).

### ***3. Hydrology***

Hydrologic inputs to the Project Site are dominated by precipitation and surface runoff. The majority of surface runoff comes to the Project Site via the Half Moon Bay Airport storm water runoff collection system. Within the airport property, runoff is consolidated in a series of channels, culverts, and pipes leading to a pair of concrete culverts (44" diameter) that run southwest under Airport Street. The 44" culverts form the headward-most extent of a stream reach of an unnamed, intermittent tributary that bisects the Project Site. This tributary passes through two culverts under West Point Avenue and connects with the tidally influenced Pillar Point Marsh, eventually flowing into Pillar Point Harbor (WSP 2008a).

### ***4. Plant Communities***

The Project Site, consisting of two more or less adjacent agricultural fields, currently is under active cultivation. The site is annually plowed, diked, and planted in one or more rotations, therefore, little to no adventive (uncultivated) vegetation persists or has the opportunity to colonize across the majority of the Project Site. In those areas where agricultural clearing had not

occurred recently (e.g., along Airport Street verge and in very small, scattered patches within agricultural fields), non-native annual grasses and herbs occur. Dominant species along the main verge include wild oats (*Avena* spp.), bristly oxtongue (*Picris echioides*), and common vetch (*Vicia sativa*).

Along the unnamed intermittent tributary that bisects the property and the southern perimeter of the property adjacent to Pillar Point Marsh, riparian (palustrine scrub shrub) and seasonal freshwater wetland plant communities persist (palustrine persistent and non-persistent emergent) (Cowardin et al. 1979). Dominant species along the drainage include willows (*Salix lasiolepis*, *S. scouleriana*, *S. sitchensis*), California blackberry (*Rubus ursinus*), and poison hemlock (*Conium maculatum*). Dominant species along the southern edge of the property included slough sedge (*Carex obnupta*), soft rush (*Juncus effusus*), silverweed (*Potentilla anserina* var. *pacifica*), field mint (*Mentha arvensis*), arroyo willow (*Salix lasiolepis*), and California blackberry. Overall, the vegetation on the proposed Project Site has been significantly altered and reflects a long history of regular disturbance and agricultural cultivation.

### 5. Protected Species

No rare plants of conservation concern have been observed on the project site (WSP 2008b). Four rare plant species have been documented by the California Natural Diversity Database (CNDDDB) within two miles of the Project Site but they are unlikely to occur on the Project Site due to lack of suitable habitat.

No rare, threatened or endangered animal species have been observed on the Project Site (WSP 2008b). The WSP field team observed 29 wildlife species on the property during a Spring 2008 field survey. One species on the watch list of the California Department of Fish and Game, the sharp-shinned hawk, was observed flying above the property during a late winter 2008 biological survey. Two special status animal species, *Rana aurora draytonii* (California red legged frog) and *Geothlypis trichas sinuosa* (saltmarsh common yellowthroat), have been recorded in the past on adjacent property (CNDDDB 2008). The California red legged frog, including one adult and one sub-adult, were observed in a wetland near the Project Site near West Point Road on May 7, 1999 (CNDDDB 2008). Saltmarsh common yellowthroat has been observed near the site in the past; specifically, observations of individuals or breeding pairs were recorded in 1985, 1988, 1989, and 1990, but this species has not been officially documented near the site since then (CNDDDB 2008). During a 2008 field effort, the WSP field team observed one common yellowthroat perched in willows in the wetlands adjacent to and to the southwest of the Project Site. These protected species are not expected to occur on the Project Site currently as no suitable breeding or foraging habitat is exists.

### 6. Extent of Jurisdictional Waters/Wetlands and Their Buffers

Approximately 0.45 acres of wetlands of “other waters” (Type 3 waters of the U.S.), 0.74 acres (32,180 ft<sup>2</sup>) of California Coastal Commission waters/wetlands, and 4.26 acres of buffer were delineated at the Big Wave Project Site (WSP 2008a, **Figure 3**). The great majority of these waters/wetlands are found along the southern margin of the property. The proposed development will avoid all direct impacts to waters/wetlands and the 100 foot buffer set back.

## **II. OBJECTIVES**

WSP Environment & Energy (WSP) was retained by Big Wave Group to assist in the restoration of the native coastal ecosystems at the Project Site. The purpose of the restoration effort is to increase the functioning of the native coastal ecosystems at the Project Site. Specifically, WSP was asked to

1. prepare a restoration plan for riparian waters/wetland ecosystem within the buffer area of the Project Site
2. design a natural landscaping plan of native species for the residential and commercial areas, and
3. assist in the design of natural storm water management/rain garden system using native plant species genetically adapted to the central coast of California.

Sections III, IV and V of this report describe designs developed the buffer restoration, native landscaping, and natural storm water management, respectively.



### **III. DRAFT (100%) RIVERINE WETLAND ECOSYSTEM DESIGN**

#### ***A. Guiding Principles***

We used the following set of principles to guide design of the riverine/riparian waters/wetland ecosystem restoration as follows:

1. Give due diligence to federal, state and local regulatory requirements
2. Target no net loss of waters/wetlands area and/or ecosystem functioning
3. Base the restoration design on attainable regional reference conditions
4. Aim to restore the native hydrological, biogeochemical, plant community, and faunal support/habitat functioning
5. Target restoration of riverine ecosystem functions (*e.g.*, through maintaining hydrological connectivity within the landscape and restoring microtopography), and
6. Integrate the form and function of the natural and the constructed landscapes.

#### ***B. U.S. Army Corps and EPA 2008 Guidance on Wetlands Compensatory Mitigation***

In April 2008, the U.S. Army Corps of Engineers along with the U.S. Environmental Protection Agency issued new standards to improve wetland restoration and protection policies (Federal Register 2008). The new “wetlands compensatory mitigation standards” were offered to promote the use of best available science, promote innovative approaches to the “no net loss of area and/or function” national policy, and to focus on the results of restoration and protection.

Relevant to the Big Wave Wellness Center and Office Park Project, these new Corps/EPA mitigation standards reaffirm the mitigation sequence of avoid, minimize, and mitigate (compensate). The Big Wave Project is avoiding all impacts to existing waters/wetlands (including both waters of the U.S. and Coastal Commission wetlands) and therefore is in line with the new guidance on mitigation sequencing. As described in this basis of design, the proposed restoration of riparian areas adjacent to waters/wetlands will likely result in expansion of at minimum 5.43 acres of state wetlands.

#### ***C. General Description and Design Rationale***

The riparian waters/wetlands ecosystem buffer design includes 8 plant community types that support approximately 60 native California taxa (**Figure 4, Figure 5, Figure 6**). The community types are based upon the U.S. Fish & Wildlife Service’s hierarchical classification system (Cowardin et al. 1979) of five wetland systems – marine, estuarine, riverine, lacustrine, and palustrine. Only wetlands within the palustrine system are appropriate to the Project Site. As such, two palustrine forest communities, two palustrine sub-scrub communities, two palustrine (persistent) emergent communities are proposed. Additionally, two upland communities, one supporting supports native grassland/wildflower species is proposed in areas adjacent to lands to remain in organic farming, as well as an upland willow stand which will serve as a natural viewpoint barrier. The wildflower areas will serve to attract beneficial and desirable insects to the organic gardens.

A total of 33 polygons at the Wellness Center and Office Park (inclusive) will be restored, representing a total of 5.43 acres of riparian and waters/wetlands within the buffer and across the built landscape. Specifically, a total of 2.28 acres of palustrine forest, 1.25 acres of palustrine scrub shrub, 1.90 acres of palustrine emergent wetlands will be restored, in addition to 0.79 acres of upland native grassland/wildflower fields and 0.22 acres of upland willow stands.

In the design process of the riparian buffer along the adjacent waters/wetlands of Wellness Center and Office Park, we focused on achieving the highest level of ecosystem functioning possible. Design elements relative to ecosystem function were developed based on site history and landscape context and will be monitored over a minimum of ten years post restoration. Importantly, an increased level of function has to be achieved while also achieving a natural, unbroken, visually attractive transition between the restored ecosystem and the residential/commercial landscape. To achieve this target, we relied upon

1. A reference database and draft hydrogeomorphic guidebook for 3<sup>rd</sup> and 4<sup>th</sup> order riverine waters/wetlands of the central California coast (NWSTC 1996) developed to assist in the design, permitting and monitoring of riverine restorations within this reference domain (biogeographic province)
2. Relevant literature, reports, flora documentation, and
3. Cumulative 60+ years of professional experience working in wetland ecosystems along the central coast of California.

This 100% restoration design is based upon a suite of activities that would increase waters/wetlands ecosystem functions and develop a native, diverse, and aesthetically pleasing landscape. Elements of the restoration design are focused around five phases of work

1. Earthwork, including mass and fine grading,
2. Placement of large wood,
3. Native species plantings,
4. Weed management, and
5. Monitoring and adaptive management.

Our rationale for implementation of each technique is described in the following text.

### 1. Earthwork

Natural transitions within the landscape will need to be restored as a result of historic land uses and the integration of wild and urban environments. Mass grading can restore landscape hydrologic connectivity creating smooth transitions within and between wetland and upland habitat. In addition, mass grading is extremely effective at removing weeds through eliminating standing biomass and elimination of a viable seed bank in the upper soil horizon(s). Earthwork also decreases competition from well-established weeds and, with standard grading techniques such as ripping and/or disking, helps loft soil, blend top and sub-soil horizons, and prepare a successful planting environment.

Fine grading involves the use of directed time to grade microtopographic features within the riverine and riparian environments. Finish grading may also involve the placement of large wood structures, and will thus provide an essential element of an ecosystem (detritus). These wood structures will mimic dead and decomposing features of a woody riparian ecosystem, including snags (standing dead), decadent/decaying logs, and log jam features of floodplains and fluvial systems, as described in the following paragraph.

### 2. Installation of large wood and log structures

Prior to grazing, clearing, industrial uses, and intense water management in California, large wood was a part of natural ecosystems. Log structures can be placed above and/or below ground. Large wood provide numerous ecosystem functions, for example log structures create roughness (*i.e.*, increase Manning's  $n$ ) which slows water flow and spreads it out to promote maximum contact of water with the floodplain surface. Log structures can be strategically placed in order to deflect flood waters away from civil structures including roadways, bridges, *etc.* Large wood creates hydraulic complexity within a reach through dissipation, focusing, and/or adding complexity to the riverine ecosystem and thereby provide habitat for aquatic invertebrates and vertebrates, including fish. Placement of large wood and log structures creates microtopographic variation with abrupt gradients in site water balance which allows for increased plant diversity and variety of habitat microsites.

### 3. Planting and Irrigation

Planting will be conducted to maintain fidelity to native plant community structure, function, and composition for the Project Site. A native plant nursery may be established on site for the project to provide nursery stock, to hold for planting, and to generate replacement stock should replacement planting become necessary after the project is completed. Collection of seed will be conducted as close to the Project Site as possible to ensure reestablishment of a suite of locally adapted native plants. Restoring native plants also will increase the detrital pool (in this case, primarily quickly decomposing carbon sources) that has been removed due to intensive farming. Native plant community restoration improves hydrologic and biogeochemical functioning on the site and provides habitat for native fauna by offering hiding, resting, escape, breeding, and foraging habitats. Establishment of native plants will lead to relative exclusion of non-native and invasive weeds and will provide vertical and horizontal structure within the landscape.

The irrigated portion of the project comprises approximately 1.0 acres of planted upland forested vegetation along Airport Street and the parking lot common space areas and along the property line with the Pillar Ridge Community. The forested vegetation along Airport Street will include approximately 20,000 square feet of Redwood Groves with fern understory, approximately 20,000 square feet of mixed Madrone, Red Alder and Big Leaf Maple and Arroyo Willow and approximately 5,000 square feet of mixed Madrone, Red Alder and Big Leaf Maple in the parking lot and common areas. Approximately 2 acres will be developed for organic no-till farming. The restored wetlands portion of the project abuts the Pillar Point Marsh. Approximately 5 acres of wetlands are restored bringing the total irrigated land to 9 acres, seven acres in native plants and 2 acres in organic gardening.

The Pillar point marsh formed with what appears to have been an abundance of fresh surface water. The more clayey DcA (Denison Creek Clay Loam) soils pass through the site near the drainage ditch and appear to follow the old Denison Creek channel (2006 Soil Survey SSURGO database and 2009 Big Wave DEIR). Dennison Creek was most likely diverted to its current discharge location prior to the preparation of the 1861 Map of Pillar Point provided in “An Analysis of the Geographic Extent of Waters of the United States, Including Wetlands on the Big Wave Property, San Mateo County, California” (WSP 2008). This diversion reduced the original watershed supporting the marsh from about 5 squares miles to one square mile (2009 DEIR for Big Wave Project, page IV.H-8). The fresh water supply to the marsh was further reduced by artificial fill for the Airport Property in 1940, filling for the Princeton Development in the 1920’s to 1940’s, the filling for the Pillar Point housing project in the 1960, drainage systems in the airport and along Airport Street and the elimination of the GSD wastewater discharge into the marsh in 1982. As a result, the majority of the fresh water supply to the Pillar Point marsh is from surfacing groundwater (Fitzgerald Marine Reserve Master Plan 2002, page 134).

The Airport Subbasin Water Balance illustrated in Table 6 (San Mateo County Midcoast Ground Water Study Phase II, 2007, page 49) shows an average groundwater inflow of approximately 900 acre-feet. Of this volume, approximately 400 acre feet is pumped by and diverted by wells from CCWD and MSWD and exported from the watershed into the SAM sewer system and discharged into the ocean.

To protect the functional health of the marsh, a key project goal is to maximize infiltration into the shallow groundwater table and to minimize the export of fresh water from the groundwater subbasin into the SAM sewer system. To maximize groundwater infiltration, the Project Description proposes that all rainwater up to a 10 year storm will be treated and infiltrated. To minimize groundwater pumping and the exporting of fresh water from the subbasin, the project description proposes all wastewater will be recycled and treated to Title 22 for unrestricted reuse (tertiary treatment with nutrient removal, <2 MPM total coliform, <1 mg/l NO<sub>3</sub>, <5 mg/l SS). The project description proposes that recycled water will be used for toilet flushing and solar system washdown (to reduce potable water demand) and all remaining recycled water (up to 10,000 gallons per day) will be available for irrigation.

To maximize the potential for maintaining fresh the fresh water to the marsh, the available recycled water will be applied all year through a subsurface irrigation system. The average application rate is so low (calculated at approximately 0.04 inches per day over the 9 acres under irrigation), that the impacts of irrigating even during wet weather conditions will be less than significant in terms of saturation and runoff or water quality. Irrigation during the winter will insure that the soil will maintain moisture even during dry periods. The peak irrigation flow rate will be 7 gallons per minute. Seven gallons per minute will provide adequate flow for a 0.5 acre drip irrigation system. Approximately 18 separate irrigation circuits will be utilized. Irrigation timing will be such that each circuit is irrigated at least once a week for six hours. The maturity of the plants under irrigation and operational experience will be key to the actual rate adjustment. To insure optimal irrigation rates, each circuit will be programmed seasonally for the application. As the wetlands mature, the irrigation eventually will be reduced in this area. As the landscaping matures, the irrigation will increase in this area. As additional organic farming increases, the farming irrigation will increase in this area. The initial irrigation rates are illustrated in the following Table (**Table 1**).

**Table 1. Irrigation Requirements for the Big Wave Project**

Description	Area (ft <sup>2</sup> )	Dry Season Application Rate (inches/week)	Wet Season Application Rate (inches/week)	Dry Season Volume (gallons/day)	Wet Season Volume (gallons/day)
Organic Farming:					
Trees and Vines	40,000	0.5	0.5	2000	2000
Vegetables	40,000	0.5		2000	
Winter Vertical Gardens	20,000		1		2000
Landscaping:					
Redwood Groves	20,000	0.5	0.5	500	500
Upland Trees	20,000	0.5	0.5	500	500
Parking Lot Trees	5,000	0.5	0.5	100	500
Wetlands Restoration:					
Forested	140,000	0.25	0.25	3000	3000
Scrub	50,000	0.25	0.25	1200	1200
Rush/Sedge	50,000	0.25		1200	
Total:				10,500	9700

#### 4. Weed Management Strategy

Several aggressive, non-native plant species are present at or near the Project Site, including, Himalayan blackberry [*Rubus discolor*] and German ivy [*Delairea odorata*]). Invasive weed species not only degrade the plant community functions, but also threaten the success of a restoration project. Therefore, an integrated weed/pest management strategy should be developed and implemented in tandem with the restoration project. The weed management strategy begins with control of existing weeds adjacent to the restoration area through hand pulling, approved localized chemical application, and/or mowing. Installing native plants species with rapid growth rates and/or at high densities will help to quickly develop a canopy which excludes weed recruitment. Continued maintenance including hand weeding and replanting of plants which suffer mortality should be conducted following restoration.

#### 5. Maintenance, Monitoring and Adaptive Management

To ensure that restoration is a success and that appropriate adaptive management/contingency measures are used, the Project Site will be monitored following restoration for a minimum of 5 years. Project targets and standards articulated in the Project monitoring plan will be established at the beginning of the restoration project and based on the assessment of the path that will achieve stated goals. The monitoring design will include methods to quantify and document each project target and standard and will identify criteria for success. Monitoring protocols will include a combination of photo points, topographic surveys, soil profiles, invertebrate surveys, and/or assessment of vegetation cover and composition. In case project standards and/or success criteria are not met, an adaptive management strategy with contingency measures will be included as part of the monitoring plan. In the event of failure to achieve a project standard,

recommended contingency measure(s) will be outlined (e.g., weeding, grading, planting) and implemented as soon as possible.

#### ***D. Construction Sequencing***

Project construction will be phased; construction of the Wellness Center and restoration of the adjacent waters/wetlands and uplands will occur as Phase 1 and 2 respectively. Following completion of the first two phases, buildings and infrastructure associated with the Office Park will be built contingent upon demand for office space. The additional phases of the Office Park will be built as businesses negotiate space and lease contracts. The adjacent waters/wetlands and uplands to the Office Park will be built following Phase 3- development of the initial Office Park buildings and infrastructure. Phase 4 construction of waters/wetlands and uplands is anticipated to integrate the live/work component of the Wellness Center key goal of encouraging community involvement by residents.

The various tasks associated with the Project Site restoration plan are described in general terms in the following text, which will be used to guide the development of construction plans and specifications.

##### 1. Earthwork (mass and finish grading)

- a) Grade to create a smooth transition to the surrounding landscape
- b) Grade surrounding landscape to increase rugosity in the surrounding landscape. Rugosity is a measure of small-scale variations and complexity or surface roughness.
- b) Using directed time, construct and link microtopographic depressions with adjacent wetland features

##### 2. Log Structures

Large wood on and within the active channel and on the adjacent floodplain and associated stream terraces is an integral structure variable of fluvial systems and an equally important link for plant and animal support ecosystem functions. As such, large wood structures will be constructed across the wetland/riparian buffer.

- a) Using directed time, install large wood structures as articulated in the planting plan and other construction documents. These structures shall consist of single logs or piles of logs on and beneath final grade (**Figure 7**).

##### 3. Planting

- a) Through mass grading remove all existing weeds and where possible, seed source in the upper 6 inches of soil
- b) Lay out (i.e. stake) planting plan as designed (**Figure 4**)
- c) Install native nursery stock according to planting plan using a suite of plant community types suited to microsite conditions and with fidelity to reference system conditions (**Figure 5**).

- d) Mulch entire planted and seeded areas with a minimum of 4" lift of sterile (weed-free) straw
- e) Following grading activities, install a temporary irrigation system to provide irrigation water to all planted areas across the wetland and riparian buffer, redwood groves, upland areas, and upland forest areas. A temporary irrigation plan will be designed prior to project implementation.

#### 6. Weed Control

After initial establishment of restored riparian/wetland and upland ecosystem areas and functioning, management of weeds/invasive species will become a high priority. Implementation of weed management must address several key factors including: 1) re-emergence of weeds from onsite seed banks, 2) establishment of existing populations of weeds that were not removed in the initial clearing effort, and 3) colonization of restored areas from offsite exotic seeds sources. Weed control efforts should be adapted with an integrated program which includes mowing, hand weeding, if necessary chemical control, and replanting as needed. Weed control will be required as part of the monitoring, maintenance, and adaptive management activities.

#### 7. Monitoring Maintenance and Adaptive Management

- a) Assume a ten year monitoring interval with monitoring reports completed at year 0 (baseline), 1, 2, 5, and 10
- b) Conduct two site visits per survey year, wet and dry season. During each visit, characterize the site through the collection of site data referencing project standards including hydrologic, biogeochemical, plant community and faunal support/habitat functions
- c) Prepare monitoring report by the end of each surveying year. Based on observations, recommend any necessary maintenance and or adaptive management measures
- d) Implement maintenance and adaptive management measures, including weeding, as necessary

#### ***E. Sediment and Erosion Control***

Restoration construction should be initiated and completed during the dry season (May to November). All construction activities must adhere to the project-specific Storm Water Pollution and Prevention Plan (SWPPP) and associated Temporary Erosion and Sediment Control (TESC) plan, both of which must be prepared and submitted by the Big Wave Group LLC or its consultants to the regulatory community prior to project implementation.

The first step will be to install sediment and erosion control measures according to the SWPPP and TESC. Upon completion of earthwork and log structure installation (*e.g.*, creating microdepressions, installing log jam, *etc.*), temporary irrigation must be installed to ensure successful post-construction planting. In addition, Big Wave Group or its consultants may be required to prepare and submit a monitoring plan to regulatory agencies, as part of the monitoring agreement with regulatory agencies (*i.e.* Coastal Commission).

## ***F. Proposed Design for Riverine Waters/Wetlands Ecosystem***

Specific project standards and associated success criteria (*i.e.*, field indicators/measurements) have been developed for riparian ecosystem restoration project. The proposed restoration design places emphasis on the following four project targets:

### ***Project Target 1: Increase waters/wetlands habitat patch size for native waters/wetlands animal species typical of the central California coast***

#### Project Standard: Success Criteria

1. Increase Patch Size: Dominant coverage by native communities within 100 foot buffer, aim for one hundred percent coverage

### ***Project Target 2: Establish and maintain diverse native plant communities, with nursery stock genetically adapted to the restored riparian and waters/wetlands ecosystem restoration project site***

#### Project Standard: Success Criteria

1. Percent cover of native tree species in riparian forest communities: Greater than or equal to 90%
2. Percent cover of native shrub species in forest and scrub-shrub communities: Greater than or equal to 40% and less than or equal to 75%
3. Percent cover of native forbs, graminoids, ferns, and fern allies in palustrine persistent and non-persistent emergent community types: Greater than or equal to 90%.
4. Percent cover of native forbs, graminoids, ferns, and fern allies in forest and scrub shrub communities: Greater than or equal to 20% and less than or equal to 75%.
5. Percent of native species cover in each stratum: greater than or equal to 85%
6. Vigor of planted stock: Greater than or equal to 80% survival.

### ***Project Target 3: Increase microtopographic complexity (i.e., microdepressions, large wood structures) within the restored riparian and waters/wetlands ecosystem restoration project site***

#### Project Standard: Success Criteria

1. Structural features: Large wood remain structurally stable
2. Microtopographic roughness: Constructed microtopographic features remain intact

### ***Project Target 4: Increase the faunal support/habitat function for native species within the restored riparian and waters/wetlands ecosystem restoration project site***

#### Project Standard: Success Criteria



1. *Vegetative strata*: forest communities- three or more strata (*i.e.* trees, shrubs, herbs, with sampling/seedling and/or vines as additional stratum) scrub-shrub communities- greater than 2 strata
2. *Faunal diversity*: restoration site continues to attract a diversity of native wildlife
3. *Canopy cover*: greater than 80% cover by 2 or 3 strata in forest and scrub-shrub communities.

### ***G. Expected Changes in Ecosystem Functions Following Restoration***

The proposed riverine/riparian ecosystem restoration plan is expected to result in the increase in ecosystem functioning as considered by four types of wetland functions: (1) hydrologic, (2) biogeochemical, (3) plant community, and (4) faunal support/habitat functions. Comparisons between current (existing) conditions on the site and wetland conditions expected five years after restoration were assessed using best professional judgment. It should be noted that the riparian restoration will result in the increase of 5.43 wetland acreage under jurisdiction of the California Coastal Commission, but is not expected to add any increase in federal jurisdiction.

Factors affecting the ability of the wetlands at the Project Site to perform ecosystem functions include, but are not limited to the following:

- 1) Degradation from historical land use,
- 2) Intensity of cropping practices,
- 3) Historic modifications to hydrologic features of the site,
- 4) Non-native species, and
- 5) Urbanization in surrounding landscape.

### **1. Hydrologic Functions**

Energy Dissipation. Energy dissipation is defined as: *The transformation and/or reduction of the kinetic energy of water as a function of the roughness of the landscape and channel morphology, and vegetation.*

Existing conditions at the Project Site do not allow for significant energy dissipation because the site is cleared and farmed. However, installation of large wood, establishment of complex microtopography, and a diverse plant community including trees will promote an increase in this function.

Surface & Subsurface Storage of Water. Surface & Subsurface Storage of Water is defined as: *The presence of soil and/or geologic materials within the creek ecosystem, including the hyporheic zone, that have physical characteristics suitable for detention, retention, and transmission of water.*

The Project Site is currently leveled and degraded by agricultural activities. However, this function is recoverable with the proposed restoration through establishment of microtopographic depressions, installation of large wood above and below ground, and development of a plant community with complex vertical structure.

Landscape Hydrologic Connections. Landscape Hydrologic Connections is defined as: *The maintenance of the natural hydraulic connectivity among source areas of surface and subsurface flow to riverine waters/wetlands and other downgradient waters/wetlands.*

This hydrologic function at the Project Site is degraded due to ditching associated with road construction and the agricultural activities on the property. The down gradient connection is culverted under and interrupted by West Point Road. This function is only modestly recoverable with the proposed wetland and riparian ecosystem restoration.

## **2. Biogeochemical Functions**

Cycling of Elements & Compounds. Cycling of Elements & Compounds is defined as: *The short- and long-term transformation of elements and compounds through abiotic and biotic processes that convert chemical species (e.g., nutrients and metals) from one form, or valence, to another.*

The Project Site is not functioning at a high level in its existing conditions because the original slope wetlands and associated hyporheic zone have been filled, drained, and degraded by agricultural activities. However, this function is recoverable with the proposed restoration due to increased microtopographic variation, installation of large wood, and establishment of a diverse plant community.

Removal of Imported Elements & Compounds. Removal of Imported Elements & Compounds is defined as: *The removal of imported nutrients, contaminants, and other elements and compounds in surface and groundwater.*

The Project Site currently is functioning at a low level because the original riparian zone has been leveled and degraded as a result of agriculture and road building activities. This function is recoverable with the proposed restoration.

Retention and Detention of Particulates. Retention and Detention of Particulates is defined as: *The deposition and retention of inorganic and organic particulates ( $>0.45\mu\text{m}$ ) from the water column, primarily through physical processes.*

The Project Site currently is functioning at a low level because the original riparian zone has been leveled, degraded, and invaded by a large number of non-native species as a result of agriculture and road building activities. This function is recoverable with the proposed restoration.

Organic Matter Export. Organic Matter Export is defined as: *The export of dissolved and particulate organic carbon from a wetland.*

The Project Site currently is functioning at a low level because the original riparian zone has been leveled and degraded as a result of agriculture and road building activities. This function is recoverable with the proposed restoration.

### 3. Plant Functions

Characteristic Plant Communities. Characteristic Plant Communities is defined as: *The physical characteristics and ecological processes that maintain the indigenous living plant biomass.*

The Project Site currently is functioning at a low level because the original riparian zone has been leveled, degraded and invaded by a large number of non-native species as a result of agriculture and road building activities. This function is recoverable with the proposed restoration. The Project Site may be expected to achieve a reference condition after a longer period of time that exceeds the expected ten-year monitoring program.

Characteristic Detrital Biomass. Characteristic Detrital Biomass is defined as: *The process of production, accumulation, and dispersal of dead plant biomass of all sizes.*

The Project Site currently is functioning at a low level because the original riparian zone has been leveled, degraded, and invaded by a large number of non-native species as a result of agriculture and road building activities. This function is recoverable with the proposed restoration and will likely achieve reference standard functioning after ten years or more, *i.e.*, within or after the duration of the ten-year monitoring program

### 4. Faunal Support Habitat Functions

Spatial Structure of Habitat. Spatial Structure of Habitat is defined as: *The capacity of waters/ wetlands to support animal populations and guilds through the heterogeneity of structure of vegetative communities.*

The Project Site currently is functioning at a low level because the original riparian zone has been leveled, degraded, and invaded by a large number of non-native species as a result of agriculture and road building activities. This function is recoverable with the proposed restoration and will likely achieve reference standard functioning after ten years or more, *i.e.*, within or after the duration of the ten-year monitoring program.

Habitat Interspersion & Connectivity. Habitat Interspersion & Connectivity is defined as: *The capacity of waters/wetlands to permit aquatic, semi-aquatic, and terrestrial organisms to enter and leave a riverine ecosystem via large, contiguous plant communities to meet life history requirements.*

The Project Site currently is functioning at a low level because the original characteristic physical complexity of an associated riparian community is not present nor is it juxtaposed in a mosaic of coastal scrub, sage scrub, perennial grasslands, vernal swales and depressions characteristic of the central Coast Ranges. This function is recoverable with the proposed restoration, and possible reference standard functioning after ten years or more, largely through the restoration of the riverine vegetative structure and adjacent plant communities.

Distribution & Abundance of Vertebrates. Distribution & Abundance of Vertebrates is defined as: *The capacity of waters/wetlands to maintain characteristic density and spatial distribution of vertebrates (aquatic, semi-aquatic and terrestrial).*

The Project Site currently is functioning at a low level because the original characteristic physical complexity of an associated riparian community is not present nor is it juxtaposed in a mosaic of coastal scrub, sage scrub, perennial grasslands, vernal swales and depressions characteristic of the central Coast Ranges. This function is recoverable with the proposed restoration, and possible reference standard functioning after ten years or more, largely through the restoration of the riverine vegetative structure and adjacent plant communities.

Distribution & Abundance of Invertebrates. Distribution & Abundance of Invertebrates is defined as: *The capacity of waters/ wetlands to maintain the density and spatial distribution of invertebrates (aquatic, semi-aquatic and terrestrial).*

The Project Site currently is functioning at a low level because the original characteristic physical complexity of an associated riparian community is not present nor is it juxtaposed in a mosaic of coastal scrub, sage scrub, perennial grasslands, vernal swales and depressions characteristic of the central Coast Ranges. This function is recoverable with the proposed restoration, and possible reference standard functioning after ten years or more, largely through the restoration of the riverine vegetative structure and adjacent plant communities.

## **VII. BEST MANAGEMENT PRACTICES FOR STORMWATER TREATMENT**

San Mateo County (County) has established best management procedures for the treatment of storm water because federal and state laws require municipalities to reduce pollution to waters of the U.S. by storm waters. According to the San Mateo County's website (<http://www.flowstobay.org/p2business/bestmanagementpractices.html>), cities within the County are governed under the *San Mateo Countywide Water Pollution Prevent Program* as part of the City/County Associate of Governments of San Mateo County. As such, the County has published procedures, guidelines, etc. to reduce and prevent pollution to the adjacent waters. The storm water treatment system proposed for the Big Wave Project incorporates the County's overall approach and practices for storm water.

Design features for storm water pollution prevention by the Project include separate storm water retention and detention ponds for relatively dirty storm water (*e.g.*, water from parking lots) and relatively clean water (*e.g.*, roof water runoff). Separate water delivery systems for clean and dirty storm water will be constructed at each of the developments (*i.e.*, office park and wellness center). Comparatively dirty storm water will be filtered through a series of grit removal, oil/water separators, and then directed to retention/detention microdepressions (**Figure 8** and **Figure 9**) within the riparian restoration zone through a storm water swale prior to overland flow into the existing wetlands. Similarly, clean storm water will be directed to a separate series of retention/detention microdepressions via a similar storm water swale (**Figure 10**). A portion of the clean storm water will be directed to an infiltration basin (one at each development) to recharge ground water. In short, the bioswale/microdepression system will serve to improve water quality in the adjacent existing waters/wetlands ecosystems by treating storm water in a series of treatments as described above.

## **VIII. CONCLUSIONS**

As presented in this *100% Design Report*, the Big Wave Wellness Center and Office Park Project consists of the construction of a residential village and an adjacent commercial property/office park complex. The proposed wetland and riparian ecosystem restoration project also includes restoration of the waters of the U.S. including wetlands, California Coastal Commission wetlands that currently exist as agricultural land. Specifically, the Project will restore a complex mosaic within a 100 foot buffer adjacent to existing federal and state waters/wetlands to provide significant benefits to waters/wetlands ecosystem functions, particularly native plant and animal communities relative to existing conditions. A total of 6 plant community types, primarily native forest, scrub shrub, and perennial sedge/rush meadows, composed over approximately 60 native plant species arrayed in 33 planting polygons represent the riparian/wetland ecosystem restoration design. Of particular importance is the restoration of potential breeding habitat for California red-legged frog, and potential foraging habitat for the San Francisco garter snake, two native vertebrates not known to utilize the Project Site, but which may be able to establish viable populations as a result of the restoration effort.

If implemented as designed as designed, the riparian/wetland ecosystem will result in an increase in the hydrologic, biogeochemical, native plant community, and faunal support/habitat functions of the currently farmed wetlands. Equally importantly, the Project represents a state-of-the-art integration of the natural and built environments through the restoration of the immediate landscape immediately surrounding the Office Park and Wellness Center, and through the utilization of native species for landscaping, locally adapted plant stock, and propagules obtained from the Project Site and the adjacent landscape.

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## X. FIGURES

Figure 1. Regional Project Site Overview



(Map Reference: <http://cwp.resources.ca.gov>)



**Figure 2.** Big Wave Project Site Location

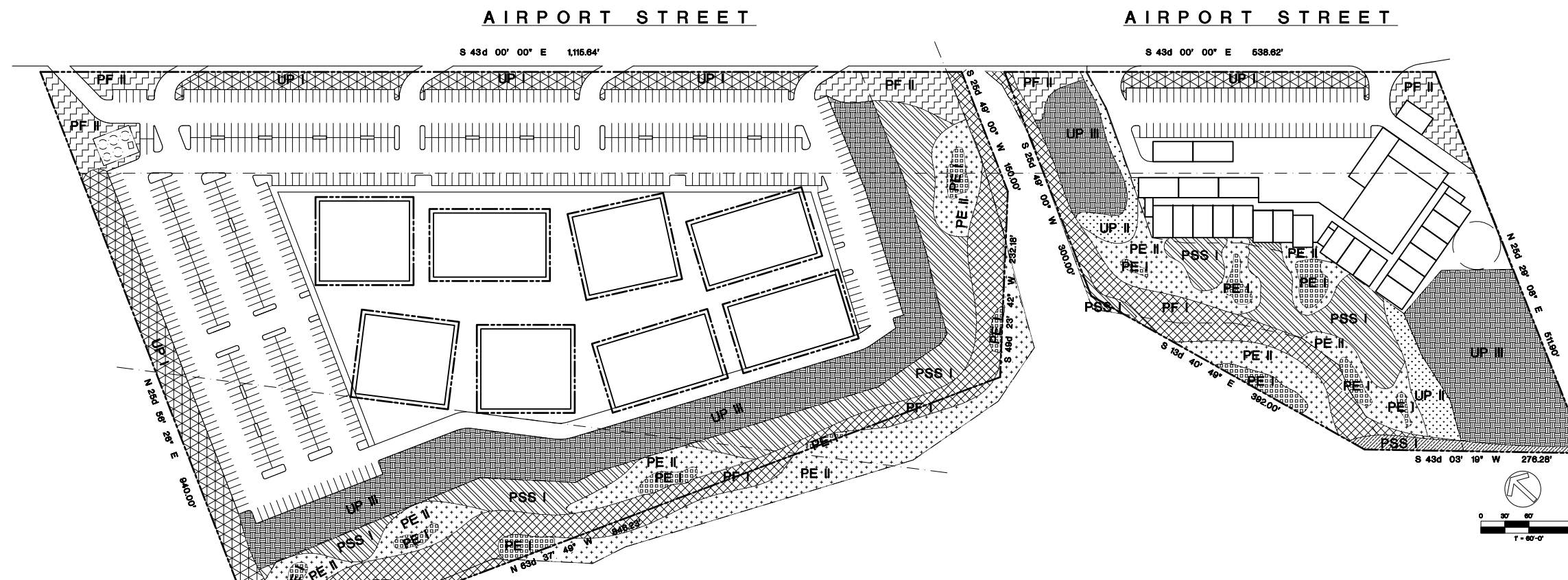


**Figure 3. Geographic Extent of Waters of the U.S. Including Wetlands**







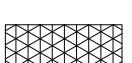


NOTE: SUPERCEDED BY FIG. 5 OF ADDENDUM

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LEGEND

-  PF I COASTAL RIPARIAN FOREST
-  PF II REDWOOD GROVE
-  PSS I MIXED WILLOW SHRUB SCRUB
-  PSS II WILLOW WATTLE
-  PE I SEDGE MEADOW
-  PE II RUSH MEADOW
-  UP I UPLAND FOREST
-  UP II WILDFLOWER GARDEN
-  UP III ORGANIC GARDEN

issue	date	description

PROPOSED DEVELOPMENT FOR  
**BIG WAVE**  
WELLNESS CENTER AND OFFICE PARK  
WEST SIDE OF AIRPORT STREET NORTH OF STANFORD AVENUE  
PRINCETON BY THE SEA, SAN MATEO COUNTY, CALIFORNIA

drawn by	checked by	job number

WELLNESS CNTR.  
OFFICE PARK

LANDSCAPE  
PLANTING  
PLAN

L101

GEORGE MEU ASSOCIATES  
ARCHITECTURE  
PLANNING

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NOTE: SUPERCEDED BY TABLE 4 OF ADDENDUM

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BIOLOGIST:  
ESA K. CRUMB  
and  
PEGGY FIEDLER, PH.D.

Upland I - Upland Forest (UPI)					
Species	Density (# per acre)	On Center Spacing (ft)	Area (sq ft)	Area (acres)	Unit Total
<b>Trees</b>					
<i>Acer macrophyllum</i>	70	25	34624	0.79	56
<i>Aesculus californica</i>	10	65	34624	0.79	8
<i>Alnus rubra</i>	70	25	34624	0.79	56
<b>Scrubs and Vines</b>					
<i>Rhamnus californica</i>	10	65	34624	0.79	8
<i>Ribes sanguineum</i> var. <i>glutinosum</i>	10	65 ft clumped	34624	0.79	8
<i>Rosa californica</i>	70	25	34624		
<i>Symphoricarpos mollis</i>	70	25	34624	0.79	56
<i>Bromus carinatus</i>	1210	16	34624	0.79	962
<i>Elymus glaucus</i>	109	20	34624		
<i>Iris douglasiana</i>	70	25 ft clumped	34624	0.79	56
<b>Ferns and Fern Allies</b>					
<i>Polystichum munitum</i>	48	30	34624	0.79	38

Palustrine Scrub-Shrub I - Mixed Willow Scrub-Shrub (PSSI)					
Species	Density (# per acre)	On Center Spacing (ft)	Area (sq ft)	Area (acres)	Total
<b>Shrubs and Vines</b>					
<i>Salix lasiolepis</i>	436	10 ft clumped	51134	1.17	512
<i>Salix stichensis</i>	436	10 ft clumped	51134	1.17	512
<i>Artemisia douglasiana</i>	194	15	51134	1.17	228
<i>Clematis lasiantha</i>	70	25	51134	1.17	82
<i>Lonicera involucrata</i> var. <i>ledebourii</i>	222	14	51134	1.17	261
<i>Marah fabaceus</i>	56	28	51134	1.17	66
<i>Ribes sanguineum</i> var. <i>glutinosum</i>	70	25	51134	1.17	82
<i>Sambucus racemosa</i> var. <i>racemosa</i>	48	30	51134	1.17	56
<b>Graminoids</b>					
<i>Iris douglasiana</i>	34	38 ft. clumped	51134	1.17	40
<i>Juncus patens</i>	48	30	51134	1.17	56
<i>Leymus triticoides</i>	9	70	51134	1.17	11
<b>Forbs</b>					
<i>Aster chilensis</i>	34	38 ft. clumped	51134	1.17	40
<i>Oenanthе sарmentosa</i>	48	30	51134	1.17	56
<i>Heracleum lanatum</i>	48	30	51134	1.17	56
<i>Scrophularia californica</i>	70	25	51134	1.17	82
<b>Ferns and Fern Allies</b>					
<i>Polystichum munitum</i>	48	30	51134	1.17	56

Palustrine Scrub-Shrub II - Willow Waddle (PSSII)					
Species	(# per acre)	Spacing (ft)	Area (sq ft)	Area (acres)	Total
<b>Trees &amp; Shrubs</b>					
<i>Salix lucida</i> ssp. <i>lasiandra</i>	681	8 ft clumped	3454	0.08	54
<b>Shrubs and Vines</b>					
<i>Salix lasiolepis</i>	681	8' oc	3454	0.08	54
<i>Marah fabaceus</i>	56	28	3454		
<i>Oenothera cerasiformis</i>	76	24' clumped	3454	0.08	6
<b>Graminoids</b>					
<i>Bromus carinatus</i>	10	65	3454	0.08	1
<b>Forbs</b>					
<i>Heracleum lanatum</i>	48	30	3454	0.08	4
<i>Scrophularia californica</i>	109	20	3454	0.08	9

Palustrine Forest I - Coastal Riparian Forest (PFI)					
Species	Density (# per acre)	On Center Spacing (ft)	Area (sq ft)	Area (acres)	Total
<b>Trees</b>					
<i>Alnus rubra</i>	436	10 ft clumped	72359	1.66	724
<i>Salix lucida</i> ssp. <i>lasiandra</i>	681	8 ft clumped	72359	1.66	1131
<b>Shrubs and Vines</b>					
<i>Cornus sericea</i> ssp. <i>sericea</i>	681	8	72359	1.66	1131
<i>Lonicera hispidula</i> var. <i>ledebourii</i>	10	65	72359	1.66	17
<i>Marah fabaceus</i>	5	90	72359	1.66	8
<i>Ribes sanguineum</i> var. <i>glutinosum</i>	9	70 ft clumped	72359	1.66	15
<i>Salix lasiolepis</i>	303	12 ft clumped	72359	1.66	503
<i>Salix stichensis</i>	303	12 ft clumped	72359	1.66	503
<i>Sambucus racemosa</i> var. <i>racemosa</i>	7	80	72359	1.66	12
<b>Graminoids</b>					
<i>Carex obnupta</i>	222	14	72359	1.66	369
<i>Juncus effusus</i>	194	15	72359	1.66	322
<i>Scirpus microcarpus</i>	436	10 ft clumped	72359	1.66	724
<b>Herbs</b>					
<i>Aralia californica</i>	10	65	72359	1.66	17
<i>Aster chilensis</i>	24	43 ft clumped	72359	1.66	40
<i>Euthamia occidentalis</i>	10	65	72359	1.66	17
<i>Oenanthе sарmentosa</i>	436	10	72359	1.66	724
<i>Scrophularia californica</i>	48	30	72359	1.66	80
<i>Stachys ajugoides</i> var. <i>ajugoides</i>	76	24	72359	1.66	126
<b>Forbs, Ferns, and Fern Allies</b>					
<i>Polystichum munitum</i>	10	65	72359	1.66	17

Palustrine Forest - Redwood Grove (PFI)					
Species	Density (# per acre)	On Center Spacing (ft)	Area (sq ft)	Area (acres)	Total
<b>Trees</b>					
<i>Sequoia sempervirens</i>	109	20	26825	0.62	67
<i>Alnus rubra</i>	70	25	26825	0.62	43
<b>Shrubs and Vines</b>					
<i>Lonicera involucrata</i> var. <i>ledebourii</i>	99	21	26825	0.62	61
<i>Rubus parviflorus</i>	10	65	26825	0.62	6
<i>Ribes sanguineum</i> var. <i>glutinosum</i>	10	65 ft clumped	26825	0.62	6
<i>Vaccinium ovatum</i>	99	21	26825	0.62	61
<i>Symphoricarpos mollis</i>	70	25	26825	0.62	43
<b>Graminoids</b>					
<i>Trillium ovatum</i>	681	8	26825	0.62	419
<i>Trillium chloropetalum</i>	303	12	26825	0.62	187
<i>Scallopia bigelovii</i>	303	12	26825	0.62	187
<i>Iris douglasiana</i>	109	20 ft clumped	26825	0.62	67
<b>Forbs</b>					
<i>Mainathemum dilatatum</i>	303	12' oc	26825	0.62	187
<i>Oxalis pilosa</i>	681	8	26825	0.62	419
<i>Tiarella trifoliata</i>	109	20	26825	0.62	67
<i>Claytonia parviflora</i>	303	12' oc	26825	0.62	187
<b>Ferns and Fern Allies</b>					
<i>Polypodium scolieri</i>	303	12' oc	26825	0.62	187
<i>Woodwardia fimbriata</i>	303	12 ft clumped	26825	0.62	187
<i>Polystichum munitum</i>	48	30	26825	0.62	30

Palustrine Emergent I - Sedge Meadow (PEI)					
Species	Density (# per acre)	On Center Spacing (ft)	Area (sq ft)	Area (acres)	Total
<b>Graminoids</b>					
<i>Carex obnupta</i>	1551	5.3	13588	0.31	484
<i>Juncus balticus</i>	681	8	13588	0.31	212
<i>Juncus effusus</i> var. <i>pacificus</i>	681	8	13588	0.31	212
<i>Scirpus microcarpus</i>	1210	6	13588	0.31	377
<b>Forbs</b>					
<i>Helenium puberulum</i>	170	16	13588	0.14	24
<i>Oenanthе sарmentosa</i>	109	20	13588	0.14	15
<i>Sparganium eurycarpum</i> ssp. <i>eurycarpum</i>	109	20	13588	0.14	15

Palustrine Emergent II - Rush Meadow (PEII) Polygons #3, 5, 8, 34, 42					
Species	Density (# per acre)	On Center Spacing (ft)	Area (sq ft)	Area (acres)	Total
<b>Graminoids</b>					
<i>Juncus balticus</i>	889	7	69172	1.59	1412
<i>Juncus effusus</i> var. <i>pacificus</i>	889	7	69172	1.59	1412
<i>Juncus patens</i>	1210	6	69172	1.59	1921
<i>Scirpus microcarpus</i>	889	7	69172	1.59	1412
<b>Forbs</b>					
<i>Helenium puberulum</i>	170	16	69172	1.59	270
<i>Oenanthе sарmentosa</i>	109	20	69172	1.59	173
<i>Potentilla anserina</i> var. <i>pacifica</i>	109	20	69172	1.59	173
<i>Mentha arvensis</i>	70	25	69172	1.59	111
<i>Stachys ajugoides</i> var. <i>ajugoides</i>	170	16	69172	1.59	270

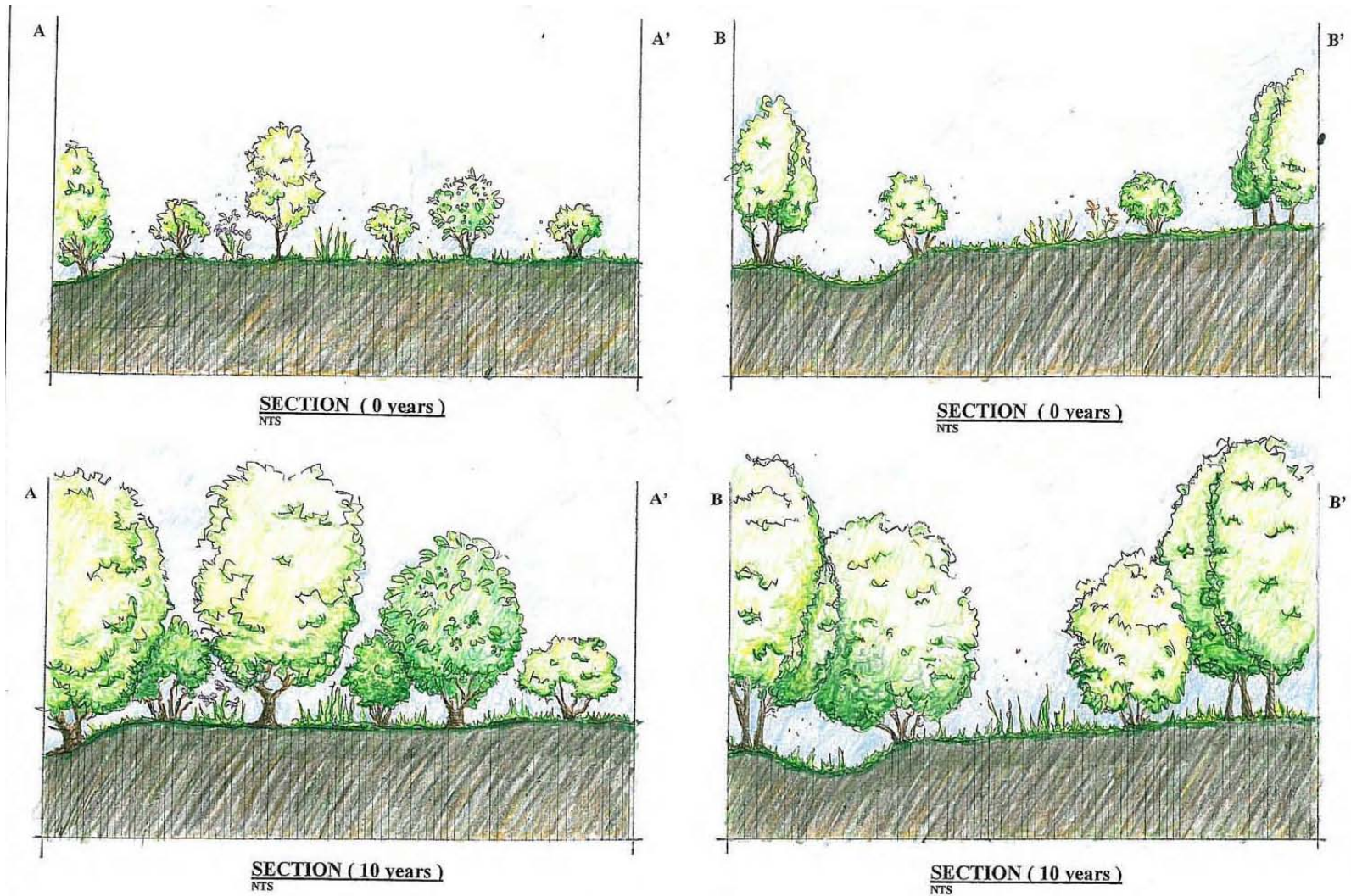
Coastal Prairie Upland II - Wildflower Garden (UPII)					
Species	Density (# per acre)	On Center Spacing (ft)	Area (sq ft)	Area (acres)	Total
<b>Seed Mix</b>					
<i>Bromus carinatus</i>	2723	4' oc	9761	0.22	610
<i>Danthonia danthoniodes</i>	2723	4' oc	9761	0.22	610
<i>Danthonia californica</i>	2723	4' oc	9761	0.22	610
<i>Eschscholzia californica</i>	2723	4' oc	9761	0.22	610
<i>Elymus glaucus</i>	1210	6' clumped	9761	0.22	271
<i>Nassella pulchra</i>	202	12' clumped	9761	0.22	45
<i>Vulpia macrostachys</i>	1210	6' oc	9761	0.22	271
<i>Lupinus succulentus</i>			9761		271
<b>Herbs/Forbs</b>					
<i>Helianthus annuus</i>	303	12' oc	9761	0.22	68
<i>Helenium bolanderi</i>	1210	6' clumped	9761	0.22	271
<i>Helenium puberulum</i>	661	8' oc	9761	0.22	148

PROPOSED DEVELOPMENT FOR  
**BIG WAVE**  
 WELLNESS CENTER AND OFFICE PARK  
 WEST SIDE OF AIRPORT STREET NORTH OF STANFORD AVENUE  
 PRINCETON BY THE SEA, SAN MATEO COUNTY, CALIFORNIA

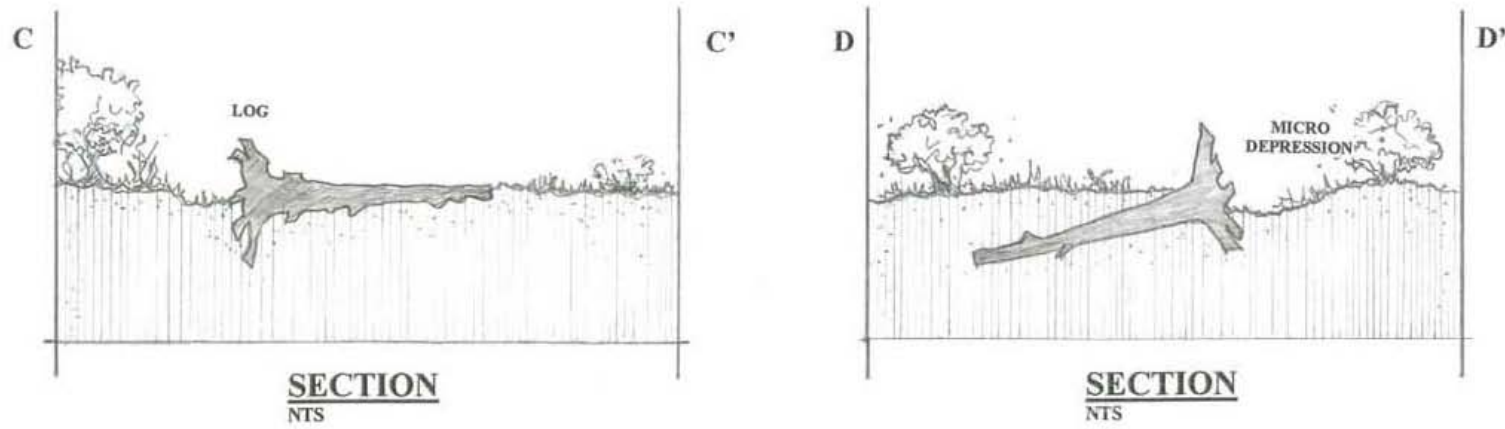
**LANDSCAPE PLANTING TABULATIONS**  
  
**L201**

GEORGE MEU ASSOCIATES  
 ARCHITECTURE PLANNING

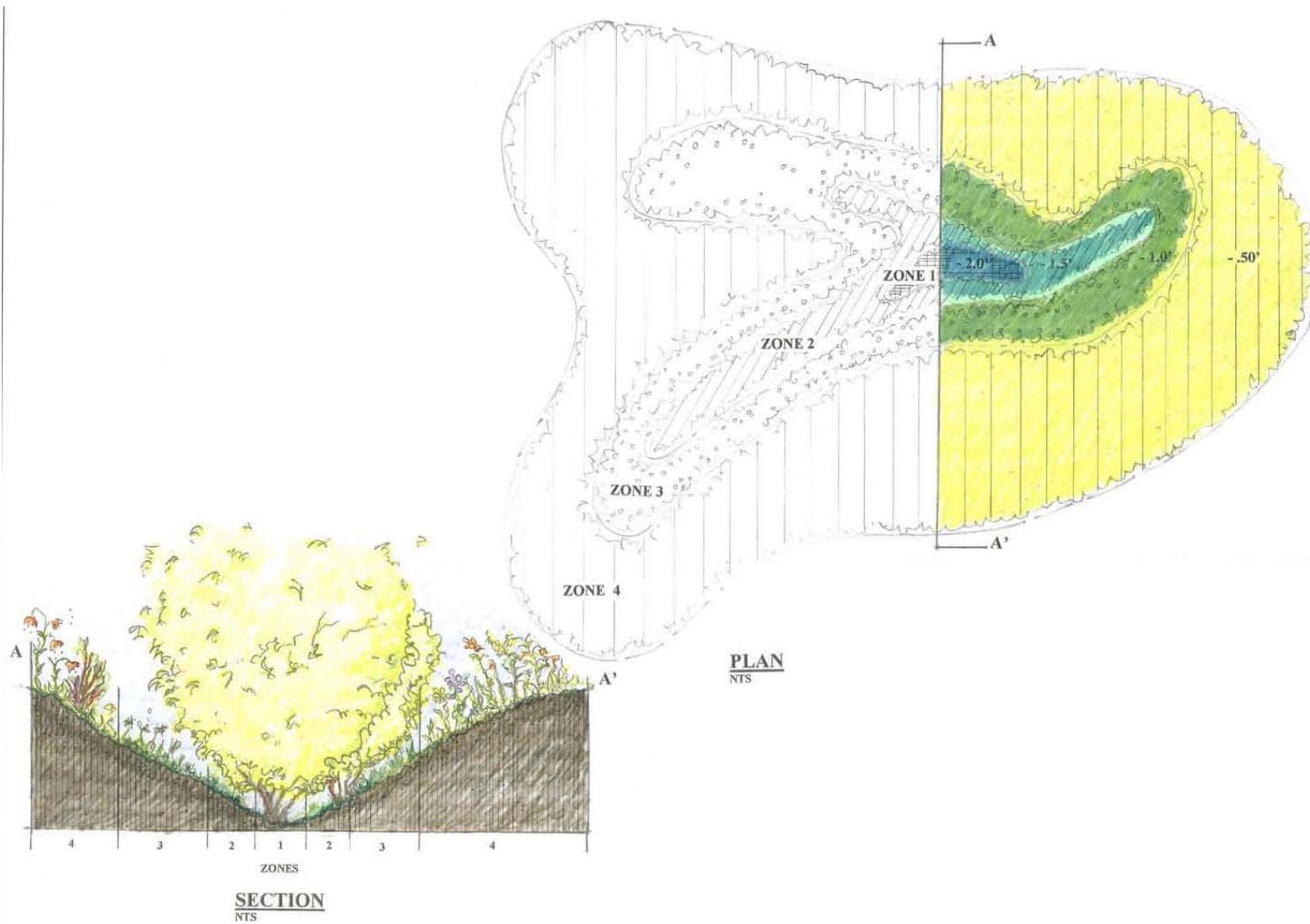
**Figure 6. Plant Community Development of Restoration Plantings**



**Figure 7. Large Wood Installation Diagram**



**Figure 8.** Large Storm Water Basin



**Figure 9. Small Storm Water Basin**

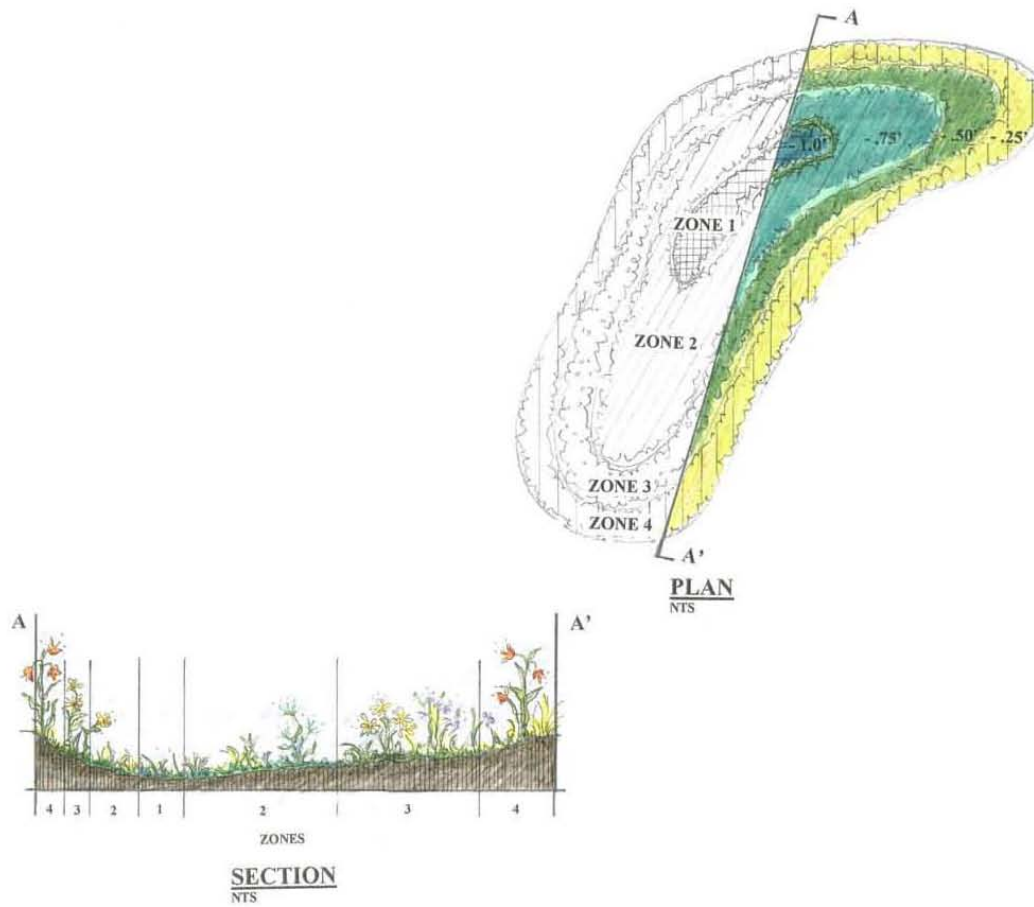
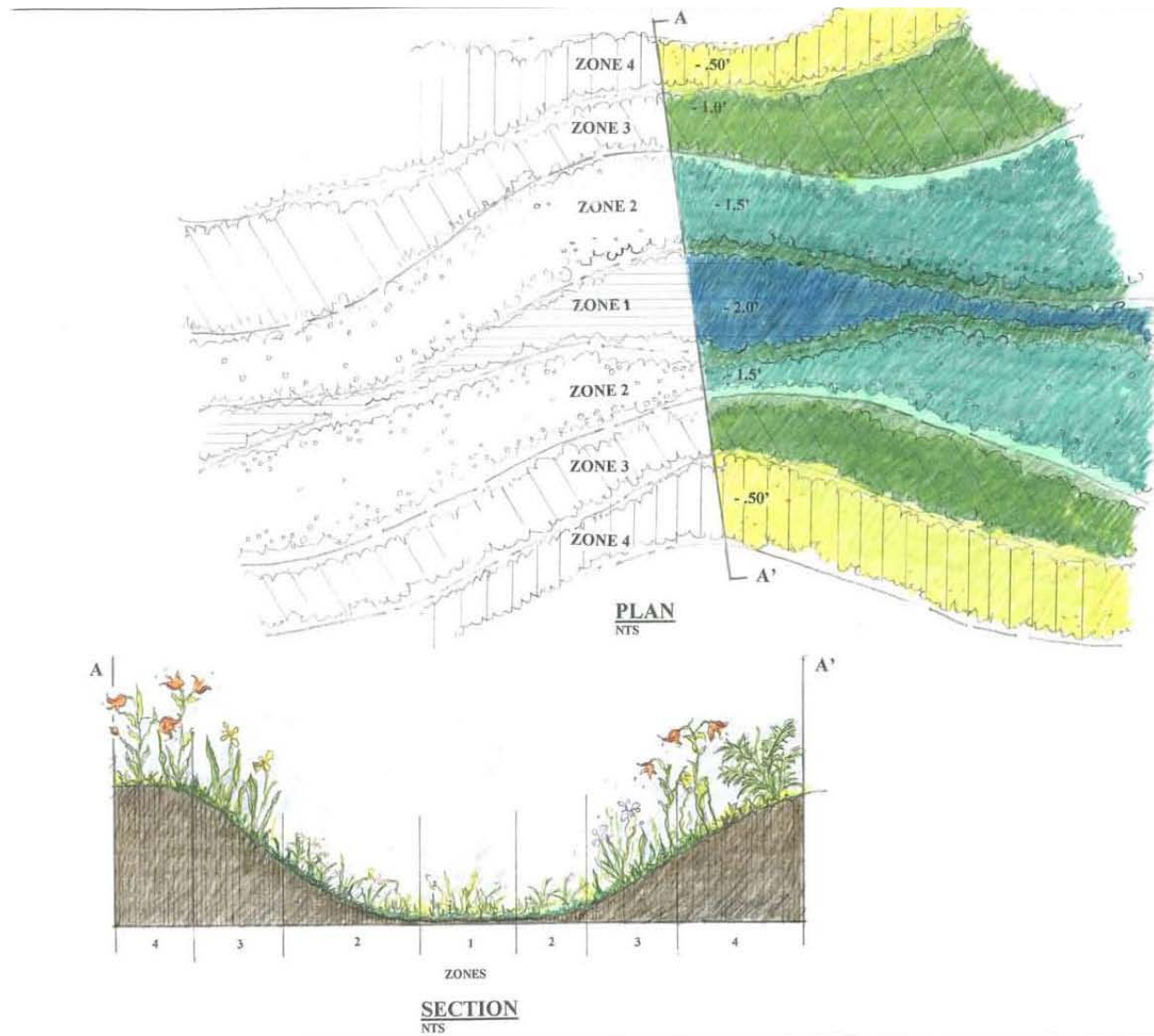




Figure 10. Stormwater Swale



**Addendum to  
the Big Wave Wellness Center and Office Park Project EIR  
North Parcel Alternative**

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**Attachment C**

**Landscaping Plan Planting Tabulations**

## BIG WAVE LANDSCAPE PLANTING TABULATIONS

### Upland I - Upland Forest (UPI)

Species	Density (# per acre)	On Center Spacing (ft)	Area (sq ft)	Area (acres)	Unit Total
<b>Trees</b>					
<i>Acer macrophyllum</i>	70	25	34624	0.79	56
<i>Aesculus californica</i>	10	65	34624	0.79	8
<i>Alnus rubra</i>	70	25	34624	0.79	56
<b>Scrubs and Vines</b>					
<i>Rhamnus californica</i>	10	65	34624	0.79	8
<i>Ribes sanguineum var. glutinosum</i>	10	65 ft clumped	34624	0.79	8
<i>Rosa californica</i>	70	25	34624		
<i>Symphoricarpos mollis</i>	70	25	34624	0.79	56
<i>Bromus carinatus</i>	1210	16	34624	0.79	962
<i>Elymus glaucus</i>	109	20	34624		
<i>Iris douglasiana</i>	70	25 ft clumped	34624	0.79	56
<b>Ferns and Fern Allies</b>					
<i>Polystichum munitum</i>	48	30	34624	0.79	38

### Palustrine Forest I - Coastal Riparian Forest (PFI)

Species	Density (# per acre)	On Center Spacing (ft)	Area (sq ft)	Area (acres)	Total
<b>Trees</b>					
<i>Alnus rubra</i>	436	10 ft clumped	72359	1.66	724
<i>Salix lucida ssp. lasiandra</i>	681	8 ft clumped	72359	1.66	1131
<b>Shrubs and Vines</b>					
<i>Cornus sericea ssp. sericea</i>	681	8	72359	1.66	1131
<i>Lonicera hispidula var. ledebourii</i>	10	65	72359	1.66	17
<i>Marah fabaceus</i>	5	90	72359	1.66	8
<i>Ribes sanguineum var. glutinosum</i>	9	70 ft clumped	72359	1.66	15
<i>Salix lasirolepis</i>	303	12 ft clumped	72359	1.66	503
<i>Salix sitchensis</i>	303	12 ft clumped	72359	1.66	503
<i>Sambucus racemosa var. racemosa</i>	7	80	72359	1.66	12
<b>Graminoids</b>					
<i>Carex obnupta</i>	222	14	72359	1.66	369
<i>Juncus effuses</i>	194	15	72359	1.66	322
<i>Scirpus microcarpus</i>	436	10 ft clumped	72359	1.66	724
<b>Herbs</b>					
<i>Aralia californica</i>	10	65	72359	1.66	17
<i>Aster chilensis</i>	24	43 ft clumped	72359	1.66	40
<i>Euthamia occidentalis</i>	10	65	72359	1.66	17
<i>Oenanthe sarmentosa</i>	436	10	72359	1.66	724
<i>Scrophularia californica</i>	48	30	72359	1.66	80
<i>Stachys ajugoides var. ajugoides</i>	76	24	72359	1.66	126
<b>Forbs, Ferns, and Fern Allies</b>					
<i>Polystichum munitum</i>	10	65	72359	1.66	17

**Palustrine Emergent I - Sedge Meadow (PEI)**

Species	Density (# per acre)	On Center Spacing (ft)	Area (sq ft)	Area (acres)	Total
<b>Graminoids</b>					
<i>Carex obnupta</i>	1551	5.3	13588	0.31	484
<i>Juncus balticus</i>	681	8	13588	0.31	212
<i>Juncus effusus</i> var. <i>pacificus</i>	681	8	13588	0.31	212
<i>Scirpus microcarpus</i>	1210	6	13588	0.31	377
<b>Forbs</b>					
<i>Helenium puberulum</i>	170	16	13588	0.14	24
<i>Oenanthe sarmentosa</i>	109	20	13588	0.14	15
<i>Sparganium eurycarpum</i> ssp. <i>eurycarpum</i>	109	20	13588	0.14	15

**Palustrine Emergent II - Rush Meadow (PEII)**      Polygons #3, 5, 8, 34, 42

Species	Density (# per acre)	On Center Spacing (ft)	Area (sq ft)	Area (acres)	Total
<b>Graminoids</b>					
<i>Juncus balticus</i>	889	7	69172	1.59	1412
<i>Juncus effusus</i> var. <i>pacificus</i>	889	7	69172	1.59	1412
<i>Juncus patens</i>	1210	6	69172	1.59	1921
<i>Scirpus microcarpus</i>	889	7	69172	1.59	1412
<b>Forbs</b>					
<i>Helenium puberulum</i>	170	16	69172	1.59	270
<i>Oenanthe sarmentosa</i>	109	20	69172	1.59	173
<i>Potentilla anserina</i> var. <i>pacifica</i>	109	20	69172	1.59	173
<i>Mentha arvensis</i>	70	25	69172	1.59	111
<i>Stachys ajugoides</i> var. <i>ajugoides</i>	170	16	69172	1.59	270

**Palustrine Scrub-Shrub I - Mixed Willow Scrub-Shrub (PSSI)**

Species	Density (# per acre)	On Center Spacing (ft)	Area (sq ft)	Area (acres)	Total
<b>Shrubs and Vines</b>					
<i>Salix lasiolepis</i>	436	10 ft clumped	51134	1.17	512
<i>Salix sitchensis</i>	436	10 ft clumped	51134	1.17	512
<i>Artemisia douglasiana</i>	194	15	51134	1.17	228
<i>Clematis lasiantha</i>	70	25	51134	1.17	82
<i>Lonicera involucrata</i> var. <i>ledebourii</i>	222	14	51134	1.17	261
<i>Marah fabaceus</i>	56	28	51134	1.17	66
<i>Ribes sanguineum</i> var. <i>glutinosum</i>	70	25	51134	1.17	82
<i>Sambucus racemosa</i> var. <i>racemosa</i>	48	30	51134	1.17	56
<b>Graminoids</b>					
<i>Iris douglasiana</i>	34	38 ft clumped	51134	1.17	40
<i>Juncus patens</i>	48	30	51134	1.17	56
<i>Leymus triticoides</i>	9	70	51134	1.17	11

Species	Density (# per acre)	On Center Spacing (ft)	Area (sq ft)	Area (acres)	Total
<b>Forbs</b>					
<i>Aster chilensis</i>	34	38 ft clumped	51134	1.17	40
<i>Oenanthe sarmentosa</i>	48	30	51134	1.17	56
<i>Heracleum lanatum</i>	48	30	51134	1.17	56
<i>Scrophularia californica</i>	70	25	51134	1.17	82
<b>Ferns and Fern Allies</b>					
<i>Polystichum munitum</i>	48	30	51134	1.17	56

**Palustrine Forest - Redwood Grove (PFII)**

Species	Density (# per acre)	On Center Spacing (ft)	Area (sq ft)	Area (acres)	Total
<b>Trees</b>					
<i>Salix lasiolepis</i>	109	20	26825	0.62	33
<i>Alnus rubra</i>	70	25	26825	0.62	76
<b>Shrubs and Vines</b>					
<i>Lonicera involucrata</i> var. <i>ledebourii</i>	99	21	26825	0.62	61
<i>Rubus parviflorus</i>	10	65	26825	0.62	6
<i>Ribes sanguineum</i> var. <i>glutinosum</i>	10	65 ft clumped	26825	0.62	6
<i>Vaccinium ovatum</i>	99	21	26825	0.62	61
<i>Symphoricarpos mollis</i>	70	25	26825	0.62	43
<b>Graminoids</b>					
<i>Trillium ovatum</i>	681	8	26825	0.62	419
<i>Trillium chloropetalum</i>	303	12	26825	0.62	187
<i>Scoliopus bigelovii</i>	303	12	26825	0.62	187
<i>Iris douglasiana</i>	109	20 ft clumped	26825	0.62	67
<b>Forbs</b>					
<i>Mainathemum dilatatum</i>	303	12' oc	26825	0.62	187
<i>Oxalis pilosa</i>	681	8	26825	0.62	419
<i>Tiarella trifoliata</i>	109	20	26825	0.62	67
<i>Claytonia parviflora</i>	303	12' oc	26825	0.62	187
<b>Ferns and Fern Allies</b>					
<i>Polypodium scolieri</i>	303	12' oc	26825	0.62	187
<i>Woodwardia fimbriata</i>	303	12 ft clumped	26825	0.62	187
<i>Polystichum munitum</i>	48	30	26825	0.62	30

**Coastal Prairie Upland II - Wildflower Garden (UPII)**

Species	Density (# per acre)	On Center Spacing (ft)	Area (sq ft)	Area (acres)	Total
<b>Seed Mix</b>					
<i>Bromus carinatus</i>	2723	4' oc	9761	0.22	610
<i>Danthonia danthoniodes</i>	2723	4' oc	9761	0.22	610
<i>Danthonia californica</i>	2723	4' oc	9761	0.22	610
<i>Eschscholzia californica</i>	2723	4' oc	9761	0.22	610
<i>Elymus glaucus</i>	1210	6' clumped	9761	0.22	271
<i>Nassella pulchra</i>	202	12' clumped	9761	0.22	45
<i>Vulpia macrostachys</i>	1210	6' oc	9761	0.22	271
<i>Lupinus succulentus</i>			9761		
<b>Herbs/Forbs</b>					
<i>Helianthus annuus</i>	303	12' oc	9761	0.22	68
<i>Helenium bolanderi</i>	1210	6' clumped	9761	0.22	271
<i>Helenium puberulum</i>	661	8' oc	9761	0.22	148

**Palustrine Scrub-Shrub II - Willow Waddle (PSSII)**

Species	Density (# per acre)	On Center Spacing (ft)	Area (sq ft)	Area (acres)	Total
<b>Trees and Shrubs</b>					
<i>Salix lucida ssp. lasiandra</i>	681	8' clumped	3454	0.08	54
<b>Shrubs and Vines</b>					
<i>Salix lasiolepis</i>	681	8' oc	3454	0.08	54
<i>Marah fabaceus</i>	56	28	3454		
<i>Oemleria cerasiformis</i>	76	24' clumped	3454	0.08	6
<b>Graminoids</b>					
<i>Bromus carinatus</i>	10	65	3454	0.08	1
<b>Forbs</b>					
<i>Heracleum lanatum</i>	48	30	3454	0.08	4
<i>Scrophularia californica</i>	109	20	3454	0.08	9

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**Addendum to  
the Big Wave Wellness Center and Office Park Project EIR  
North Parcel Alternative**

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**Attachment D  
Big Wave NPA Project  
Compliance with Local Coastal Program Policies**

**Attachment D**

**Big Wave North Parcel Alternative Project  
Compliance with Local Coastal Program (LCP) Policies**

<b>COUNTY OF SAN MATEO LOCAL COASTAL PROGRAM (LCP) POLICIES</b>	
<p>The following LCP policies are applicable to the Big Wave Project (project). A discussion of project consistency with these policies is provided for the purpose of determining whether the project would result in a significant conflict with these policies. Based on this table, the Addendum to the Big Wave Wellness Center and Office Park Project EIR (Addendum) concludes that the project is consistent with these policies.</p> <p>New and amended LCP policies were adopted by the California Coastal Commission in August 2012. New policies applicable to the Big Wave Project are shown with an “*” before the policy number.</p>	
<b>Locating and Planning New Development</b>	
<p><b>1.1 Coastal Development Permits</b> - After certification of the LCP, require a Coastal Development Permit for all development in the Coastal Zone subject to certain exemptions.</p>	<p><b>Consistent:</b> The proposal includes a request for a Coastal Development Permit from the County.</p>
<p><b>1.18 Location of New Development</b> – (a) Direct new development to existing urban areas and rural service centers in order to: (1) discourage urban sprawl, (2) maximize the efficiency of public facilities, services, and utilities, (3) minimize energy consumption, (4) encourage the orderly formation and development of local governmental agencies, (5) protect and enhance the natural environment, and (6) revitalize existing developed areas; (b) concentrate new development in urban areas and rural service centers by requiring the “infilling” of existing residential subdivisions and commercial areas; (c) allow some future growth to develop at relatively high densities for affordable housing in areas where public facilities and services are or will be adequate and where coastal resources will not be endangered; and (d) require the development of urban areas on lands designated as agriculture and sensitive habitats in conformance with Agriculture and Sensitive Habitats Component policies.</p>	<p><b>Consistent:</b> The project is proposed on two vacant parcels between existing development to the north, south, and east. Both parcels are designated for urban land use.</p>
<p><b>*1.19 Ensure Adequate Public Services and Infrastructure for New Development in Urban Areas</b> – Prohibits the issuance of permits for development in the urban area unless it can be demonstrated that it will be served with adequate water supplies and wastewater treatment facilities. Specifically, development that relies upon municipal water and wastewater treatment systems shall not be approved if there is: (a) insufficient water and wastewater public works capacity within the system to serve the development or (b) evidence that the entity providing the service cannot provide such service for the development. In addition, new public water connections in the Montara Water and Sanitary District (MWSD) water service area will be allowed only if consistent with the MWSD Public Works Plan (Coastal Commission PWP No. 2-06-006).</p>	<p><b>Consistent:</b> As discussed in Section 17.d (Utilities and Service Systems) of the Addendum, the NPA proposes to connect to MWSD for water supply, MWSD has adequate water supplies to serve the project, and MWSD would apply to the San Mateo County Local Agency Formation Commission (LAFCo) for a sphere of influence amendment and application to extend water service pursuant to Government Code Section 56133. The California Coastal Commission (CCC) has amended the MWSD Public Works Plan (Coastal Commission PWP No. 2-06-006) to allow new connections to MWSD. Regarding wastewater service, proposed changes to the project eliminate on-site wastewater treatment and wastewater recycling. The project would connect to the Granada Sanitary District (GSD) which has adequate capacity to serve the project and wastewater would be treated by the GSD wastewater treatment plant.</p>



<p><b>*1.23 Timing of New Housing Development in the Midcoast</b>- In order to ensure that roads, utilities, schools and other public works facilities and community infrastructure are not overburdened by rapid residential growth, the policy limits the maximum number of new dwelling units built in the urban Midcoast to 40 units each calendar year until various threshold are met.</p>	<p><b>Consistent:</b> The Wellness Center would not contain dwelling units, which by definition contain a kitchen, but 57 bedrooms and one common commercial kitchen, for communal dining.</p>
<p><b>1.24 Protection of Archaeological/Paleontological Resources</b> - Based on County Archaeology/ Paleontology Sensitivity Maps, the policy requires determination of whether or not sites proposed for new development are located within areas containing potential archaeological/paleontological resources. Prior to approval of development proposed in sensitive areas, the policy requires that a mitigation plan, adequate to protect the resource and prepared by a qualified archaeologist/paleontologist be submitted for review and approval and implemented as part of the project.</p>	<p><b>Consistent:</b> An archaeological site (CA-SMA-151) was identified on the site. The NPA project development avoids this resource in accordance with Mitigation Measure CULT-2a. Mitigation would reduce impacts to less than significant.</p>
<p><b>*1.35 All New Land Use Development and Activities Shall Protect Coastal Water Quality Among Other Ways By</b> – Requires implementation of Storm water Best Management Practices (BMPs).</p>	<p><b>Consistent:</b> With the implementation of the proposed erosion sediment control plan, drainage and stormwater control plan, and Mitigation Measures HYDRO-3 through HYDRO-5, the project would comply with this policy.</p>
<p><b>Public Works</b></p>	
<p><b>2.28 Management of Pillar Point Marsh</b> - Require, as a condition of development permit for any facilities to increase water supply, that any water system that presently draws or proposes to draw water from wells in the aquifer serving Pillar Point Marsh agree to participate in and assist in the funding of the hydrologic study of Pillar Point Marsh required by Policy 7.20 and to accept the restrictions resulting from that study.</p>	<p><b>Consistent:</b> The project would result in equivalent or reduced use of water supply from the existing agricultural well, due to the project’s proposed connection to MWSO for domestic water service and the use of the well for irrigation use only.</p>
<p><b>2.42 Capacity Limits</b> -</p> <ul style="list-style-type: none"> <li>• Limits expansion of roadways to capacity which does not exceed that needed to accommodate commuter peak period traffic when buildout of the Land Use Plan occurs.</li> <li>• Requires use of the requirements of commuter peak period traffic as the basis for determining appropriate increases in capacity.</li> </ul>	<p><b>Consistent:</b> As discussed in Section 4.16 (Transportation/Traffic) of the Addendum, Hexagon Transportation Consultants prepared a Transportation Impact Assessment of the Big Wave Project (Attachment H). Commuter peak period traffic was used as the basis of the Transportation Impact Analysis. With implementation of Mitigation Measure TRANS-1, all study intersections would operate at an acceptable level of service and impacts would be less than significant.</p>
<p><b>2.43 Desired Level of Service</b> - In assessing the need for road expansion, considers Service Level D acceptable during commuter peak periods and Service Level E acceptable during recreation peak periods.</p>	<p><b>Consistent:</b> With implementation of Mitigation Measure TRANS-1, all study intersections would operate at an acceptable level of service and impacts would be less than significant. As mitigated, the project would not require road expansion.</p>
<p><b>*2.52 - Traffic Mitigation for all Development in the Urban Midcoast</b> - In the urban Midcoast, require applicants for new development, as defined in Section 30106 of the Coastal Act, that generates any net increase in vehicle trips on Highways 1 and/or 92, except for a single-family dwelling, a second dwelling unit, or a two-family dwelling, to develop and implement a traffic impact analysis and mitigation plan (TIMP).</p>	<p><b>Consistent:</b> With implementation of Mitigation Measure TRANS-1, all study intersections would operate at an acceptable level of service and impacts would be less than significant.</p>

<p><b>2.56 Increased Service for Coastside Residents -</b> Encourages SamTrans to expand bus service to and along the Coastside to improve transit service to Coastside residents.</p>	<p><b>Consistent:</b> The SamTrans 17 line currently serves the project area, with stops at La Granada Avenue and Prospect Way.</p>
<p><b>Housing</b></p>	
<p><b>3.1 Sufficient Housing Opportunities -</b> Through both public and private efforts, protect, encourages and, where feasible, provide housing opportunities for persons of low and moderate income who reside, work or can be expected to work in the Coastal Zone.</p>	<p><b>Consistent:</b> The project proposes the development of housing for 50 developmentally disabled adults of low and moderate income who reside, work or can be expected to work in the Coastal Zone. The Wellness Center would provide new work opportunities for disabled adults on-site.</p>
<p><b>3.2 Non-Discrimination –</b> Requires the County to strive to ensure that decent housing is available for low and moderate income persons regardless of age, race, sex, marital status or other arbitrary factors.</p>	<p><b>Consistent:</b> The project proposes housing specifically for developmentally disabled adults and support staff.</p>
<p><b>3.3 Balanced Developments -</b> Requires the County to strive to provide such housing in balanced residential environments that combine access to employment, community facilities and adequate services.</p>	<p><b>Consistent:</b> The project proposes the development of housing for 50 developmentally disabled adults, as well as associated agricultural, maintenance and other uses that would provide employment opportunities for residents in addition to recreational facilities.</p>
<p><b>3.6 Allocation of Affordable Units -</b> In order to reduce home-to-work travel distance within the Coastal Zone, and to encourage shared responsibility for housing by subarea roughly proportional to employment opportunities available in the Midcoast, the policy allocates 50% of “fair share” affordable units to the unincorporated area, with no more affordable units to be built in the rural unincorporated area than allowed by Policy 3.24, and 50% to Half Moon Bay.</p>	<p><b>Consistent:</b> The project would create affordable housing for 50 developmentally disabled adults in an urban area of the Midcoast.</p>
<p><b>3.4 Diverse Housing Opportunities -</b> Requires the County to strive to improve the range of housing choices, by location, type, price and tenure, available to persons of low and moderate income.</p>	<p><b>Consistent:</b> The project proposes the development of housing for 50 developmentally disabled adults of low and moderate income.</p>
<p><b>3.13 Maintenance of Community Character -</b> Requires that new development providing significant housing opportunities for low and moderate income persons contribute to maintaining a sense of community character by being of compatible scale, size and design. Limit the height to two stories to mitigate the impact of this development on the surrounding neighborhoods. Assess negative traffic impacts and mitigate as much as possible.</p>	<p><b>Consistent:</b> The Wellness Center is comprised of 4 buildings, including a 1-story recreational building, two 2-story residential buildings and a 3-story residential building. The 3-story building (Building 4) is located approximately 210-feet from residential uses to the north with the distance buffered by shorter structures and landscaping. As discussed in Section 4.1 (Aesthetics) of the Addendum, aesthetic impacts to the residential uses to the north would be less than significant. With implementation of Mitigation Measure TRANS-1, all study intersections would operate at an acceptable level of service and impacts would be less than significant.</p>
<p><b>3.14 Location of Affordable Housing-</b> Requires, in the Midcoast, affordable housing to be located in the designated affordable housing sites in the urban area and elsewhere in the urban area, where affordable housing units specified in LCP Policies 3.19, 3.20, 3.21 and 3.22 are permitted, including mobile homes, second units, and affordable units derived from density bonus provisions.</p>	<p><b>Consistent:</b> While the project site is not a designated affordable housing site, it is located in an urban area. It does not include mobile homes, second units, or affordable units derived from density bonus provisions, but affordable housing for 50 developmentally disabled adults of low and moderate income.</p>

<b>Energy</b>	
<p><b>4.42 Alternative Energy Sources</b> - Encourages the development of non-polluting alternative energy resources including but not limited to co-generation, biomass, wind and solar.</p>	<p><b>Consistent:</b> The project proposes the implementation of solar facilities for the generation of electricity.</p>
<b>Agriculture</b>	
<p><b>*5.2 Designation of Prime Agricultural Lands</b> - Requires the County to designate any parcel which contains prime agricultural lands as Agriculture on the Local Coastal Program Land Use Plan Map, subject to the following exceptions: State Park lands existing as of the date of Local Coastal Program certification, rural service centers, and solid waste disposal sites necessary for the health, safety, and welfare of the County.</p>	<p><b>Consistent:</b> The policy requires the County to undertake a comprehensive assessment of the County’s Coastal Zone to identify all parcels containing prime agricultural lands and to thereafter prepare and submit an LCP amendment that will amend the LCP Land Use Map as described in this policy. While the property contains prime agricultural lands, the LCP Land Use Map has not been amended to designate the project parcels as Agriculture. The current designation of areas proposed for development is General Industrial.</p>
<p><b>*5.4 Designation of Lands Suitable for Agriculture</b> - Requires the County to designate any parcel, which contains other lands suitable for agriculture, as Agriculture on the Local Coastal Program Land Use Plan Map, subject to the following exceptions: rural service centers, State Park lands existing as of the date of Land Use Plan certification, and solid waste disposal sites necessary for the health, safety and welfare of the County.</p>	<p><b>Consistent:</b> The project site does not contain other lands suitable for agriculture. The current designation of areas proposed for development is General Industrial.</p>
<b>Sensitive Habitats</b>	
<p><b>7.3 Protection of Sensitive Habitats</b> – Prohibits any land use or development which would have significant adverse impact on sensitive habitat areas. Requires development in areas adjacent to sensitive habitats to be sited and designed to prevent impacts that could significantly degrade the sensitive habitats. Requires all uses shall be compatible with the maintenance of biologic productivity of the habitats.</p>	<p><b>Consistent:</b> The project increases the wetland buffer zone on the north parcel from 100 feet to between 150 and 250 feet. The wetland buffer zone on the south parcel remains 100 feet. The project includes the restoration and maintenance of wetland and buffer areas.</p>
<p><b>7.4 Permitted Uses in Sensitive Habitats</b> - Permits only resource dependent uses in sensitive habitats. Resource dependent uses for riparian corridors, wetlands, marine habitats, sand dunes, sea cliffs and habitats supporting rare, endangered, and unique species shall be limited to the uses permitted in Policies 7.9, 7.16, 7.23, 7.26, 7.30, 7.33, and 7.44, respectively, of the County Local Coastal Program on March 25, 1986; and (b) in sensitive habitats, require that all permitted uses comply with U.S. Fish and Wildlife and State Department of Fish and Game regulations.</p>	<p><b>Consistent:</b> The restored wetlands would extend both foraging and breeding habitat currently available in Pillar Point Marsh for project area special status species, as well as provide a wider, protected movement corridor through the site. Implementation of Mitigation Measures BIO 1.a – 4.a would result in project compliance with U.S. Fish and Wildlife and State Department of Fish and Game regulations.</p>
<p><b>7.5 Permit Conditions</b> - Require the applicant to demonstrate that there will be no significant impact on sensitive habitats. When it is determined that significant impacts may occur, require the applicant to provide a report prepared by a qualified professional which provides: (1) mitigation measures which protect resources and comply with the policies of the Shoreline Access, Recreation/Visitor-Serving Facilities and Sensitive Habitats Components, and (2) a program for monitoring and evaluating the effectiveness of mitigation measures. Develop an appropriate program to inspect the adequacy of the applicant’s mitigation measures. When applicable, require as a condition of permit approval the restoration</p>	<p><b>Consistent:</b> As discussed in this document, the project, as proposed and mitigated, would comply with the applicable LCP policies. The Riparian &amp; Waters/Wetland Ecosystem Restoration Final Basis of Design Report (Attachment B of the Addendum) prepared for the project includes a 10-year monitoring plan. The project includes the restoration and maintenance of wetland and buffer areas.</p>

<p>of damaged habitat(s) when in the judgment of the Planning Director restoration is partially or wholly feasible.</p>	
<p><b>7.9 Permitted Uses in Riparian Corridors</b> - (a) Within corridors, the policy permits only the following uses: (1) education and research, (2) consumptive uses as provided for in the Fish and Game Code and Title 14 of the California Administrative Code, (3) fish and wildlife management activities, (4) trails and scenic overlooks on public land(s), and (5) necessary water supply projects; and (b) when no feasible or practicable alternative exists, the policy permits the following uses: (1) stream dependent aquaculture, provided that non-stream dependent facilities locate outside of corridor, (2) flood control projects, including selective removal of riparian vegetation, where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development, (3) bridges when supports are not in significant conflict with corridor resources, (4) pipelines, (5) repair or maintenance of roadways or road crossings, (6) logging operations which are limited to temporary skid trails, stream crossings, roads and landings in accordance with State and County timber harvesting regulations, and (7) agricultural uses, provided no existing riparian vegetation is removed, and no soil is allowed to enter stream channels.</p>	<p><b>Consistent:</b> Proposed uses within the restored riparian corridor would be limited to the allowable uses. properties. Also, see discussion under Policies 7.16 and 7.18, for wetlands.</p>
<p><b>7.11 Establishment of Buffer Zones</b> – (a) On both sides of riparian corridors, from the “limit of riparian vegetation” the policy requires development to extend buffer zones 50 feet outward for perennial streams and 30 feet outward for intermittent streams; (b) where no riparian vegetation exists along both sides of riparian corridors, the policy requires development to extend buffer zones 50 feet from the predictable high water point for perennial streams and 30 feet from the midpoint of intermittent streams; and (c) along lakes, ponds, and other wet areas, the policy requires development to extend buffer zones 100 feet from the high water point except for manmade ponds and reservoirs used for agricultural purposes for which no buffer zone is designated.</p>	<p><b>Consistent:</b> The project increases the wetland buffer zone on the north parcel from 100 feet to between 150 and 250 feet. The wetland buffer zone on the south parcel remains 100 feet. The project includes the restoration and maintenance of wetland and buffer areas. Buffer areas are planted as a riparian corridor and uplands coastal scrub/shrub between the proposed development and the proposed riverine wetland ecosystem restoration area. Also see discussion under Policies 7.16 and 7.18, for wetlands.</p>
<p><b>7.16 Permitted Uses in Wetlands</b> - Within wetlands, the policy permits only the following uses: (1) nature education and research, (2) hunting, (3) fishing, (4) fish and wildlife management, (5) mosquito abatement through water management and biological controls; however, when determined to be ineffective, allow chemical controls which will not have a significant impact, (6) diking, dredging, and filling only as it serves to maintain existing dikes and an open channel at Pescadero Marsh, where such activity is necessary for the protection of pre-existing dwellings from flooding, or where such activity will enhance or restore the biological productivity of the marsh, (7) diking, dredging, and filling in any other wetland only if such activity serves to restore or enhance the biological productivity of the wetland, (8) dredging manmade reservoirs for agricultural water supply where wetlands may have formed, providing spoil disposal is planned</p>	<p><b>Consistent:</b> The applicant proposes to perform wetlands restoration in wetland areas. Proposed uses within the restored wetlands would be limited to the allowable uses.</p>

<p>and carried out to avoid significant disruption to marine and wildlife habitats and water circulation, and (9) incidental public service purposes, including, but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.</p>	
<p><b>7.18 Establishment of Buffer Zones</b> – Requires buffer zones to extend a minimum of 100 feet landward from the outermost line of wetland vegetation. This setback may be reduced to no less than 50 feet only where (1) no alternative development site or design is possible; and (2) adequacy of the alternative setback to protect wetland resources is conclusively demonstrated by a professional biologist to the satisfaction of the County and the State Department of Fish and Game. Requires a larger setback as necessary to maintain the functional capacity of the wetland ecosystem.</p>	<p><b>Consistent:</b> The project increases the wetland buffer zone on the north parcel from 100 feet to between 150 and 250 feet. The wetland buffer zone on the south parcel remains 100 feet. Buffers would be planted with riparian and uplands coastal scrub/shrub vegetation between the proposed development and the proposed riverine wetland ecosystem restoration area.</p>
<p><b>7.19 Permitted Uses in Buffer Zones</b> - Within buffer zones, the policy permits the following uses only: (1) uses allowed within wetlands (Policy 7.16) and (2) public trails, scenic overlooks, and agricultural uses that produce no impact on the adjacent wetlands.</p>	<p><b>Consistent:</b> The project includes agricultural uses, limited to organic farming, within the wetland buffer zones.</p>
<p><b>7.36 San Francisco Garter Snake</b> - Requires the County to (a) Prevent any development where there is known to be a riparian or wetland location for the San Francisco garter snake with the following exceptions: (1) existing manmade impoundments smaller than one-half acre in surface, and (2) existing manmade impoundments greater than one-half acre in surface providing mitigation measures are taken to prevent disruption of no more than one half of the snake’s known habitat in that location in accordance with recommendations from the State Department of Fish and Game; and (b) requires developers to make sufficiently detailed analyses of any construction which could impair the potential or existing migration routes of the San Francisco garter snake. Such analyses will determine appropriate mitigation measures to be taken to provide for appropriate migration corridors.</p>	<p><b>Consistent:</b> The San Francisco Garter Snake has been documented in the vicinity of the project site and has moderate potential to occur on the site. Mitigation Measure BIO-1a is proposed to reduce potential impacts to this species to less than significant.</p>
<p><b>Visual Resources</b></p>	
<p><b>8.5 Location of Development</b> - On rural lands and urban parcels larger than 20,000 sq. ft.: Require that new development be located on a portion of a parcel where the development: (1) is least visible from State and County Scenic Roads; (2) is least likely to significantly impact views from public viewpoints; and (3) is consistent with all other LCP requirements, best preserves the visual and open space qualities of the parcel overall.</p>	<p><b>Consistent:</b> The project includes several features that help to minimize the visibility of the buildings and associated development. These features include the 150 foot to roughly 250-foot wetlands buffer around the perimeter of development on the north parcel. Part of this area would be used for organic gardening and the part of the buffer area closest to Pillar Point Marsh would be revegetated with riparian plant communities. Buildings are clustered and setback into the interior of the north parcel. Perimeter vegetative screening would be planted. The building heights have been lowered from the 2010 Big Wave project. The project would not block views of the ocean or ridgelines.</p>

<p><b>8.6 Streams, Wetlands, and Estuaries</b> - (a) Requires development to setback from the edge of streams and other natural waterways a sufficient distance to preserve the visual character of the waterway; (b) prohibits structural development which will adversely affect the visual quality of perennial streams and associated riparian habitat, except for those permitted by Sensitive Habitats Component Policies; (c) requires development to retain the open natural visual appearance of estuaries and their surrounding beaches; and (d) requires development to retain wetlands intact except for public accessways designed to respect the visual and ecological fragility of the area and adjacent land.</p>	<p><b>Consistent:</b> The project includes a 150 foot to roughly 250-foot wetland buffers planted with riparian and uplands coastal scrub/shrub vegetation between the proposed development and the proposed riverine wetland ecosystem restoration area.</p>
<p><b>8.10 Vegetative Cover</b> – Requires replacement of vegetation removed during construction with plant materials (trees, shrubs, ground cover) which are compatible with surrounding vegetation and is suitable to the climate, soil, and ecological characteristics of the area.</p>	<p><b>Consistent:</b> The project proposes extensive native landscaping throughout the site as well as the restoration of wetland and buffer areas.</p>
<p><b>8.13 Special Design Guidelines for Coastal Communities</b> - Applies special design guidelines to supplement the design criteria in the Community Design Manual. For the Princeton-by-the-Sea area, the policy calls for commercial development to reflect the nautical character of the harbor setting, utilize wood or shingle siding, employ natural or sea colors, and use pitched roofs. For industrial development, the policy calls for buildings to utilize architectural detailing, subdued colors, textured building materials, and landscaping to add visual interest and soften the harsh lines of standard or stock building forms normally used in industrial districts.</p>	<p><b>Consistent:</b> Both the Wellness Center and Office Park buildings of the project utilize architectural detailing, subdued colors, textured building materials, and landscaping to soften and screen the proposed building forms. Specifically, the project proposes hardi plank siding and shingles, as well as earth-toned exterior colors and marine-color accents to reflect the nautical character of the harbor setting.</p>
<p><b>8.15 Coastal Views</b> - Prevent development (including buildings, structures, fences, unnatural obstructions, signs, and landscaping) from substantially blocking views to or along the shoreline from coastal roads, roadside rests and vista points, recreation areas, trails, coastal accessways, and beaches.</p>	<p><b>Consistent:</b> As discussed in Section 4.1 (Aesthetics) of the Addendum, the project would not obstruct coastal views and impacts would be less than significant.</p>
<p><b>8.16 Landscaping</b> – Requires development to (a) use plant materials to integrate the man-made and natural environments and to soften the visual impact of new development; and (b) protect existing desirable vegetation. Encourage, where feasible, that new planting be common to the area.</p>	<p><b>Consistent:</b> The project proposes extensive native landscaping throughout the site as well as the restoration of wetland and buffer areas.</p>
<p><b>8.19 Colors and Materials</b> –(a) Requires development to employ colors and materials in new development which blend, rather than contrast, with the surrounding physical conditions of the site; and (b) prohibits highly reflective surfaces and colors except those of solar energy devices.</p>	<p><b>Consistent:</b> The building finishes are proposed to be siding/stucco in pale neutrals with earth-toned accent colors, including marine-related green and blue and dark red. The chosen color palette is anticipated to blend with the surrounding area and is subject to Design Review approval, which will evaluate compliance with a similar policy.</p>
<p><b>8.20 Scale</b> – Requires development to relate proposed structures in size and scale to adjacent buildings and landforms.</p>	<p><b>Consistent:</b> The project reduces maximum building height from 51 to 38 feet from grade and clusters buildings against existing development. Building 4 of the Wellness Center and Buildings B through E are three stories in height. These buildings are buffered by distance and vegetation from adjoining residential uses. While buildings in the immediate vicinity are generally one and two stories in height, including the warehouse buildings</p>

	<p>in Princeton and the homes in the Pillar Ridge Manufactured Home Community, several buildings in the project vicinity are three stories in height. Facade articulation and the varying heights of the buildings help to further minimize visual impacts from viewing locations along Airport Street, the North Trail, and Highway 1.</p>
<p><b>8.21 Commercial Signs</b> – (a) Prohibits off-premise commercial signs except for seasonal temporary agricultural signs; (b) requires on-premise commercial signs to be designed as an integral part of structure they identify and which do not extend above the roof line; (c) prohibits brightly illuminated colored, rotating, reflective, blinking, flashing or moving signs, pennants, or streamers; and (d) requires information and direction signs to be simple, easy-to-read, and harmonize with surrounding elements.</p>	<p><b>Consistent:</b> The proposal includes minimal signage, with spaces on the Office Park building facades intended for building signage whereby signs would not extend above the roof line. No free-standing signs are proposed. Such signage would be implemented in accordance with applicable regulations.</p>
<p><b>Hazards</b></p>	
<p><b>9.3 Regulation of Geologic Hazard Areas-</b> Applies the following regulations of the Resource Management (RM) Zoning Ordinance to designated geologic hazard areas: a. Section 6324.6 - Hazards to Public Safety Criteria. b. Section 6326.2 - Tsunami Inundation Area Criteria. c. Section 6326.3 - Seismic Fault/Fracture Area Criteria. Require geologic reports prepared by a certified engineering geologist consistent with “Guidelines for Geologic/Seismic Reports” (CDMG Notes #37) for all proposed development. d. Section 6326.4 - Slope Instability Area Criteria.</p>	<p><b>Consistent:</b> Regarding potential geological hazards, a Fault Trench Study, prepared after EIR certification and included in the Addendum, found no evidence of fault traces on the project site. All mitigations and final design recommendations associated with geology and soils would be reviewed and approved by the County prior to issuance of applicable permits per Mitigation Measure GEO-8. Regarding potential tsunami hazard, exposure of Wellness Center residents to potential tsunami wave run-up is reduced from the original project by raising the floor elevation of residential units within the Wellness Center to 34 feet NGVD or higher. See Table 3 of the Addendum, Office Park and Wellness Center, Building Elevations.</p>
<p><b>9.9 Regulation of Development in Floodplains</b> – Requires development located within flood hazard areas shall employ the standards, limitations and controls contained in Chapter 35.5 of the San Mateo County Ordinance Code, Sections 8131, 8132 and 8133 of Chapter 2 and Section 8309 of Chapter 4, Division VII (Building Regulations), and applicable Subdivision Regulations.</p>	<p><b>Consistent:</b> The parcels are in Flood Zone X (Area of Minimal Flood Hazard). Significant portions of the project site, as shown on the 1984 FEMA flood mapping, are shown in a Zone A flood area (a 100-year flood hazard area). However, in a 2005 Letter of Map Amendment (LOMA), FEMA removed the project parcels from the Zone A flood area.</p>
<p><b>9.10 Geological Investigation of Building Sites</b> - Requires the County Geologist or an independent consulting certified engineering geologist to review all building and grading permits in designated hazardous areas for evaluation of potential geotechnical problems and to review and approve all required investigations for adequacy. As appropriate and where not already specifically required, require site specific geotechnical investigations to determine mitigation measures for the remedy of such hazards as may exist for structures of human occupancy and/or employment other than those considered accessory to agriculture as defined in Policy 5.6.</p>	<p><b>Consistent:</b> A Fault Trench Study, prepared after EIR certification and included in this Addendum, found no evidence of fault traces on the project site. All mitigations and final design recommendations associated with geology and soils would be reviewed and approved by the County prior to issuance of applicable permits per Mitigation Measure GEO-8.</p>
<p><b>Shoreline Access Component</b></p>	
<p><b>10.1 Permit Conditions for Shoreline Access</b> - Requires some provision for shoreline access as a condition of granting development permits for any public or private development permits (except as exempted by Policy 10.2) between the sea and the nearest road. The type of</p>	<p><b>Consistent:</b> The project would be located between the sea and the nearest through road, Airport Street. The applicant proposes a Class 1, 8-foot wide coastal trail extension within the front of the properties that would run along the right-of-way to the southern edge of the Pillar</p>

<p>provision, the location of the access and the amount and type of improvements required shall be consistent with the policies of this component.</p>	<p>Ridge Mobile Home Park and would not disturb sensitive habitat or buffer zones.</p>
<p><b>10.10 Fragile Resources (Sensitive Habitats)</b>- Requires the establishment of public access to sensitive habitats or their buffer zones, through grants or dedications of easements or other means, at the time a Coastal Development Permit is processed. Open the access in sensitive habitats or their buffer zones for public use only when development standards and management practices are adequate to protect the resources (see Sensitive Habitats Component) and Policies 10.23 and 10.25.</p>	<p><b>Consistent:</b> The owner of the project would be required to record an access easement allowing public access on the trail along Airport Street, whereby the easement would be included in the Final/Parcel Maps for the proposed subdivision.</p>
<p><b>10.22 Parking</b> – Requires new commercial or industrial parking facilities of 10 or more spaces within 1/4-mile radius of an established shoreline access area to designate and post 20% of the total spaces for beach user parking between 10:00 a.m. and 4:00 p.m.</p>	<p><b>Consistent:</b> The project would provide 462 parking spaces for the Wellness Center and Office Park uses and 92 parking spaces (20% of 462 spaces) designated and posted for coastal access public parking.</p>
<p><b>Recreation/Visitor-Serving Facilities</b></p>	
<p><b>11.4 Recreation and Visitor-Serving Facilities Permitted in the Coastal Zone</b> - Permits the following facilities in the Coastal Zone: (1) necessary visitor-serving facilities as defined in Policy 11.1, and (2) commercial recreation and public recreation facilities which (a) are designed to enhance public opportunities for coastal recreation, (b) do not substantially alter the natural environment, and (c) do not subvert the unique small town, rural character of the individual communities on the Coastside.</p>	<p><b>Consistent:</b> The project would provide public recreation in the form of an 8-foot wide coastal trail extension along the Airport Street frontage of both parcels and 92 coastal access public parking spaces. No visitor-serving facilities are proposed. Recreational facilities within the Wellness Center would not be open to the general public.</p>
<p><b>11.7 Urban Areas</b> – (a) Permits visitor-serving and commercial recreation facilities to locate within enclosed buildings in areas designated as Coastside Commercial Recreation and Neighborhood Commercial; and (b) permits public recreation facilities in urban areas.</p>	<p><b>Consistent:</b> The project would provide public recreation in the form of an 8-foot wide coastal trail extension along the Airport Street frontage of both parcels and 92 coastal access public parking spaces. No visitor-serving facilities or commercial recreation facilities are proposed. Recreational facilities within the Wellness Center would not be open to the general public.</p>
<p><b>11.14 Public Recreational Facilities</b> – Requires the use of the locational and development standards, the Agriculture Component, and the applicable standards and planning and management guidelines of the <u>County’s Parks and Recreation Element</u> as the development and management standards for public recreation facilities, including trails. LCP policies must predominate if there are conflicts. When the route of a bike path in the County’s Bikeways Plan corresponds to the route of a trail included in the LCP trail program, construct the trail to accommodate both bicycle and pedestrian use, wherever possible.</p>	<p><b>Consistent:</b> The applicant is coordinating coastal trail construction with the County Parks Department to connect with the Coastal Trail. Development of trail facilities on the project site would be completed consistent with applicable regulations.</p>
<p><b>11.15 Private Recreation and Visitor-Serving Facilities</b> - (a) Requires private recreation and visitor-serving facilities to conform to: (1) the development and locational standards included throughout this component and as referred in other components, and (2) the design standards of the Visual Resources Component; and (b) require that private recreation and visitor-serving facilities conform to the intensities of use appropriate to the rural or urban setting and to the requirements of the individual site. In rural areas, visitor-serving uses shall require density credits based on daily water use in</p>	<p><b>Consistent:</b> Development of trails and private recreational facilities on the project site would be completed consistent with applicable regulations. Consistency with the Visual Resources Component is discussed above.</p>



accordance with the requirements set forth in Local Coastal Program Policy 1.8.	
<b>11.18 Sensitive Habitats</b> – Requires development to provide improvements and management adequate to protect sensitive habitats. These may include, but are not limited to, the following: (1) informative displays, brochures, and signs to minimize public intrusion and impact, (2) organized tours of sensitive areas, (3) landscaped buffers or fences and (4) staff to maintain improvements and manage the use of sensitive habitats.	<b>Consistent:</b> The project includes willow wattle fencing between development and landscaped buffers on both north and south parcels consistent with Mitigation Measure BIO 4.a. The project involves restoration of wetland and buffer areas and maintenance of these areas.

**Addendum to  
the Big Wave Wellness Center and Office Park Project EIR  
North Parcel Alternative**

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**Attachment E**

**EIR Mitigation Measures as Amended**

## Attachment E

### Big Wave North Parcel Alternative Amended EIR Mitigation Measures

The EIR mitigation measures adopted by the Board of Supervisors on March 15, 2011 include text changes made at the time of Board certification of the EIR as identified in the Staff Report. These changes are incorporated into the EIR mitigation language and are not identified with marked text. Amendments to the EIR mitigation measures are shown in track changes. Underlined text denotes new text. ~~Strike-out~~ text denotes deletion.

The property owner(s) shall comply with all mitigation measures listed below (which are derived from the Mitigation Monitoring and Reporting Program (MMRP) incorporated within the Final EIR and made available to the public on October 15, 2010). When timing has not been specified below, then mitigation timing and monitoring shall be as specified in the MMRP, the terms and requirements of which are incorporated herein by reference.

<b>Mitigation Measure AES-4: Light Impacts to Day or Nighttime Views in the Area.</b>	
•	Prior to the approval of final project plans, a detailed lighting plan shall be submitted to San Mateo County for review and approval, consistent with the County's requirements. The lighting plan shall prohibit light spillover across property lines and limit lighting to the minimum necessary for security and exterior lighting purposes, as determined by the Community Development Director. All lighting shall be designed to be compatible with surrounding development. The project shall not propose light sources that are atypical of the surrounding environment.
•	Reflective glass or other glaring building materials shall be discouraged. The exterior of the proposed building shall be constructed of non-reflective materials such as, but not limited to: high-performance tinted non-reflective glass, metal panel, and pre-cast concrete or cast in-place or fabricated wall surfaces. The proposed materials shall be reviewed and approved by the Community Development Director prior to approval of the Final Map.
<b>Mitigation Measure AQ-2: Construction Emissions.</b>	
The property owner(s) shall require the grading and construction contractor(s) to implement a dust control program. The program shall be applied to all construction activities involving grading, excavation, and use of unpaved areas for staging, extensive hauling of materials, or building demolition. The dust control program shall include the following measures:	
•	Water all active construction areas at least twice daily.
•	Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard.
•	Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.
•	Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites.
•	Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
•	Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more).

•	Enclose, cover, water twice daily, or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.).
•	Limit traffic speeds on unpaved roads to 15 miles per hour (mph).
•	Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
•	Replant vegetation in disturbed areas as quickly as possible.
•	Install wheel washers for all existing, or wash off the tires or tracks of all trucks and equipment leaving the site.
•	Limit the area subject to excavation, grading, and other construction activity at any one time.
•	<u>Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.</u>
•	<u>Post a publicly visible sign with the name and telephone number of the construction contractor and San Mateo County staff person to contact regarding dust complaints. This person shall respond and take corrective action within 48 hours. The publicly visible sign shall also include the contact phone number for the BAAQMD to ensure compliance with applicable regulations.</u>
<b>Mitigation Measure AQ-5: Sewage Treatment Odors.</b>	
<del>The project applicant shall provide supporting engineering calculations and site plan details to verify the basis of design for the odor removal system. This information shall be supplied as part of the engineering report to be submitted at time of application for review and approval by the RWQCB for required permits for the sewage treatment plant.</del>	
<b>Mitigation Measure BIO-1a: Special-Status Species.</b>	
A qualified biologist (hereafter, biological monitor) capable of monitoring projects with potential habitat for western pond turtle (WPT), San Francisco garter snakes (SFGS), and California red-legged frogs (CRLF) shall be present at the site, prior to any disturbance activities, as follows:	
(1)	Prior to and within three (3) days of installation of exclusion fencing (type to be determined through consultation with CDFG and USFWS), the monitor shall survey the location for the installation for the presence of WPT, SFGS and CRLF. In addition, should any burrows be observed, the burrows shall be inspected by the biologist to determine if any are being used by any of the species. Should any of these species be observed, the area shall be vacated and re-inspected in one week. If no animal use is noted, the burrows shall be carefully excavated using a small trowel or shovel. Careful prodding using a blunt object will aid in determining the course of the tunnel such that the tunnel is excavated from the sides rather than the top, reducing the potential for any injury should an animal be present. Excavated burrows with no WPT, CRLF or SFGS shall be left open so they cannot be reoccupied. If any non-listed species are located, they shall be translocated outside of the construction zone. Should any individual WPT, CRLF or SFGS be found during the field survey or excavation, the area where that individual has been found shall remain undisturbed. If any life stage of the WPT, SFGS or CRLF is found during these surveys or excavations, the Department of Fish and <del>Game</del> Wildlife and the U.S. Fish and Wildlife Service shall be contacted immediately, and activities that could result in take shall be postponed until appropriate actions are taken to allow project activities to continue.

(2)	During installation of grading and construction zone exclusion fencing, the biological monitor shall be present and will oversee the installation of all grading and construction fencing. The exclusionary fencing shall be installed on one parcel site first so that if any animals are within the grading and construction zone, they will have the opportunity to move out of the area freely.
	Immediately following installation of exclusion fencing, the biological monitor shall survey the enclosed grading and construction zone for the presence of WPT, SFGS and CRLF. If any life stage of the SFGS or CRLF is found during these surveys, the Department of Fish and <del>Game</del> Wildlife and the U.S. Fish and Wildlife Service shall be contacted immediately, and activities that could result in take shall be postponed until appropriate actions are taken to allow project activities to continue.
	The biological monitor shall be present at all times during restoration area planting activities outside the grading and construction zone and within the buffer area, to monitor for the presence of WPT, SFGS and CRLF.
	The biological monitor shall prepare a training document in both English and Spanish about the animals of concern, their identification, and the methods of avoidance and reporting requirements and procedures, should the species be observed. The document shall provide photographs of the species and notification numbers for the monitor, the Department of Fish and <del>Game</del> Wildlife, and the U.S. Fish and Wildlife Service. The training document and contact information for the monitor shall be posted at the grading and construction zone and maintained in the monitoring log. All contractors, subcontractors and construction workers shall be provided a copy of the training document in advance of their respective grading and construction activities and shall be required to adhere to its contents.
	A highly visible warning sign shall be installed along the project perimeter. The warning sign shall be in English and Spanish and shall state: "Stay Out - Habitat Area of Federally Protected Species." A document drop shall be attached to several warning signs and stocked with a supply of training documents.
	The biological monitor shall conduct weekly site visits when grading and construction are occurring to verify that all construction zone exclusionary fencing is in place and functioning as intended. Any repair or maintenance to the fencing deemed necessary by the biological monitor shall be completed under the monitor's supervision. Such maintenance activities include adequate removal of vegetation at the construction fence line to ensure that vegetation "ladders" for species access are not allowed to establish.
	Once restoration activities are complete, the exclusion fencing shall be removed under the supervision of the biological monitor. Prior to the removal of the buffer area/restoration area fencing, permanent exclusionary measures shall be put in place to prevent special-status species movement beyond the buffer areas. Wildlife movement through the sites shall be facilitated via a buffer zone on either side of the drainage that bisects the parcels.
	The general contractor shall assign a crew member that will be responsible for conducting site inspections, monitoring gate opening and closing, and assuring that other species protection measures are in place and being enforced when the biological monitor is not present. The crew member shall adhere to the procedures contained in the training document and shall be able to contact the biological monitor should any violations be noted or listed species observed on-site.

	<p>The biological monitor has the authority to halt all or some grading and construction activities and/or modify all or some grading and construction methods as necessary to protect habitat and individual sensitive species. The monitor shall be responsible for contacting USFWS should any endangered or threatened species be observed within the grading and construction zones.</p>
	<p>The biological monitor shall complete daily monitoring reports for each day present, to be maintained in a monitoring logbook kept on-site. Reports must contain the date and time of work, weather conditions, biological monitor's name, construction or project activity and progress performed that day, any listed species observed, any measures taken to repair and/or maintain fencing, and any grading and construction modifications required to protect habitat. The monitoring logbook with compiled reports shall be submitted to the Community Development Director upon cessation of construction as part of a construction monitoring report.</p>
<p><b>Mitigation Measure BIO-1b: Special-Status Species.</b></p>	
<p>Prior to any disturbance activities, Any active bird nests in the vicinity of proposed grading shall be avoided until young birds are able to leave the nest (i.e., fledged) and forage on their own. Avoidance may be accomplished either by scheduling grading and tree removal during the non-nesting period (September through February), or if this is not feasible, by conducting a pre-construction nesting bird survey. Provisions of the pre-construction survey and nest avoidance, if necessary, shall include the following:</p>	
	<p>If grading is scheduled during the active nesting period (March through August), a qualified wildlife biologist shall conduct a pre-construction nesting survey no more than 30 days prior to initiation of grading to provide confirmation on presence or absence of active nests in the vicinity.</p>
	<p>If active nests are encountered, species-specific measures shall be prepared by a qualified biologist in consultation with <u>CDFGW</u> and implemented to prevent nest abandonment. At a minimum, grading in the vicinity of the nest shall be deferred until the young birds have fledged. A nest-setback zone shall be established via consultation with <u>CDFGW</u> and USFWS, within which all construction-related disturbances shall be prohibited. The perimeter of the nest-setback zone shall be fenced or adequately demarcated, and construction personnel restricted from the area.</p>
	<p>If permanent avoidance of the nest is not feasible, impacts shall be minimized by prohibiting disturbance within the nest-setback zone until a qualified biologist verifies that the birds have either (a) not begun egg-laying and incubation, or (b) that the juveniles from the nest are foraging independently and capable of independent survival at an earlier date. A survey report by the qualified biologist verifying that the young have fledged shall be submitted to <u>CDFGW</u> and USFWS prior to initiation of grading in the nest-setback zone.</p>
<p><b>Mitigation Measure BIO-1c: Special-Status Species.</b></p>	
<p>Project grading, construction, and staging activities shall not result in impacts to project area wetlands and/or habitat for special-status species known to occur in the vicinity of the site. The applicant's biologist has obtained a verified wetland delineation and has consulted with the regulatory agencies regarding special-status species. The property owner(s) shall continue to coordinate all project activities potentially regulated by State, Federal, and local agencies and shall obtain all necessary permits from <u>CDFGW</u>, Corps, USFWS, and the RWQCB as required by Federal and State law to avoid, minimize or offset impacts to any species listed under either the State or Federal Endangered Species Acts or protected under any other State or Federal law.</p>	

<b>Mitigation Measure BIO-1d: Special-Status Species.</b>	
Sensitive and general habitat features outside the limits of approved grading and development shall be protected by identifying a construction and development boundary on all project plans and prohibiting construction equipment operation within this boundary. The boundary shall be staked and flagged in the field with a highly visible color coded system and all construction and equipment operators shall be instructed to remain outside this no-disturbance boundary for the duration of construction. This measure is in addition to the wildlife exclusion fencing described in Mitigation Measure Bio-1a and applies to the protection of all habitat features outside of the project limits.	
<b>Mitigation Measure BIO-4a: Wildlife Movement and Habitat Connectivity.</b>	
Measures recommended in Mitigation Measures BIO-1a through BIO-1d would serve to protect important natural habitat on the site for wildlife, avoid the potential loss of bird nests, and protect sensitive natural areas. Although wildlife movement and habitat connectivity impacts were found to be less than significant, the following additional provisions shall be implemented to further protect wildlife habitat resources:	
	Fencing that obstructs wildlife movement shall be restricted to building envelopes and wildlife exclusionary fencing along special-status species protection corridors and shall not be allowed elsewhere on the site. Fencing that obstructs wildlife movement contains one or more of the following conditions: lowest horizontal is within 1.5 feet of the ground OR highest horizontal is over 6 feet OR top or bottom wire is barbed OR distance between top wires is less than 10 inches OR it combines with existing structures or fences, even on neighboring parcels, to create an obstacle to wildlife movement.
	Lighting shall be carefully designed and controlled to prevent unnecessary illumination of natural habitat on the site. Lighting shall be restricted to building envelopes, at the minimum level necessary to illuminate roadways and other outdoor areas. Lighting shall generally be kept low to the ground, directed downward, and shielded to prevent illumination into adjacent natural areas.
	Dogs and cats shall be confined to individual residences and the fenced portion of the building envelopes to minimize harassment and loss of wildlife.
	All garbage, recycling, and composting shall be kept in closed containers and latched or locked to prevent wildlife from using the waste as a food source.
<b>Mitigation Measure CULT-2a: Archaeological Resources.</b>	
All final improvements for the proposed project shall be designed and approved by County staff, as well as a County-approved qualified archaeologist, to avoid impacts to prehistoric archaeological site CA-SMA-151 due to the proposed development. To avoid impacts to CA-SMA-151, the archaeological site shall be excluded from disruption during project grading and construction and during project operation (excluding agricultural activities limited to soil disturbance within 6 inches of the existing grade). Avoidance shall be assured by fencing the site perimeter (to be confirmed by a County-approved qualified archaeologist or licensed surveyor prior to any start of grading) to exclude construction equipment, particularly for grading activities. Fencing shall be removed when all construction activities are finished to avoid drawing attention to the site. Additionally, the area within the meets and bounds of identified site CA-SMA-151 shall be included in a deed restriction recorded with the County Recorder's Office that permanently protects this archaeological resource. The deed restriction shall limit uses within the site perimeter of CA-SMA-151 to farming within the existing plow zone (within 6 inches of the existing grade) and require any ground-disturbing activity or development within the cultural site perimeter to be subject to a Coastal Development Permit and meet California Environmental Quality Act (CEQA) requirements for disturbance of a	

mapped cultural resource.	
<b>OR</b>	
<p>If avoidance of site CA-SMA-151 is impractical or infeasible, a County-approved archaeologist shall be retained to conduct test excavations at the site to determine the integrity of its subsurface deposit. Additionally, a mitigation plan shall be developed by a County-approved archaeologist that addresses specific project impacts and outlines appropriate mitigation measures. At a minimum, the mitigation plan shall include the following:</p>	
•	Preparation of a research design that outlines regional issues and how they can be addressed through recovery of materials at CA-SMA-151;
•	Discussion of field, laboratory, and analytical methods;
•	Expected involvement of the Native American community;
•	Actions to be taken in the event that human remains are discovered;
•	Expected schedule for completing mitigation, including submittal of technical report; and
•	Curation plan for recovered materials.
<p>The site may continue to be used for growing crops, provided that no ground-disturbing activity such as ripping, plowing, disking, etc., is allowed to extend deeper than the existing plow zone (approximately 6 inches from the existing grade). Any building on the flake scatter portion of the site must avoid ground-disturbing activity below the plow zone. Prior to placing fill materials on top of the area being covered, an archaeological investigation shall be conducted to gather baseline data about the nature of the site.</p>	
<b>Mitigation Measure CULT-2b: Archaeological Resources.</b>	
<p>A qualified archaeologist, as determined by the County, who can consult with representatives of Native American tribal groups shall monitor future ground-disturbing activities in the monitoring area north of site CA-SMA-151.</p>	
<b>Mitigation Measure CULT-2c: Archaeological Resources.</b>	
<p>In the event that additional subsurface archaeological resources are encountered during the course of grading and/or excavation, all development shall temporarily cease in these areas where such subsurface archaeological resources are encountered until the County Planning Department is contacted and agrees upon a qualified archaeologist to that will be brought onto the project site to properly assess the resources and make recommendations for their disposition. Construction activities may continue in other areas, subject to review by a qualified archaeologist and the approval of the Community Development Director. If any findings are determined to be significant by the archaeologist, they shall be subject to scientific analysis; duration/disposition of archaeological specimens as agreed to by the Native American community, landowner, and the County; and a report prepared according to current professional standards.</p>	
<b>Mitigation Measure CULT-3: Paleontological Resources.</b>	
<p>A qualified paleontologist, as determined by the County, shall monitor future ground-disturbing activities in native soil both on-site and off-site as related to the project. In the event that paleontological resources are discovered during grading and/or excavation, the monitor shall be empowered to temporarily halt or divert construction in the immediate vicinity of the discovery while it is evaluated for significance. Construction activities could continue in other areas. If any findings are determined to be significant by the paleontologist, they shall be subject to scientific analysis, professional museum curation, and a report prepared according to current professional standards.</p>	



**Mitigation Measure GEO-3a: Seismic-Related Ground Failure.**

The final geotechnical investigation for the project shall evaluate the potential for cyclic densification and develop final mitigation measures, as needed to the satisfaction of the County Planning and Building Department's Geotechnical Engineer. Potential mitigation measures may include, but are not limited to: (1) over-excavating and replacing loose sandy soil with compacted engineered fill; (2) applying deep soil compaction techniques, such as DDC, RIC, or equivalent soil densification method; and (3) designing building foundations to accommodate total and differential ground settlement resulting from cyclic densification, as well as post-liquefaction settlement and consolidation ground settlement (if applicable). Approval of the report by the County Planning and Building Department's Geotechnical Engineer shall be obtained prior to issuance of building permits for construction.

**Mitigation Measure GEO-3b: Seismic-Related Ground Failure.**

Additional subsurface exploration using rotary-wash drilling methods and/or Cone Penetration Testing (CPTs) shall be performed to better characterize the subsurface conditions at the sites. Based on the results of subsurface investigation, the potential for soil liquefaction and liquefaction-induced ground failures, such as lateral spreading, post-liquefaction reconsolidation, lurch cracking, and sand boils shall be reevaluated at the site. The final geotechnical investigation report shall provide mitigation measures for liquefaction-induced hazards, to the satisfaction of the County Planning and Building Department's Geotechnical Engineer. Potential mitigation measures may include: (1) improving the soil with deep soil compaction techniques, such as DDC, RIC, or equivalent method, to reduce the liquefaction potential; (2) buildings supported on stiffened shallow foundations (i.e., footings with interlocking grade beams) bearing on a layer of well-compacted fill; (3) buildings supported on deep foundations such as drilled piers, driven piles or propriety piles (i.e., torque-down piles and auger cast piles); and (4) constructing a structural slab that spans supported between columns.

**Mitigation Measure GEO-4: Total and Differential Settlement.**

Additional subsurface exploration using rotary-wash drilling methods and/or CPTs and consolidation laboratory testing shall be performed to better characterize the subsurface conditions and soil properties at the site. Based on the results of subsurface investigation, total and differential ground settlement due to cyclic densification, post-liquefaction reconsolidation, and consolidation settlement due to building loads and fill placement shall be reevaluated. The final geotechnical investigation report shall provide mitigation measures for ground settlement, to the satisfaction of the County Planning and Building Department's Geotechnical Engineer. Potential mitigation measures may include: (1) improving the soil with deep soil compaction techniques, such as DDC, RIC, or equivalent method, to reduce the potential for total and differential ground settlement; (2) supporting the buildings on stiffened shallow foundations (i.e., footings with interlocking grade beams) bearing on a layer of well-compacted fill; (3) supporting the buildings on deep foundations such as drilled piers, driven piles or propriety piles (i.e., torque-down piles and auger cast piles); and (4) constructing a structural slab that spans supported between columns. If deep foundations are selected, they shall be designed to accommodate load conditions resulting from post-liquefaction reconsolidation and consolidation due to the placement of new fill (if applicable).

**Mitigation Measure GEO-6: Expansive Soil.**

The final geotechnical investigation shall provide an estimate of differential movement associated with the shrinking and swelling of the existing on-site expansive soil at the site, to the satisfaction of the County Planning and Building Department's Geotechnical Engineer. Mitigation measures for expansive soils may include designing the buildings to be supported on: (1) shallow foundations that rest on a layer of non-expansive engineered fill; (2) a

deepened spread footing system where the proposed footings gain support at or below the depth of significant seasonal moisture fluctuation and the slab-on-grade floor will be supported on a layer non-expansive fill, as described above; (3) a stiffened foundation system, such as a reinforced concrete or post-tensioned mat, that is capable of resisting the differential movement and soil pressures associated with the expansive soil; or (4) a deep foundation system that transfers the building and slab loads to competent soil beneath the near-surface moderately to highly expansive soil layer.

**Mitigation Measure GEO-7: Pervious Pavements and Other Water/Wastewater Infiltration Systems.**

The near-surface soil may consist of moderately to highly expansive clay and special subgrade preparation, and foundation and pavement design recommendations shall be required to prevent near-surface clayey soil from ponding water, and becoming saturated and weak under the proposed site loading conditions, such as foundation and traffic loads. Final design recommendations for a pervious pavement system shall be submitted as a part of the building permit application prior to system construction and shall allow surface water to percolate through the pavement without causing adverse impacts to new pavements and building foundations due to moisture fluctuations in the near-surface expansive clay, to the satisfaction of the County Planning and Building Department's Geotechnical Engineer. Potential mitigation measures may include: (1) collecting and redirecting surface and subsurface water away from the proposed building foundations; (2) using permeable base material within pavement areas; and (3) installing subdrains to collect and redirect water from areas that could adversely impact building foundations and vehicular pavement to a suitable outlet.

**Mitigation Measure GEO-8: Review and Approval of Final Grading, Drainage, and Foundation Plans and Specifications.**

To ensure the property owner(s)'s geotechnical consultant is given the opportunity to participate in the final design and construction phases of the project, the property owner(s)'s consultant (Registered Geotechnical Engineer and Registered Engineering Geologist) shall review and approve the final grading, drainage, and foundation plans and specifications. Also, upon completion of construction activities, the property owner(s)'s consultant shall provide a final statement to the County Planning and Building Department's Geotechnical Engineer indicating whether the work was performed in accordance with project plans and specifications, and the consultant's recommendations. All mitigations and final design recommendations shall be reviewed and approved by the County prior to issuance of applicable permits and approval of the Final Map.

**Mitigation Measure HAZ-2: Accidental Release of Hazardous Materials.**

Prior to issuance of the grading permit "hard card" by the County Planning and Building Department, a Phase II Environmental Site Assessment (Phase II ESA) shall be performed at the project site to evaluate whether the recognized environmental conditions identified in the Phase I ESA represent an actual release of hazardous substances to soil or groundwater at the project site. To determine whether hazardous substances have migrated onto the project site from the north or northeast, a groundwater sample shall be collected from the agricultural supply well. The Phase II ESA shall include parameters that may be applied to a health risk assessment and remediation (Site Management Plan) if soil is inappropriate for reuse and required to be transported off the project site. The recommendations of the Phase II ESA shall be incorporated into project plans to the satisfaction of the County and in conformance with applicable regulations. If soil is determined to be inappropriate for reuse and required to be transported off the project site, the change to the grading plans shall be considered a modification of the project, subject to the requirements of Condition 1.

**Mitigation Measure HAZ-3: Hazards Associated with Airport Operations.**

Prior to approval of the Parcel Map for the Wellness Center, an avigation easement shall be prepared for the project site, in a form satisfactory to the County Director of Public Works. The avigation easement shall be recorded and shown on the vesting tentative map. With approval of the Wellness Center, it is understood that the Wellness Center property owner(s) and tenants, and their successor's in interest, in perpetuity, acknowledge the project's location adjacent to the Half Moon Bay Airport and the noise level inherent in its present and future use. The following statement shall be included in the details of the avigation easement on the recorded Final Map, prior to the issuance of the Certificate of Occupancy for any residential unit at the subject property:

"This parcel is adjacent to the Half Moon Bay Airport. Residents on this parcel may be subject to inconvenience or discomfort arising from airport operations, including but not limited to noise associated with aircraft landings, take-offs, in air maneuvers and fly-overs, and on-the-ground engine start-ups and taxiing. San Mateo County recognizes the value of the Half Moon Bay Airport to the residents of this County and seeks to protect airport operations from significant interference and disruption. With approval of the Wellness Center owners, it is understood on the part of both the Wellness Center property owner(s) and the Half Moon Bay Airport that airport operations are intended to continue, notwithstanding potential noise complaints received from property owners, residents, staff, guests, and others at the Wellness Center. In the event that the Wellness Center resident(s) or property owner(s) express an inability or unwillingness to accept such noise conditions authorized under the terms of the avigation easement and/or remain unsatisfied with the noise reduction measures being implemented by the airport, the affected resident(s) shall be relocated, with assistance provided by the property owner, to the satisfaction of the Planning and Building Department and/or the Department of Housing. This condition shall be included in all contracts including rental agreements between residents of the Wellness Center and the owners and/or operators of the Wellness Center.

**Mitigation Measure HYDRO-3: Drainage, Erosion, and Siltation.**

Prior to issuance of a grading permit "hard card" by the County, the property owner shall demonstrate compliance with the requirements of the San Francisco Bay Regional Water Quality Control Board (RWQCB). The applicant shall prepare and submit a Stormwater Pollution Prevention Plan (SWPPP) for the proposed project. The applicant's SWPPP shall identify the Best Management Practices (BMPs) to control erosion and sedimentation and provide for treatment of 80 to 85% of post-construction runoff from new impervious areas. Neighborhood- and/or lot-level treatment BMPs shall be emphasized, consistent with San Francisco Bay RWQCB and San Mateo County Water Pollution Prevention Program (SMCWPPP) guidance for National Pollution Discharge Elimination System (NPDES) Phase 2 compliance. These types of BMPs, which may also assist in reducing post-project peak flows, include infiltration basins and trenches, dry wells, rain gardens, on-contour grassy swales, media filters, biofiltration features and grassy swales. BMPs shall be designed in accordance with engineering criteria in the California Stormwater BMPs Handbook or other accepted guidance and designs shall be reviewed and approved by the County prior to issuance of grading or building permits. As discussed under Mitigation Measure HYDRO-5, if lot-level BMPs are accepted by SMCWPPP as a suitable control measure, the applicant shall establish a mechanism for enforcement to assure that BMPs functioning is being maintained as designed. The applicant shall implement the detailed maintenance schedule, which includes monthly inspection of system components, annual weeding, annual replanting, bi-annual cleaning of catch basins, bi-monthly parking lot vacuuming, and daily trash pickup in the parking lots.

Submittal of a project erosion control plan and SWPPP to San Mateo County for review shall be required as part of the building permit application. The erosion control plan shall include components for erosion control, such as phasing of grading, limiting areas of disturbance, designation of restricted-entry zones, diversion of runoff away from disturbed areas, protective measures for sensitive areas, outlet protection, and provision for revegetation or mulching. The plan shall also prescribe treatment measures to trap sediment once it has been mobilized, at a scale and density appropriate to the size and slope of the catchment. These measures typically include inlet protection, straw bale barriers, straw mulching, straw wattles, silt fencing, check dams, terracing, and siltation or sediment ponds. Other aspects of the SWPPP, especially those related to water quality, are discussed below for other mitigation measures.

Landscape plans showing the grassy swales and indicating flow paths shall also be provided by the property owner(s) to the County Planning and Building Department.

**Mitigation Measure HYDRO-4: Alteration of Drainage Patterns Resulting in Increased Flooding.**

The applicant shall submit a drainage report and plans to the County that identify the drainage pathways and the extent of any off-site drainage that flows on-site. How such off-site drainage will be infiltrated on-site or conveyed through the site shall also be detailed. The drainage plan shall provide designs consistent with recognized engineering criteria. The drainage plan shall be reviewed and approved by the County Department of Public Works prior to issuance of grading or building permits.

**Mitigation Measure HYDRO-5: Surface Water Runoff Quality.**

The applicant shall prepare and submit a comprehensive erosion control plan and SWPPP. Potential construction-phase and post-construction pollutant impacts from development can be controlled through preparation and implementation of an erosion control plan and a SWPPP consistent with recommended design criteria, in accordance with the NPDES permitting requirements enforced by SMCWPPP and the San Francisco Bay RWQCB. The erosion control plan forms a significant portion of the construction-phase controls required in a SWPPP, which also details the construction-phase housekeeping measures for control of contaminants other than sediment, as well as the treatment measures and BMPs to be implemented for control of pollutants once the project has been constructed. The SWPPP also sets forth the BMPs monitoring and maintenance schedule and identifies the responsible entities during the construction and post-construction phases.

The applicant's SWPPP shall identify the BMPs that will be used to reduce post-construction peak flows to existing levels in all on-site drainages where construction will occur. Neighborhood- and/or lot-level BMPs to promote infiltration of storm runoff shall be emphasized, consistent with San Francisco Bay RWQCB and SMCWPPP guidance for NPDES Phase 2 permit compliance. These types of BMPs, which may also enhance water quality, include infiltration basins and trenches, dry wells, rain gardens, ~~on-contour grassy swales, media filters,~~ and biofiltration features. BMPs shall be designed in accordance with engineering criteria in the California Stormwater BMPs Handbook or other accepted guidance and designs shall be reviewed and approved by the County prior to issuance of grading or building permits. The applicant shall prepare a clearly defined operations and maintenance plan for water quality and quality control measures. The design and maintenance documents shall include measures to limit vector concerns, especially with respect to control of mosquitoes. The applicant shall identify the responsible parties and provide adequate funding to operate and maintain stormwater improvements (through a HOA, Geological Hazard Abatement District, CSD, CFD or similar organization). If lot-level BMPs are accepted by the County as a suitable control measure, the applicant shall establish a mechanism for enforcement to assure that BMPs functioning is being maintained as designed. The applicant shall also establish financial assurances, as deemed appropriate by the Community

<p>Development Director, enabling the County to maintain the stormwater improvements should the HOA or other entity disband/or cease to perform its maintenance responsibilities.</p>
<p>The SWPPP must also include post-construction water quality BMPs that control pollutant levels to pre-development levels, or to the maximum extent practicable (MEP). To confirm that structural BMPs (e.g., <del>biofiltration features, wet ponds, vegetated swales, constructed wetlands, or media filters</del>) will function as intended, design must be consistent with engineering criteria, as set forth in guidance such as the recently revised California Stormwater BMPs Handbook for New and Redevelopment. These types of structural BMPs are intended to supplement other stormwater management program measures, such as street sweeping and litter control, outreach regarding appropriate fertilizer and pesticide use practices, and managed disposal of hazardous wastes.</p>
<p>The main post-construction water quality enhancement measure indicated by the applicant <del>report</del> is the use of <del>rain gardens (constructed wetlands)</del> <u>bioretention areas and infiltration trenches</u> to control pollutants. Locations and designs of the stormwater infiltration system shall be provided to the County Department of Public Works as part of the grading plans during Final Map review.</p>
<p>Many of the distributed BMPs that could prove useful to address control of post-project peak flows at the lot- and/or neighborhood-level could reasonably be linked with measures to enhance water quality, thereby providing compliance with the NPDES Phase 2 permit requirements as well. For example, downspouts could direct roof runoff to biofiltration features, with percolated stormwater conveyed through subdrains to small infiltration basins or dry wells.</p>
<p>Per Technical Memorandum #1 (TM #1), dated May 15, 2009, prepared by Schaaf and Wheeler (included in Appendix H of the DEIR), Stormwater Best Management Practices should serve several hydrologic and water quality functions, including maximizing groundwater recharge, minimizing quantities of stormwater runoff, and reducing pollutant loadings in stormwater runoff.</p>
<p><b>Mitigation Measure HYDRO-6:</b> Groundwater Quality.</p>
<p>The property owner(s) shall abandon all unused wells on the project site consistent with San Mateo County Environmental Health Division standards and the standards described in the State of California Department of Water Resources Well Standards (Bulletins 74-81 and 74-90).</p>
<p>Any on-site wells left in service <u>for landscaping, gardening, and agricultural uses</u> should meet CDPH criteria for well protection. <del>The property owner(s) shall prepare, if required by the CDPH or County Department of Health Services, a Drinking Water Source Assessment and Protection (DWSAP) application to identify and protect against potential well contaminants.</del></p>
<p><b>Mitigation Measure HYDRO-9:</b> Exposure to Tsunami and Seiche.</p>
<p>In areas subject to tsunami and seiche effects, implementing agencies, including the County Planning and Building Department, shall, where appropriate, ensure that the project incorporates features designed to minimize damage from a tsunami or seiche. Structures should either be placed at elevations above those likely to be adversely affected during a tsunami or seiche event or be designed to allow swift water to flow around, through, or underneath without causing collapse. Other features to be considered in designing projects within areas subject to tsunami or seiche may include using structures as buffer zones, providing front-line defenses, and securing foundations of expendable structures so as not to add to debris in the flowing waters.</p>
<p><b>Mitigation Measure LU-2</b></p>
<p>The property owner(s) shall work with the California Coastal Commission (CCC) to identify and delineate the CCC's jurisdiction over the project site, subject to CCC review and approval. The</p>

<p>property owner(s) shall obtain all necessary approvals from the Coastal Commission prior to the initiation of any development within areas of CCC's jurisdiction.</p>	
<p><b>Mitigation Measure LU-3</b></p>	
<p>The property owner(s) shall comply with the following recommendations of the State Department of Transportation, Division of Aeronautics: (1) Federal Aviation Administration (FAA) Advisory Circular 150/5370-2E "Operational Safety on Airports during Construction" shall be incorporated into the project design specifications; (2) in accordance with Federal Aviation Regulation, Part 77 "Objects Affecting Navigable Airspace," a Notice of Proposed Construction or Alteration (Form 7460-1) shall be provided if required by the FAA; and (3) the location and type of landscape trees shall be selected carefully so they do not become a hazard to aircraft around the airport. Evidence of compliance with these requirements shall be submitted for the review and approval of the County Department of Public Works prior to the issuance of any building permit for project structures.</p>	
<p><b>Mitigation Measure LU-4</b></p>	
<p>The property owner(s) shall comply with the recommendations of the County's Coastside Design Review Officer to implement changes as necessary to the Office Park building to improve consistency with applicable policies of the LCP and the Community Design Manual, to the satisfaction of the County's Coastside Design Review Officer, prior to the-issuance of a building permit for each building.</p>	
<p><b>Mitigation Measure NOISE-1: Construction Noise.</b></p>	
<p>The construction contractor shall implement measures to reduce the noise levels generated by construction equipment operating at the project site during project grading and construction phases. The construction contractor shall include in construction contracts the following requirements or measures shown in the sole discretion of the Community Development Director to be equally effective:</p>	
•	All construction equipment shall be equipped with improved noise muffling, and maintain the manufacturers' recommended noise abatement measures, such as mufflers, engine covers, and engine isolators in good working condition.
•	Stationary construction equipment that generates noise levels in excess of 65 dBA Leq shall be located as far away from existing residential areas as possible. The equipment shall be shielded from noise sensitive receptors by using temporary walls, sound curtains, or other similar devices.
•	Heavy-duty vehicle storage and start-up areas shall be located a minimum of 150 feet from occupied residences where feasible.
•	All equipment shall be turned off if not in use for more than five minutes.
•	Drilled piles or the use of sonic or vibratory pile drivers shall be used instead of impact pile drivers. The driving heads of sonic or vibratory pile drivers shall be screened on all sides by acoustic blankets capable of reducing noise levels by at least 15 dBA.
•	Temporary barriers, such as flexible sound control curtains, shall be erected between the proposed project and the Pillar Ridge Manufactured Home Community to minimize the amount of noise during construction. The temporary noise barriers shall reduce construction-related noise levels at Pillar Ridge Manufactured Home Community to less than 80 dBA Leq.
•	Two weeks prior to the commencement of grading or construction at the project site, notification must be provided to all occupants of the Pillar Ridge Manufactured Home Community that discloses the construction schedule, including the various types of activities and equipment that would be occurring throughout the duration of the grading

	and construction periods.
•	Two weeks prior to the commencement of grading or construction at the project site, an information sign shall be posted at the entrance to each construction site that identifies the permitted construction hours, per Condition 43, and provides a telephone number to call and receive information about the construction project or to report complaints regarding excessive noise levels. The property owner(s) shall rectify all received complaints within 24 hours of their receipt. The County may be required to determine whether a complaint is reasonable and subject to being rectified. Should the property owner(s) consider a complaint to be unreasonable, the property owner(s) shall contact the County Planning Department within 24 hours of the receipt of the complaint to discuss how the complaint should be addressed.
<b>Mitigation Measure PS-1: Police Services.</b>	
The property owner(s) shall provide on-site manned security with clear lines and reliable means of communication to fire and emergency medical response, for the life of each project.	
<b>Mitigation Measure PS-2a: Fire Protection Services.</b>	
When there are partial closures, roadblocks, or encroachments to streets surrounding the project site during the grading and construction periods, flagmen shall be utilized to facilitate the traffic flow.	
<b>Mitigation Measure TRANS-1: Intersection Level of Service and Capacity.</b>	
<p><u>Mitigation Measure TRANS-1</u>  <u>The project's potentially significant impact to AM and PM delays at the intersection of Highway 1 and Cypress Avenue would be mitigated to a less-than-significant level with the installation of a traffic signal or roundabout as described below or other alternate mitigation acceptable to Caltrans and the County.</u></p> <p><u>Signal Warrant Analysis</u>  <u>With the project, the peak hour signal warrant would be met at the intersection of Highway 1 at Cypress Avenue. With signalization, this intersection would operate at LOS C under both the AM and the PM peak hours. Under signalized conditions, the existing roadway geometry would be adequate to handle the anticipated traffic demand. Hexagon states that it is not advisable to install a traffic signal prior to a warrant being met, and the warrant is not met under existing conditions.</u></p> <p><u>Roundabout</u>  <u>The roundabout analysis at the intersection of Highway 1 and Cypress Avenue shows that a one-lane roundabout would operate with acceptable delay and LOS during the AM and PM peak hour under all project conditions on weekdays. During the midday peak hour on Saturday, there would be a need for a by-pass lane for the southbound right-turn traffic in order for the intersection to operate at an acceptable level of service C under existing plus project conditions.</u></p> <p><u>Upon occupancy of the first building and at occupancy of each Office Park building until the warrant is met, the applicant shall submit a warrant study for the Highway 1 and Cypress Avenue intersection to the County to assess whether warrants for mitigation have been met. If and when warrants are met, the applicant shall obtain approval for implementation of any mitigation measure from Caltrans, comply with CEQA requirements, obtain any other necessary permits (e.g., encroachment permit, coastal permit), and install mitigation measure per County requirements.</u></p> <p><u>The property owner(s) shall submit a traffic report to the Department of Public Works prior to the approval by the Community Development Director for each building permit for the initial or every additional 40,000 sq. ft. of space at the Office Park property, until full buildout. In</u></p>	

addition, the property owner(s) shall submit traffic reports bi-annually until full project occupancy of the Office Park project. After full occupancy of the Office Park property, the property owner(s) shall submit one additional traffic report two (2) years after full occupancy to determine if mitigation measures are to be implemented. The report shall be signed and stamped by a Professional Transportation Engineer licensed in the State of California. The report shall identify the current (i.e., data collected within one (1) year of the report) Levels of Service (LOS) at the following intersections:

<b>Intersections</b>	<b>Cumulative without Project (Worst Case LOS)**</b>	<b>If LOS falls BELOW this level, Mitigation Measures are required*:</b>
Cypress Avenue and SR 1	<b>E</b>	<b>E</b>
Airport Street and Stanford/Cornell (Study Intersection 3 of DEIR)	<b>A</b>	<b>C*</b>
Broadway and Prospect Way (Study Intersection 2)	<b>B</b>	<b>C</b>
Prospect Way and Capistrano (Study Intersection 1)	<b>B</b>	<b>C</b>
State Route 1 and South Capistrano (Study Intersection 7)	<b>C</b>	<b>C</b>
State Route 1 and North Capistrano (Study Intersection 8)	<b>C</b>	<b>C</b>
<p>*LOS "trigger" levels for mitigation are based on levels directly below "cumulative with project" worst case LOS** for all intersections except for Airport Street and Stanford/Cornell, where "cumulative with project" worst case LOS is LOS B, while the trigger is LOS C.</p> <p>**Source: "Traffic Analysis of the Revised Access Plan for Big Wave Office Park and Wellness Center," prepared by Hexagon Transportation Consultants, Inc., dated November 17, 2010.</p>		

If the traffic report identifies that the proposed additional floor space at the Office Park property will trigger a lower level of service at the intersection of Cypress Avenue and SR 1, as shown in the table above, then a signal prior to issuance of any additional building permits. If traffic reports reveal that the LOS of any of the other intersections listed above (excluding Cypress Avenue and SR 1) fall below LOS C, it the property owner(s) shall implement the mitigation measures required by the Department of Public Works and the Planning and Building Department, subject to all necessary permitting and environmental review requirements, prior to issuance of any additional building permit. In the event that permits required for roadway or intersection improvements are not obtained, the methods for maintaining LOS C or better shall be achieved by reducing vehicle trips to and from the project site. The proposed method by which this reduction shall be achieved shall be submitted for the review and approval of the Planning and Building Department and the Department of Public Works, prior to issuance of any building permit. Subsequent administrative reviews, per Condition 4, shall demonstrate reduced vehicle trips, to the satisfaction of the Community Development Director.

In addition to LOS evaluations, the traffic reports shall also identify the length of the projected queues on each affected street in Princeton-by-the-Sea at peak commute periods, determine if there have been any impacts to pedestrian and bicyclist safety in the impacted area, take into



<p>consideration potential impacts of on- and off-site improvements to tsunami evacuation routes (including capacity limitations of driveway access improvements) and provide recommended mitigation measures that could be implemented to mitigate identified impacts. The property owner(s) will then be required to implement these mitigation measures, as approved by the Department of Public Works, the Planning and Building Department, Sheriff's Office of Emergency Services, and the Coastside County Fire Protection District, prior to the issuance of any building permit.</p>
<p>The project proposes to direct Office Park traffic away from Cypress Avenue and SR 1. However, should the property owner(s), at a future date, wish to revise the existing ingress/egress improvements for the Office Park project, such future modifications shall require a new Planning and Building Department application, accompanied by a traffic report that is signed and stamped by a Professional Transportation Engineer licensed in the State of California, and shall be subject to Department of Public Works review and approval. The traffic report shall determine the impacts of these modifications to the intersection at Cypress Avenue and SR 1 and shall recommend appropriate mitigation measures to mitigate any significant impacts. If the mitigation measures are accepted by the Department of Public Works, the property owners must install the mitigation measures prior to the issuance of a construction permit for the modifications.</p>
<p><b>Mitigation Measure TRANS-8: Construction.</b></p>
<p>Prior to issuance of grading permits, the property owner(s) shall submit a traffic control plan to the County Department of Public Works for review and approval. All staging during construction shall occur on-site.</p>
<p>All grading and construction traffic shall be scheduled during non-commute hours (weekdays 7:00 a.m. to 9:00 a.m. and 3:00 p.m. to 8:00 p.m.) and shall avoid using Cypress Avenue. Vehicles carrying extra wide and/or long loads (including scrapers, excavators, cat crawlers and extended lift trucks) shall access the site between 9:00 p.m. and midnight and between 11:00 a.m. and 2:00 p.m. only, using the following route to and from the project sites: Capistrano Road-Prospect Way-Broadway-California Avenue-Cornell Avenue-Airport Street.</p>
<p><b>Mitigation Measure UTIL-2: Wastewater Collection System Capacity.</b></p>
<p>The property owner(s) shall either: (a) revise the project design to limit the maximum amount of sewage flow to the Granada Sanitary District sewer system to that which can be accommodated by the existing 8-inch sewer line in Stanford Avenue and the Princeton Pump Station as determined by GSD; or (b) provide necessary expansion of the capacity of the sewer system to accommodate the addition of the expected maximum sewage flow of 26,000 gpd from the project. Any implementation of Mitigation Measure UTIL-2b would require separate CEQA review and permit review. file a complete Application with and obtain a Sewer Connection Permit from GSD. The applicant shall construct an 8-inch gravity sanitary sewer main line complying with GSD standard specifications and details that would run approximately 1,900 ft. north along the Airport Street right-of-way from the existing manhole at Airport Street and Stanford Avenue to the northern limit of the northern parcel (Figure 8). GSD currently estimates the required size of this sewer main to be 8 inches in diameter, but the final system and sizing shall be based on a detailed sewer system design and analyses satisfying GSD.</p>
<p><b>Mitigation Measure UTIL-4: Wastewater Recycling and Disposal Requirements.</b></p>
<p>The property owner(s) shall comply with State Health Department and RWQCB requirements for wastewater recycling.</p>
<p><b>Mitigation Measure UTIL-5: Wastewater and Recycling Water Flow Estimates.</b></p>
<p>The property owner(s) shall revise the project plans and water budget analysis to correct the inconsistencies in the water recycling assumptions and calculations, and shall use this</p>

information to verify: (a) the adequacy of plans for irrigation uses of recycled water; and (b) the sufficiency of the proposed landscape areas for winter season dispersal of all wastewater flow not distributed for toilet flushing. The project's use of treated wastewater for irrigation shall be managed and controlled to prevent changes in existing drainage and hydrology that could adversely impact the biology or hydrology of wetland habitats or result in ponding that could result in health, circulation, or structural stability problems. Prior to issuance of any grading permit, the property owner(s) shall submit a report, prepared by a biologist/hydrologist to determine appropriate recycled watering levels and landscaping to accommodate such watering levels for all seasons that is consistent with the above requirement and the revised water budget analysis. The report shall be submitted for review by the Environmental Health Division, RWQCB, and the County Planning Department. Use of recycled water for irrigation of landscaping and types and amounts of landscaping shall be monitored for two years by a biologist/hydrologist to adjust water levels and landscaping as necessary based on actual site conditions.

**Mitigation Measure UTIL-6: Creek Crossing by Sewage Pipeline.**

The project property owner(s) shall modify the current plans for sewer connection between the north and south parcels to provide either: (a) realignment and profile correction to accommodate a gravity sewer line; or (b) incorporation of a lift station on either the north or south parcel. The location and design of this lift station shall be submitted for the review and approval of permitting agencies.

**Mitigation Measure UTIL-11: Solid Waste Disposal.**

- To facilitate on-site separation and recycling of construction-related wastes, the contractor(s) shall provide temporary waste separation bins on-site during construction. These bins shall be emptied and recycled as a part of the project's regular solid waste disposal program.
- The property owner(s) shall prepare and submit a facility recycling program for the collection and loading of recyclable materials prepared in response to the California Solid Waste Reuse and Recycling Access Act of 1991 as described by the CIWMB, Model Ordinance, Relating to Areas for Collecting and Loading Recyclable Materials in Development Projects, March 31, 1993. Adequate space or enclosures for recycling bins shall be provided at appropriate locations to promote recycling of paper, metal, glass, and other recyclable material.

**Addendum to  
the Big Wave Wellness Center and Office Park Project EIR  
North Parcel Alternative**

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**Attachment F**

**Visual Simulations**



## **Visual Simulation Methodology**

### **Big Wave North Parcel Alternative**

June 2014

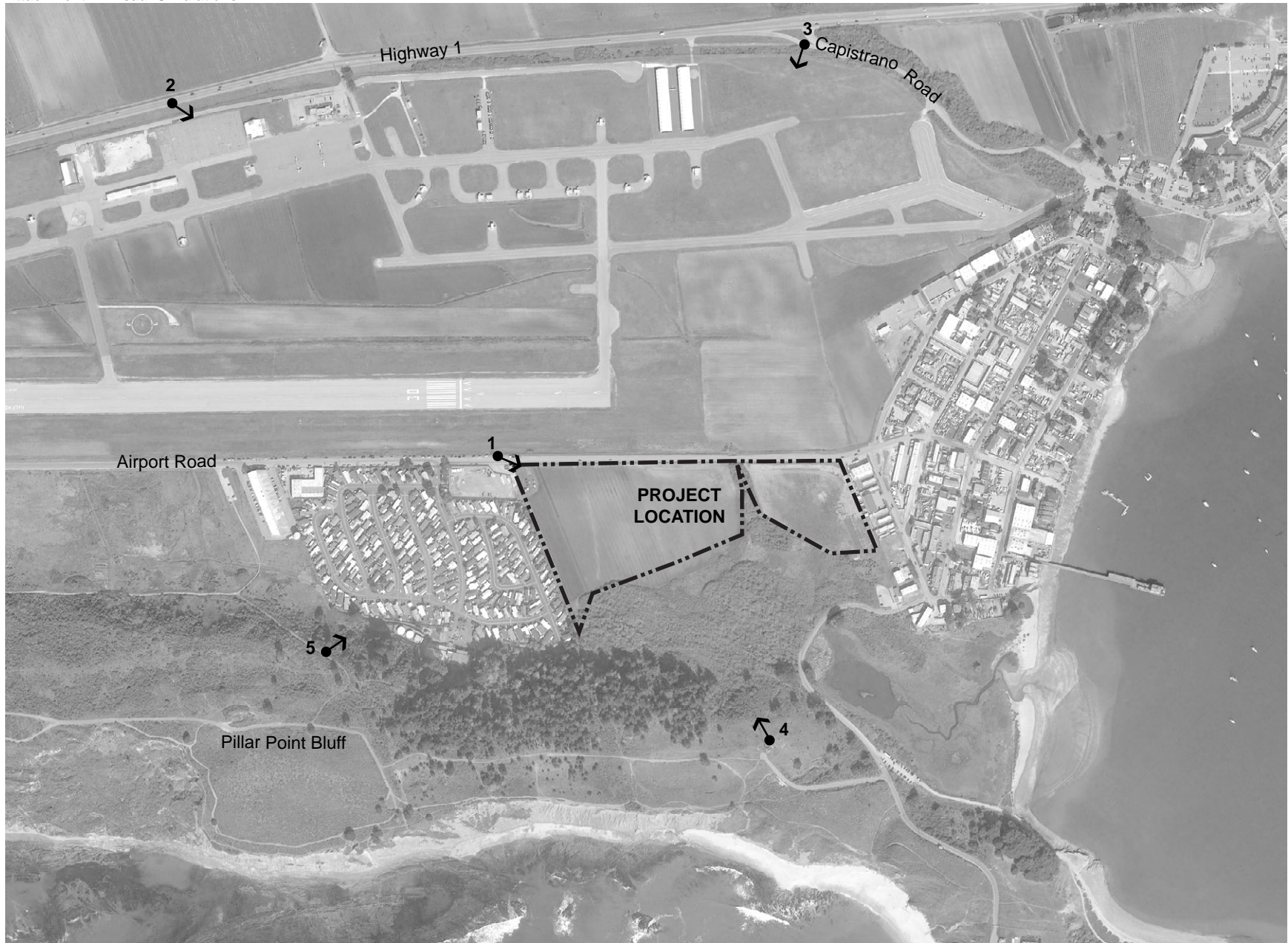
The visual simulations produced by Environmental Vision are the results of an objective computer modeling process; the technical methods employed for producing the computer-generated simulation images are outlined below.

High resolution digital photographs were taken May 7, 2014 using a full-frame digital single lens reflex (SLR) camera with a 50 millimeter (mm) lens which represents a horizontal view angle of approximately 40 degrees. Systematic documentation of photography viewpoint locations included Global Positioning System (GPS) recording and photograph log sheet and basemap annotation. The simulation photographs were selected in consultation with the County and EIR consultant.

Three-dimensional (3-D) computer modeling for the proposed project was developed from project data including existing conditions CAD survey data and site and grading plans (MacLeod and Assoc., dated 2/20/14 and 5/28/14), architectural plans and project description data (received 4/10/14 through 5/29/14), and landscape plans (received 4/10/14 through 5/20/14). Tree height assumptions were provided by the project biologist. The project model was combined with CAD, geographic information system (GIS) topography data and digital aerial photographs of the existing site, viewpoint locations, and both on-and off-site features such as the existing site features and adjacent structures, to produce digital modeling for simulation of the Proposed Project.

For the simulation viewpoints, photograph locations were incorporated into the 3D model based on GPS field data and basemaps, using 5 feet as the eye level. Computer "wireframe" perspective plots were overlaid on the photographs to verify scale and viewpoint locations. Digital visual simulation images were then produced based on computer renderings of the 3-D modeling combined with digital photographs from each viewpoint.

The simulations show new landscaping at approximately 15 years of maturity, with tree heights between 20 and 25 feet.



0 600  
Feet

1 ● → Photograph Viewpoint Location  
and Direction

**Figure 1**  
**Simulation Viewpoint Locations**  
Big Wave North Parcel Alternative



Existing view from Airport Road looking south (VP 1)



Visual simulation of Proposed Project with landscaping at installation  
Refer to Figure 1 for photograph viewpoint locations



Existing view from Airport Road looking south (VP 1)



Visual simulation of Proposed Project with landscaping at 15 years  
Refer to Figure 1 for photograph viewpoint locations



Existing view from Highway 1 at Moss Beach Airport looking south (VP 2)



Visual simulation of Proposed Project with landscaping at installation  
Refer to Figure 1 for photograph viewpoint locations

**Figure 4**  
**Visual Simulation - Highway 1**  
Big Wave North Parcel Alternative





Existing view from Highway 1 at Moss Beach Airport looking south (VP 2)



Visual simulation of Proposed Project with landscaping at 15 years  
Refer to Figure 1 for photograph viewpoint locations



Existing view from Capistrano Road at Highway 1 looking southwest (VP 3)



Visual simulation of Proposed Project with landscaping at installation  
Refer to Figure 1 for photograph viewpoint locations

**Figure 6**  
**Visual Simulation - Capistrano Road**  
Big Wave North Parcel Alternative



Existing view from Capistrano Road at Highway 1 looking southwest (VP 3)



Visual simulation of Proposed Project with landscaping at 15 years

Refer to Figure 1 for photograph viewpoint locations

**Figure 7**  
**Visual Simulation - Capistrano Road**  
Big Wave North Parcel Alternative



Existing view from Pillar Point Radio Tower looking north (VP 4)



Visual simulation of Proposed Project with landscaping at installation  
Refer to Figure 1 for photograph viewpoint locations

**Figure 8**  
**Visual Simulation - Radio Tower**  
Big Wave North Parcel Alternative



Existing view from Pillar Point Radio Tower looking north (VP 4)



Visual simulation of Proposed Project with landscaping at 15 years  
Refer to Figure 1 for photograph viewpoint locations

**Figure 9**  
**Visual Simulation - Radio Tower**  
**Big Wave North Parcel Alternative**



Existing view from Pillar Point Bluff Trail looking east (VP 5)



Visual simulation of Proposed Project with landscaping at installation

Refer to Figure 1 for photograph viewpoint locations

**Figure 10**  
**Visual Simulation - Pillar Point Bluff**  
Big Wave North Parcel Alternative



Existing view from Pillar Point Bluff Trail looking east (VP 5)



Visual simulation of Proposed Project with landscaping at 15 years

Refer to Figure 1 for photograph viewpoint locations

**Figure 11**  
**Visual Simulation - Pillar Point Bluff**  
Big Wave North Parcel Alternative

**Addendum to  
the Big Wave Wellness Center and Office Park Project EIR  
North Parcel Alternative**

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**Attachment G**

**Air Quality Calculations**



## Big Wave NPA Project - Gravel Import San Mateo County, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	189.00	1000sqft	3.21	189,000.00	0
Other Non-Asphalt Surfaces	2.00	Acre	2.00	87,120.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	70
<b>Climate Zone</b>	5			<b>Operational Year</b>	2016
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	641.35	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -  
 Land Use - CPD Override  
 Grading - CPD Override  
 Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	250.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	250.00
tblGrading	AcresOfGrading	0.00	3.60
tblGrading	MaterialImported	0.00	17,300.00
tblLandUse	LotAcreage	4.34	3.21
tblProjectCharacteristics	OperationalYear	2014	2016

## 2.0 Emissions Summary

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## 2.2 Overall Operational

### Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2225	2.0000e-005	1.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.4100e-003	3.4100e-003	1.0000e-005	0.0000	3.6200e-003
Energy	0.0199	0.1809	0.1519	1.0900e-003		0.0137	0.0137		0.0137	0.0137	0.0000	965.5261	965.5261	0.0385	0.0108	969.6833
Mobile	0.9577	1.9175	10.1173	0.0197	1.4875	0.0257	1.5132	0.3990	0.0236	0.4226	0.0000	1,554.4890	1,554.4890	0.0714	0.0000	1,555.9888
Waste						0.0000	0.0000		0.0000	0.0000	35.6797	0.0000	35.6797	2.1086	0.0000	79.9606
Water						0.0000	0.0000		0.0000	0.0000	10.6571	73.8404	84.4974	1.0979	0.0265	115.7801
<b>Total</b>	<b>2.2002</b>	<b>2.0984</b>	<b>10.2711</b>	<b>0.0208</b>	<b>1.4875</b>	<b>0.0395</b>	<b>1.5269</b>	<b>0.3990</b>	<b>0.0374</b>	<b>0.4363</b>	<b>46.3368</b>	<b>2,593.8589</b>	<b>2,640.1957</b>	<b>3.3165</b>	<b>0.0373</b>	<b>2,721.4164</b>

## 2.2 Overall Operational

### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2225	2.0000e-005	1.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.4100e-003	3.4100e-003	1.0000e-005	0.0000	3.6200e-003
Energy	0.0199	0.1809	0.1519	1.0900e-003		0.0137	0.0137		0.0137	0.0137	0.0000	965.5261	965.5261	0.0385	0.0108	969.6833
Mobile	0.9577	1.9175	10.1173	0.0197	1.4875	0.0257	1.5132	0.3990	0.0236	0.4226	0.0000	1,554.4890	1,554.4890	0.0714	0.0000	1,555.9888
Waste						0.0000	0.0000		0.0000	0.0000	35.6797	0.0000	35.6797	2.1086	0.0000	79.9606
Water						0.0000	0.0000		0.0000	0.0000	10.6571	73.8404	84.4974	1.0977	0.0265	115.7631
<b>Total</b>	<b>2.2002</b>	<b>2.0984</b>	<b>10.2711</b>	<b>0.0208</b>	<b>1.4875</b>	<b>0.0395</b>	<b>1.5269</b>	<b>0.3990</b>	<b>0.0374</b>	<b>0.4363</b>	<b>46.3368</b>	<b>2,593.8589</b>	<b>2,640.1957</b>	<b>3.3163</b>	<b>0.0373</b>	<b>2,721.3994</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>	<b>0.11</b>	<b>0.00</b>

## 3.0 Construction Detail

### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/28/2015	5	20	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	2/12/2015	3/11/2015	5	20	
4	Building Construction	Building Construction	3/12/2015	1/27/2016	5	230	
5	Paving	Paving	1/28/2016	2/24/2016	5	20	
6	Architectural Coating	Architectural Coating	2/25/2016	3/23/2016	5	20	

**Acres of Grading (Site Preparation Phase): 3.6**

**Acres of Grading (Grading Phase): 10**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 414,180; Non-Residential Outdoor: 138,060 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	162	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	162	0.38
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Building Construction	Welders	1	8.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	2,163.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	97.00	45.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	19.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

### 3.2 Demolition - 2015

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0451	0.4836	0.3607	4.0000e-004		0.0245	0.0245		0.0229	0.0229	0.0000	37.4413	37.4413	0.0102	0.0000	37.6544
<b>Total</b>	<b>0.0451</b>	<b>0.4836</b>	<b>0.3607</b>	<b>4.0000e-004</b>		<b>0.0245</b>	<b>0.0245</b>		<b>0.0229</b>	<b>0.0229</b>	<b>0.0000</b>	<b>37.4413</b>	<b>37.4413</b>	<b>0.0102</b>	<b>0.0000</b>	<b>37.6544</b>



### 3.2 Demolition - 2015

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	9.3000e-004	8.8300e-003	2.0000e-005	1.3600e-003	1.0000e-005	1.3700e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2638	1.2638	7.0000e-005	0.0000	1.2654
<b>Total</b>	<b>6.0000e-004</b>	<b>9.3000e-004</b>	<b>8.8300e-003</b>	<b>2.0000e-005</b>	<b>1.3600e-003</b>	<b>1.0000e-005</b>	<b>1.3700e-003</b>	<b>3.6000e-004</b>	<b>1.0000e-005</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>1.2638</b>	<b>1.2638</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.2654</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0451	0.4836	0.3607	4.0000e-004		0.0245	0.0245		0.0229	0.0229	0.0000	37.4412	37.4412	0.0102	0.0000	37.6544
<b>Total</b>	<b>0.0451</b>	<b>0.4836</b>	<b>0.3607</b>	<b>4.0000e-004</b>		<b>0.0245</b>	<b>0.0245</b>		<b>0.0229</b>	<b>0.0229</b>	<b>0.0000</b>	<b>37.4412</b>	<b>37.4412</b>	<b>0.0102</b>	<b>0.0000</b>	<b>37.6544</b>

### 3.2 Demolition - 2015

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	9.3000e-004	8.8300e-003	2.0000e-005	1.3600e-003	1.0000e-005	1.3700e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2638	1.2638	7.0000e-005	0.0000	1.2654
<b>Total</b>	<b>6.0000e-004</b>	<b>9.3000e-004</b>	<b>8.8300e-003</b>	<b>2.0000e-005</b>	<b>1.3600e-003</b>	<b>1.0000e-005</b>	<b>1.3700e-003</b>	<b>3.6000e-004</b>	<b>1.0000e-005</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>1.2638</b>	<b>1.2638</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.2654</b>

### 3.3 Site Preparation - 2015

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0932	0.0000	0.0932	0.0500	0.0000	0.0500	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154		0.0142	0.0142	0.0000	18.6506	18.6506	5.5700e-003	0.0000	18.7675
<b>Total</b>	<b>0.0263</b>	<b>0.2845</b>	<b>0.2132</b>	<b>2.0000e-004</b>	<b>0.0932</b>	<b>0.0154</b>	<b>0.1087</b>	<b>0.0500</b>	<b>0.0142</b>	<b>0.0642</b>	<b>0.0000</b>	<b>18.6506</b>	<b>18.6506</b>	<b>5.5700e-003</b>	<b>0.0000</b>	<b>18.7675</b>

### 3.3 Site Preparation - 2015

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0312	0.3759	0.4163	7.9000e-004	0.0180	5.3000e-003	0.0233	4.9500e-003	4.8700e-003	9.8200e-003	0.0000	72.4110	72.4110	6.0000e-004	0.0000	72.4237
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	5.6000e-004	5.3000e-003	1.0000e-005	8.1000e-004	1.0000e-005	8.2000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7583	0.7583	4.0000e-005	0.0000	0.7592
<b>Total</b>	<b>0.0315</b>	<b>0.3765</b>	<b>0.4216</b>	<b>8.0000e-004</b>	<b>0.0188</b>	<b>5.3100e-003</b>	<b>0.0241</b>	<b>5.1700e-003</b>	<b>4.8800e-003</b>	<b>0.0100</b>	<b>0.0000</b>	<b>73.1693</b>	<b>73.1693</b>	<b>6.4000e-004</b>	<b>0.0000</b>	<b>73.1829</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0420	0.0000	0.0420	0.0225	0.0000	0.0225	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154		0.0142	0.0142	0.0000	18.6505	18.6505	5.5700e-003	0.0000	18.7675
<b>Total</b>	<b>0.0263</b>	<b>0.2845</b>	<b>0.2132</b>	<b>2.0000e-004</b>	<b>0.0420</b>	<b>0.0154</b>	<b>0.0574</b>	<b>0.0225</b>	<b>0.0142</b>	<b>0.0367</b>	<b>0.0000</b>	<b>18.6505</b>	<b>18.6505</b>	<b>5.5700e-003</b>	<b>0.0000</b>	<b>18.7675</b>

### 3.3 Site Preparation - 2015

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0312	0.3759	0.4163	7.9000e-004	0.0180	5.3000e-003	0.0233	4.9500e-003	4.8700e-003	9.8200e-003	0.0000	72.4110	72.4110	6.0000e-004	0.0000	72.4237
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	5.6000e-004	5.3000e-003	1.0000e-005	8.1000e-004	1.0000e-005	8.2000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7583	0.7583	4.0000e-005	0.0000	0.7592
<b>Total</b>	<b>0.0315</b>	<b>0.3765</b>	<b>0.4216</b>	<b>8.0000e-004</b>	<b>0.0188</b>	<b>5.3100e-003</b>	<b>0.0241</b>	<b>5.1700e-003</b>	<b>4.8800e-003</b>	<b>0.0100</b>	<b>0.0000</b>	<b>73.1693</b>	<b>73.1693</b>	<b>6.4000e-004</b>	<b>0.0000</b>	<b>73.1829</b>

### 3.4 Grading - 2015

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0383	0.4042	0.2667	3.0000e-004		0.0233	0.0233		0.0214	0.0214	0.0000	28.3860	28.3860	8.4700e-003	0.0000	28.5639
<b>Total</b>	<b>0.0383</b>	<b>0.4042</b>	<b>0.2667</b>	<b>3.0000e-004</b>	<b>0.0655</b>	<b>0.0233</b>	<b>0.0888</b>	<b>0.0337</b>	<b>0.0214</b>	<b>0.0551</b>	<b>0.0000</b>	<b>28.3860</b>	<b>28.3860</b>	<b>8.4700e-003</b>	<b>0.0000</b>	<b>28.5639</b>

### 3.4 Grading - 2015

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	9.3000e-004	8.8300e-003	2.0000e-005	1.3600e-003	1.0000e-005	1.3700e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2638	1.2638	7.0000e-005	0.0000	1.2654
<b>Total</b>	<b>6.0000e-004</b>	<b>9.3000e-004</b>	<b>8.8300e-003</b>	<b>2.0000e-005</b>	<b>1.3600e-003</b>	<b>1.0000e-005</b>	<b>1.3700e-003</b>	<b>3.6000e-004</b>	<b>1.0000e-005</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>1.2638</b>	<b>1.2638</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.2654</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0295	0.0000	0.0295	0.0152	0.0000	0.0152	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0383	0.4042	0.2667	3.0000e-004		0.0233	0.0233		0.0214	0.0214	0.0000	28.3859	28.3859	8.4700e-003	0.0000	28.5639
<b>Total</b>	<b>0.0383</b>	<b>0.4042</b>	<b>0.2667</b>	<b>3.0000e-004</b>	<b>0.0295</b>	<b>0.0233</b>	<b>0.0528</b>	<b>0.0152</b>	<b>0.0214</b>	<b>0.0366</b>	<b>0.0000</b>	<b>28.3859</b>	<b>28.3859</b>	<b>8.4700e-003</b>	<b>0.0000</b>	<b>28.5639</b>

### 3.4 Grading - 2015

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	9.3000e-004	8.8300e-003	2.0000e-005	1.3600e-003	1.0000e-005	1.3700e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2638	1.2638	7.0000e-005	0.0000	1.2654
<b>Total</b>	<b>6.0000e-004</b>	<b>9.3000e-004</b>	<b>8.8300e-003</b>	<b>2.0000e-005</b>	<b>1.3600e-003</b>	<b>1.0000e-005</b>	<b>1.3700e-003</b>	<b>3.6000e-004</b>	<b>1.0000e-005</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>1.2638</b>	<b>1.2638</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.2654</b>

### 3.5 Building Construction - 2015

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3860	3.1682	1.9776	2.8300e-003		0.2233	0.2233		0.2100	0.2100	0.0000	257.4140	257.4140	0.0646	0.0000	258.7703
<b>Total</b>	<b>0.3860</b>	<b>3.1682</b>	<b>1.9776</b>	<b>2.8300e-003</b>		<b>0.2233</b>	<b>0.2233</b>		<b>0.2100</b>	<b>0.2100</b>	<b>0.0000</b>	<b>257.4140</b>	<b>257.4140</b>	<b>0.0646</b>	<b>0.0000</b>	<b>258.7703</b>

### 3.5 Building Construction - 2015

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0690	0.5512	0.8803	1.1100e-003	0.0303	8.5600e-003	0.0389	8.6900e-003	7.8700e-003	0.0166	0.0000	101.4812	101.4812	9.0000e-004	0.0000	101.5002
Worker	0.0408	0.0632	0.6023	1.0800e-003	0.0925	7.9000e-004	0.0933	0.0246	7.2000e-004	0.0253	0.0000	86.2225	86.2225	4.9800e-003	0.0000	86.3270
<b>Total</b>	<b>0.1097</b>	<b>0.6144</b>	<b>1.4826</b>	<b>2.1900e-003</b>	<b>0.1228</b>	<b>9.3500e-003</b>	<b>0.1321</b>	<b>0.0333</b>	<b>8.5900e-003</b>	<b>0.0419</b>	<b>0.0000</b>	<b>187.7037</b>	<b>187.7037</b>	<b>5.8800e-003</b>	<b>0.0000</b>	<b>187.8271</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3860	3.1682	1.9776	2.8300e-003		0.2233	0.2233		0.2100	0.2100	0.0000	257.4137	257.4137	0.0646	0.0000	258.7700
<b>Total</b>	<b>0.3860</b>	<b>3.1682</b>	<b>1.9776</b>	<b>2.8300e-003</b>		<b>0.2233</b>	<b>0.2233</b>		<b>0.2100</b>	<b>0.2100</b>	<b>0.0000</b>	<b>257.4137</b>	<b>257.4137</b>	<b>0.0646</b>	<b>0.0000</b>	<b>258.7700</b>

### 3.5 Building Construction - 2015

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0690	0.5512	0.8803	1.1100e-003	0.0303	8.5600e-003	0.0389	8.6900e-003	7.8700e-003	0.0166	0.0000	101.4812	101.4812	9.0000e-004	0.0000	101.5002
Worker	0.0408	0.0632	0.6023	1.0800e-003	0.0925	7.9000e-004	0.0933	0.0246	7.2000e-004	0.0253	0.0000	86.2225	86.2225	4.9800e-003	0.0000	86.3270
<b>Total</b>	<b>0.1097</b>	<b>0.6144</b>	<b>1.4826</b>	<b>2.1900e-003</b>	<b>0.1228</b>	<b>9.3500e-003</b>	<b>0.1321</b>	<b>0.0333</b>	<b>8.5900e-003</b>	<b>0.0419</b>	<b>0.0000</b>	<b>187.7037</b>	<b>187.7037</b>	<b>5.8800e-003</b>	<b>0.0000</b>	<b>187.8271</b>

### 3.5 Building Construction - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0324	0.2708	0.1758	2.5000e-004		0.0187	0.0187		0.0176	0.0176	0.0000	23.0046	23.0046	5.7100e-003	0.0000	23.1244
<b>Total</b>	<b>0.0324</b>	<b>0.2708</b>	<b>0.1758</b>	<b>2.5000e-004</b>		<b>0.0187</b>	<b>0.0187</b>		<b>0.0176</b>	<b>0.0176</b>	<b>0.0000</b>	<b>23.0046</b>	<b>23.0046</b>	<b>5.7100e-003</b>	<b>0.0000</b>	<b>23.1244</b>



### 3.5 Building Construction - 2016

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.5900e-003	0.0433	0.0742	1.0000e-004	2.7300e-003	6.2000e-004	3.3500e-003	7.8000e-004	5.7000e-004	1.3500e-003	0.0000	9.0436	9.0436	7.0000e-005	0.0000	9.0451
Worker	3.3000e-003	5.1300e-003	0.0488	1.0000e-004	8.3300e-003	7.0000e-005	8.4000e-003	2.2200e-003	6.0000e-005	2.2800e-003	0.0000	7.5110	7.5110	4.1000e-004	0.0000	7.5197
<b>Total</b>	<b>8.8900e-003</b>	<b>0.0485</b>	<b>0.1229</b>	<b>2.0000e-004</b>	<b>0.0111</b>	<b>6.9000e-004</b>	<b>0.0118</b>	<b>3.0000e-003</b>	<b>6.3000e-004</b>	<b>3.6300e-003</b>	<b>0.0000</b>	<b>16.5547</b>	<b>16.5547</b>	<b>4.8000e-004</b>	<b>0.0000</b>	<b>16.5648</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0324	0.2708	0.1758	2.5000e-004		0.0187	0.0187		0.0176	0.0176	0.0000	23.0046	23.0046	5.7100e-003	0.0000	23.1244
<b>Total</b>	<b>0.0324</b>	<b>0.2708</b>	<b>0.1758</b>	<b>2.5000e-004</b>		<b>0.0187</b>	<b>0.0187</b>		<b>0.0176</b>	<b>0.0176</b>	<b>0.0000</b>	<b>23.0046</b>	<b>23.0046</b>	<b>5.7100e-003</b>	<b>0.0000</b>	<b>23.1244</b>

### 3.5 Building Construction - 2016

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.5900e-003	0.0433	0.0742	1.0000e-004	2.7300e-003	6.2000e-004	3.3500e-003	7.8000e-004	5.7000e-004	1.3500e-003	0.0000	9.0436	9.0436	7.0000e-005	0.0000	9.0451
Worker	3.3000e-003	5.1300e-003	0.0488	1.0000e-004	8.3300e-003	7.0000e-005	8.4000e-003	2.2200e-003	6.0000e-005	2.2800e-003	0.0000	7.5110	7.5110	4.1000e-004	0.0000	7.5197
<b>Total</b>	<b>8.8900e-003</b>	<b>0.0485</b>	<b>0.1229</b>	<b>2.0000e-004</b>	<b>0.0111</b>	<b>6.9000e-004</b>	<b>0.0118</b>	<b>3.0000e-003</b>	<b>6.3000e-004</b>	<b>3.6300e-003</b>	<b>0.0000</b>	<b>16.5547</b>	<b>16.5547</b>	<b>4.8000e-004</b>	<b>0.0000</b>	<b>16.5648</b>

### 3.6 Paving - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0209</b>	<b>0.2239</b>	<b>0.1482</b>	<b>2.2000e-004</b>		<b>0.0126</b>	<b>0.0126</b>		<b>0.0116</b>	<b>0.0116</b>	<b>0.0000</b>	<b>21.0138</b>	<b>21.0138</b>	<b>6.3400e-003</b>	<b>0.0000</b>	<b>21.1469</b>

### 3.6 Paving - 2016

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	8.3000e-004	7.9400e-003	2.0000e-005	1.3600e-003	1.0000e-005	1.3700e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2226	1.2226	7.0000e-005	0.0000	1.2240
<b>Total</b>	<b>5.4000e-004</b>	<b>8.3000e-004</b>	<b>7.9400e-003</b>	<b>2.0000e-005</b>	<b>1.3600e-003</b>	<b>1.0000e-005</b>	<b>1.3700e-003</b>	<b>3.6000e-004</b>	<b>1.0000e-005</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>1.2226</b>	<b>1.2226</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.2240</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0209</b>	<b>0.2239</b>	<b>0.1482</b>	<b>2.2000e-004</b>		<b>0.0126</b>	<b>0.0126</b>		<b>0.0116</b>	<b>0.0116</b>	<b>0.0000</b>	<b>21.0138</b>	<b>21.0138</b>	<b>6.3400e-003</b>	<b>0.0000</b>	<b>21.1469</b>

### 3.6 Paving - 2016

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	8.3000e-004	7.9400e-003	2.0000e-005	1.3600e-003	1.0000e-005	1.3700e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2226	1.2226	7.0000e-005	0.0000	1.2240
<b>Total</b>	<b>5.4000e-004</b>	<b>8.3000e-004</b>	<b>7.9400e-003</b>	<b>2.0000e-005</b>	<b>1.3600e-003</b>	<b>1.0000e-005</b>	<b>1.3700e-003</b>	<b>3.6000e-004</b>	<b>1.0000e-005</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>1.2226</b>	<b>1.2226</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.2240</b>

### 3.7 Architectural Coating - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.1995					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6800e-003	0.0237	0.0188	3.0000e-005		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596
<b>Total</b>	<b>3.2032</b>	<b>0.0237</b>	<b>0.0188</b>	<b>3.0000e-005</b>		<b>1.9700e-003</b>	<b>1.9700e-003</b>		<b>1.9700e-003</b>	<b>1.9700e-003</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>3.0000e-004</b>	<b>0.0000</b>	<b>2.5596</b>

### 3.7 Architectural Coating - 2016

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8000e-004	1.0600e-003	0.0101	2.0000e-005	1.7200e-003	1.0000e-005	1.7300e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.5487	1.5487	8.0000e-005	0.0000	1.5505
<b>Total</b>	<b>6.8000e-004</b>	<b>1.0600e-003</b>	<b>0.0101</b>	<b>2.0000e-005</b>	<b>1.7200e-003</b>	<b>1.0000e-005</b>	<b>1.7300e-003</b>	<b>4.6000e-004</b>	<b>1.0000e-005</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>1.5487</b>	<b>1.5487</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.5505</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.1995					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6800e-003	0.0237	0.0188	3.0000e-005		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596
<b>Total</b>	<b>3.2032</b>	<b>0.0237</b>	<b>0.0188</b>	<b>3.0000e-005</b>		<b>1.9700e-003</b>	<b>1.9700e-003</b>		<b>1.9700e-003</b>	<b>1.9700e-003</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>3.0000e-004</b>	<b>0.0000</b>	<b>2.5596</b>

### 3.7 Architectural Coating - 2016

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8000e-004	1.0600e-003	0.0101	2.0000e-005	1.7200e-003	1.0000e-005	1.7300e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.5487	1.5487	8.0000e-005	0.0000	1.5505
<b>Total</b>	<b>6.8000e-004</b>	<b>1.0600e-003</b>	<b>0.0101</b>	<b>2.0000e-005</b>	<b>1.7200e-003</b>	<b>1.0000e-005</b>	<b>1.7300e-003</b>	<b>4.6000e-004</b>	<b>1.0000e-005</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>1.5487</b>	<b>1.5487</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.5505</b>

### 4.0 Operational Detail - Mobile

#### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.9577	1.9175	10.1173	0.0197	1.4875	0.0257	1.5132	0.3990	0.0236	0.4226	0.0000	1,554.4890	1,554.4890	0.0714	0.0000	1,555.9888
Unmitigated	0.9577	1.9175	10.1173	0.0197	1.4875	0.0257	1.5132	0.3990	0.0236	0.4226	0.0000	1,554.4890	1,554.4890	0.0714	0.0000	1,555.9888

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Office Park	2,158.38	309.96	143.64	4,026,286	4,026,286
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
<b>Total</b>	<b>2,158.38</b>	<b>309.96</b>	<b>143.64</b>	<b>4,026,286</b>	<b>4,026,286</b>

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Office Park	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.579021	0.062765	0.176333	0.114336	0.029695	0.004181	0.015593	0.003984	0.002598	0.003702	0.006580	0.000230	0.000982

### 5.0 Energy Detail

#### 4.4 Fleet Mix

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	768.6521	768.6521	0.0348	7.1900e-003	771.6112
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	768.6521	768.6521	0.0348	7.1900e-003	771.6112
NaturalGas Mitigated	0.0199	0.1809	0.1519	1.0900e-003		0.0137	0.0137		0.0137	0.0137	0.0000	196.8740	196.8740	3.7700e-003	3.6100e-003	198.0722
NaturalGas Unmitigated	0.0199	0.1809	0.1519	1.0900e-003		0.0137	0.0137		0.0137	0.0137	0.0000	196.8740	196.8740	3.7700e-003	3.6100e-003	198.0722

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Office Park	3.68928e+006	0.0199	0.1809	0.1519	1.0900e-003		0.0137	0.0137		0.0137	0.0137	0.0000	196.8740	196.8740	3.7700e-003	3.6100e-003	198.0722
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0199</b>	<b>0.1809</b>	<b>0.1519</b>	<b>1.0900e-003</b>		<b>0.0137</b>	<b>0.0137</b>		<b>0.0137</b>	<b>0.0137</b>	<b>0.0000</b>	<b>196.8740</b>	<b>196.8740</b>	<b>3.7700e-003</b>	<b>3.6100e-003</b>	<b>198.0722</b>



## 5.2 Energy by Land Use - NaturalGas

### Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Office Park	3.68928e+006	0.0199	0.1809	0.1519	1.0900e-003		0.0137	0.0137		0.0137	0.0137	0.0000	196.8740	196.8740	3.7700e-003	3.6100e-003	198.0722
<b>Total</b>		<b>0.0199</b>	<b>0.1809</b>	<b>0.1519</b>	<b>1.0900e-003</b>		<b>0.0137</b>	<b>0.0137</b>		<b>0.0137</b>	<b>0.0137</b>	<b>0.0000</b>	<b>196.8740</b>	<b>196.8740</b>	<b>3.7700e-003</b>	<b>3.6100e-003</b>	<b>198.0722</b>

## 5.3 Energy by Land Use - Electricity

### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Office Park	2.64222e+006	768.6521	0.0348	7.1900e-003	771.6112
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>768.6521</b>	<b>0.0348</b>	<b>7.1900e-003</b>	<b>771.6112</b>

### 5.3 Energy by Land Use - Electricity

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Office Park	2.64222e+006	768.6521	0.0348	7.1900e-003	771.6112
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>768.6521</b>	<b>0.0348</b>	<b>7.1900e-003</b>	<b>771.6112</b>

### 6.0 Area Detail

#### 6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.2225	2.0000e-005	1.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.4100e-003	3.4100e-003	1.0000e-005	0.0000	3.6200e-003
Unmitigated	1.2225	2.0000e-005	1.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.4100e-003	3.4100e-003	1.0000e-005	0.0000	3.6200e-003

## 6.2 Area by SubCategory

### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1440					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0784					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8000e-004	2.0000e-005	1.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.4100e-003	3.4100e-003	1.0000e-005	0.0000	3.6200e-003
<b>Total</b>	<b>1.2226</b>	<b>2.0000e-005</b>	<b>1.8000e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>3.4100e-003</b>	<b>3.4100e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>3.6200e-003</b>

### Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1440					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0784					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8000e-004	2.0000e-005	1.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.4100e-003	3.4100e-003	1.0000e-005	0.0000	3.6200e-003
<b>Total</b>	<b>1.2226</b>	<b>2.0000e-005</b>	<b>1.8000e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>3.4100e-003</b>	<b>3.4100e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>3.6200e-003</b>

## 7.0 Water Detail

## 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	84.4974	1.0977	0.0265	115.7631
Unmitigated	84.4974	1.0979	0.0265	115.7801

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Office Park	33.5917 / 20.5884	84.4974	1.0979	0.0265	115.7801
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>84.4974</b>	<b>1.0979</b>	<b>0.0265</b>	<b>115.7801</b>

## 7.2 Water by Land Use

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Office Park	33.5917 / 20.5884	84.4974	1.0977	0.0265	115.7631
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>84.4974</b>	<b>1.0977</b>	<b>0.0265</b>	<b>115.7631</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	35.6797	2.1086	0.0000	79.9606
Unmitigated	35.6797	2.1086	0.0000	79.9606

## 8.2 Waste by Land Use

### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Office Park	175.77	35.6797	2.1086	0.0000	79.9606
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>35.6797</b>	<b>2.1086</b>	<b>0.0000</b>	<b>79.9606</b>

### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Office Park	175.77	35.6797	2.1086	0.0000	79.9606
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>35.6797</b>	<b>2.1086</b>	<b>0.0000</b>	<b>79.9606</b>

## 9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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## 10.0 Vegetation

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No Results.

## Big Wave NPA Project - Gravel Import San Mateo County, Summer

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	189.00	1000sqft	3.21	189,000.00	0
Other Non-Asphalt Surfaces	2.00	Acre	2.00	87,120.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	70
<b>Climate Zone</b>	5			<b>Operational Year</b>	2016
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	641.35	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

#### 1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - CPD Override
- Grading - CPD Override
- Construction Off-road Equipment Mitigation -



Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	250.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	250.00
tblGrading	AcresOfGrading	0.00	3.60
tblGrading	MaterialImported	0.00	17,300.00
tblLandUse	LotAcreage	4.34	3.21
tblProjectCharacteristics	OperationalYear	2014	2016

## 2.0 Emissions Summary

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## 2.2 Overall Operational

### Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.6999	1.9000e-004	0.0200	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0418	0.0418	1.2000e-004		0.0443
Energy	0.1090	0.9909	0.8324	5.9500e-003		0.0753	0.0753		0.0753	0.0753		1,189.1314	1,189.1314	0.0228	0.0218	1,196.3682
Mobile	7.1617	13.0894	72.8279	0.1528	11.4515	0.1896	11.6410	3.0609	0.1742	3.2350		13,293.5023	13,293.5023	0.5818		13,305.7193
<b>Total</b>	<b>13.9706</b>	<b>14.0805</b>	<b>73.6802</b>	<b>0.1588</b>	<b>11.4515</b>	<b>0.2649</b>	<b>11.7164</b>	<b>3.0609</b>	<b>0.2496</b>	<b>3.3104</b>		<b>14,482.6754</b>	<b>14,482.6754</b>	<b>0.6047</b>	<b>0.0218</b>	<b>14,502.1318</b>

### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.6999	1.9000e-004	0.0200	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0418	0.0418	1.2000e-004		0.0443
Energy	0.1090	0.9909	0.8324	5.9500e-003		0.0753	0.0753		0.0753	0.0753		1,189.1314	1,189.1314	0.0228	0.0218	1,196.3682
Mobile	7.1617	13.0894	72.8279	0.1528	11.4515	0.1896	11.6410	3.0609	0.1742	3.2350		13,293.5023	13,293.5023	0.5818		13,305.7193
<b>Total</b>	<b>13.9706</b>	<b>14.0805</b>	<b>73.6802</b>	<b>0.1588</b>	<b>11.4515</b>	<b>0.2649</b>	<b>11.7164</b>	<b>3.0609</b>	<b>0.2496</b>	<b>3.3104</b>		<b>14,482.6754</b>	<b>14,482.6754</b>	<b>0.6047</b>	<b>0.0218</b>	<b>14,502.1318</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/28/2015	5	20	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	2/12/2015	3/11/2015	5	20	
4	Building Construction	Building Construction	3/12/2015	1/27/2016	5	230	
5	Paving	Paving	1/28/2016	2/24/2016	5	20	
6	Architectural Coating	Architectural Coating	2/25/2016	3/23/2016	5	20	

Acres of Grading (Site Preparation Phase): 3.6

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 414,180; Non-Residential Outdoor: 138,060 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	162	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	162	0.38
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Building Construction	Welders	1	8.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	2,163.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	97.00	45.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	19.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

### 3.2 Demolition - 2015

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
<b>Total</b>	<b>4.5083</b>	<b>48.3629</b>	<b>36.0738</b>	<b>0.0399</b>		<b>2.4508</b>	<b>2.4508</b>		<b>2.2858</b>	<b>2.2858</b>		<b>4,127.1934</b>	<b>4,127.1934</b>	<b>1.1188</b>		<b>4,150.6886</b>

### 3.2 Demolition - 2015

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0613	0.0814	0.9125	1.6800e-003	0.1415	1.1600e-003	0.1426	0.0375	1.0600e-003	0.0386		147.6592	147.6592	8.0400e-003		147.8280
<b>Total</b>	<b>0.0613</b>	<b>0.0814</b>	<b>0.9125</b>	<b>1.6800e-003</b>	<b>0.1415</b>	<b>1.1600e-003</b>	<b>0.1426</b>	<b>0.0375</b>	<b>1.0600e-003</b>	<b>0.0386</b>		<b>147.6592</b>	<b>147.6592</b>	<b>8.0400e-003</b>		<b>147.8280</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858	0.0000	4,127.1934	4,127.1934	1.1188		4,150.6886
<b>Total</b>	<b>4.5083</b>	<b>48.3629</b>	<b>36.0738</b>	<b>0.0399</b>		<b>2.4508</b>	<b>2.4508</b>		<b>2.2858</b>	<b>2.2858</b>	<b>0.0000</b>	<b>4,127.1934</b>	<b>4,127.1934</b>	<b>1.1188</b>		<b>4,150.6886</b>

### 3.2 Demolition - 2015

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0613	0.0814	0.9125	1.6800e-003	0.1415	1.1600e-003	0.1426	0.0375	1.0600e-003	0.0386		147.6592	147.6592	8.0400e-003		147.8280
<b>Total</b>	<b>0.0613</b>	<b>0.0814</b>	<b>0.9125</b>	<b>1.6800e-003</b>	<b>0.1415</b>	<b>1.1600e-003</b>	<b>0.1426</b>	<b>0.0375</b>	<b>1.0600e-003</b>	<b>0.0386</b>		<b>147.6592</b>	<b>147.6592</b>	<b>8.0400e-003</b>		<b>147.8280</b>

### 3.3 Site Preparation - 2015

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.6437	0.0000	18.6437	10.0015	0.0000	10.0015			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.744 4	4,111.744 4	1.2275		4,137.522 5
<b>Total</b>	<b>5.2609</b>	<b>56.8897</b>	<b>42.6318</b>	<b>0.0391</b>	<b>18.6437</b>	<b>3.0883</b>	<b>21.7320</b>	<b>10.0015</b>	<b>2.8412</b>	<b>12.8428</b>		<b>4,111.744 4</b>	<b>4,111.744 4</b>	<b>1.2275</b>		<b>4,137.522 5</b>



### 3.3 Site Preparation - 2015

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.7450	72.1971	72.4927	0.1576	3.7424	1.0573	4.7998	1.0232	0.9724	1.9955		15,980.0841	15,980.0841	0.1318		15,982.8513
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0736	0.0977	1.0949	2.0200e-003	0.1698	1.3900e-003	0.1711	0.0450	1.2700e-003	0.0463		177.1910	177.1910	9.6500e-003		177.3936
<b>Total</b>	<b>5.8186</b>	<b>72.2948</b>	<b>73.5876</b>	<b>0.1596</b>	<b>3.9122</b>	<b>1.0587</b>	<b>4.9709</b>	<b>1.0682</b>	<b>0.9736</b>	<b>2.0418</b>		<b>16,157.2751</b>	<b>16,157.2751</b>	<b>0.1414</b>		<b>16,160.2449</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.3897	0.0000	8.3897	4.5007	0.0000	4.5007			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412	0.0000	4,111.7444	4,111.7444	1.2275		4,137.5224
<b>Total</b>	<b>5.2609</b>	<b>56.8897</b>	<b>42.6318</b>	<b>0.0391</b>	<b>8.3897</b>	<b>3.0883</b>	<b>11.4779</b>	<b>4.5007</b>	<b>2.8412</b>	<b>7.3419</b>	<b>0.0000</b>	<b>4,111.7444</b>	<b>4,111.7444</b>	<b>1.2275</b>		<b>4,137.5224</b>

### 3.3 Site Preparation - 2015

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.7450	72.1971	72.4927	0.1576	3.7424	1.0573	4.7998	1.0232	0.9724	1.9955		15,980.0841	15,980.0841	0.1318		15,982.8513
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0736	0.0977	1.0949	2.0200e-003	0.1698	1.3900e-003	0.1711	0.0450	1.2700e-003	0.0463		177.1910	177.1910	9.6500e-003		177.3936
<b>Total</b>	<b>5.8186</b>	<b>72.2948</b>	<b>73.5876</b>	<b>0.1596</b>	<b>3.9122</b>	<b>1.0587</b>	<b>4.9709</b>	<b>1.0682</b>	<b>0.9736</b>	<b>2.0418</b>		<b>16,157.2751</b>	<b>16,157.2751</b>	<b>0.1414</b>		<b>16,160.2449</b>

### 3.4 Grading - 2015

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421		3,129.0158	3,129.0158	0.9341		3,148.6328
<b>Total</b>	<b>3.8327</b>	<b>40.4161</b>	<b>26.6731</b>	<b>0.0298</b>	<b>6.5523</b>	<b>2.3284</b>	<b>8.8807</b>	<b>3.3675</b>	<b>2.1421</b>	<b>5.5096</b>		<b>3,129.0158</b>	<b>3,129.0158</b>	<b>0.9341</b>		<b>3,148.6328</b>

### 3.4 Grading - 2015

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0613	0.0814	0.9125	1.6800e-003	0.1415	1.1600e-003	0.1426	0.0375	1.0600e-003	0.0386		147.6592	147.6592	8.0400e-003		147.8280
<b>Total</b>	<b>0.0613</b>	<b>0.0814</b>	<b>0.9125</b>	<b>1.6800e-003</b>	<b>0.1415</b>	<b>1.1600e-003</b>	<b>0.1426</b>	<b>0.0375</b>	<b>1.0600e-003</b>	<b>0.0386</b>		<b>147.6592</b>	<b>147.6592</b>	<b>8.0400e-003</b>		<b>147.8280</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421	0.0000	3,129.0158	3,129.0158	0.9341		3,148.6328
<b>Total</b>	<b>3.8327</b>	<b>40.4161</b>	<b>26.6731</b>	<b>0.0298</b>	<b>2.9486</b>	<b>2.3284</b>	<b>5.2769</b>	<b>1.5154</b>	<b>2.1421</b>	<b>3.6575</b>	<b>0.0000</b>	<b>3,129.0158</b>	<b>3,129.0158</b>	<b>0.9341</b>		<b>3,148.6328</b>

### 3.4 Grading - 2015

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0613	0.0814	0.9125	1.6800e-003	0.1415	1.1600e-003	0.1426	0.0375	1.0600e-003	0.0386		147.6592	147.6592	8.0400e-003		147.8280
<b>Total</b>	<b>0.0613</b>	<b>0.0814</b>	<b>0.9125</b>	<b>1.6800e-003</b>	<b>0.1415</b>	<b>1.1600e-003</b>	<b>0.1426</b>	<b>0.0375</b>	<b>1.0600e-003</b>	<b>0.0386</b>		<b>147.6592</b>	<b>147.6592</b>	<b>8.0400e-003</b>		<b>147.8280</b>

### 3.5 Building Construction - 2015

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
<b>Total</b>	<b>3.6591</b>	<b>30.0299</b>	<b>18.7446</b>	<b>0.0268</b>		<b>2.1167</b>	<b>2.1167</b>		<b>1.9904</b>	<b>1.9904</b>		<b>2,689.5771</b>	<b>2,689.5771</b>	<b>0.6748</b>		<b>2,703.7483</b>

### 3.5 Building Construction - 2015

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.5820	5.0385	6.7347	0.0105	0.2977	0.0807	0.3784	0.0849	0.0742	0.1591		1,063.7989	1,063.7989	9.3500e-003			1,063.9952
Worker	0.3967	0.5265	5.9005	0.0109	0.9147	7.4900e-003	0.9222	0.2426	6.8500e-003	0.2495		954.8626	954.8626	0.0520			955.9545
<b>Total</b>	<b>0.9787</b>	<b>5.5649</b>	<b>12.6352</b>	<b>0.0214</b>	<b>1.2124</b>	<b>0.0882</b>	<b>1.3006</b>	<b>0.3275</b>	<b>0.0810</b>	<b>0.4085</b>		<b>2,018.6614</b>	<b>2,018.6614</b>	<b>0.0614</b>			<b>2,019.9497</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.5771	2,689.5771	0.6748			2,703.7483
<b>Total</b>	<b>3.6591</b>	<b>30.0299</b>	<b>18.7446</b>	<b>0.0268</b>		<b>2.1167</b>	<b>2.1167</b>		<b>1.9904</b>	<b>1.9904</b>	<b>0.0000</b>	<b>2,689.5771</b>	<b>2,689.5771</b>	<b>0.6748</b>			<b>2,703.7483</b>

### 3.5 Building Construction - 2015

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5820	5.0385	6.7347	0.0105	0.2977	0.0807	0.3784	0.0849	0.0742	0.1591		1,063.7989	1,063.7989	9.3500e-003		1,063.9952
Worker	0.3967	0.5265	5.9005	0.0109	0.9147	7.4900e-003	0.9222	0.2426	6.8500e-003	0.2495		954.8626	954.8626	0.0520		955.9545
<b>Total</b>	<b>0.9787</b>	<b>5.5649</b>	<b>12.6352</b>	<b>0.0214</b>	<b>1.2124</b>	<b>0.0882</b>	<b>1.3006</b>	<b>0.3275</b>	<b>0.0810</b>	<b>0.4085</b>		<b>2,018.6614</b>	<b>2,018.6614</b>	<b>0.0614</b>		<b>2,019.9497</b>

### 3.5 Building Construction - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
<b>Total</b>	<b>3.4062</b>	<b>28.5063</b>	<b>18.5066</b>	<b>0.0268</b>		<b>1.9674</b>	<b>1.9674</b>		<b>1.8485</b>	<b>1.8485</b>		<b>2,669.2864</b>	<b>2,669.2864</b>	<b>0.6620</b>		<b>2,683.1890</b>

### 3.5 Building Construction - 2016

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5238	4.3986	6.2251	0.0105	0.2978	0.0648	0.3626	0.0849	0.0596	0.1445		1,052.8124	1,052.8124	8.2700e-003		1,052.9860
Worker	0.3580	0.4744	5.3279	0.0109	0.9147	7.0700e-003	0.9218	0.2426	6.4800e-003	0.2491		923.7638	923.7638	0.0477		924.7647
<b>Total</b>	<b>0.8817</b>	<b>4.8730</b>	<b>11.5530</b>	<b>0.0214</b>	<b>1.2125</b>	<b>0.0719</b>	<b>1.2844</b>	<b>0.3275</b>	<b>0.0661</b>	<b>0.3936</b>		<b>1,976.5761</b>	<b>1,976.5761</b>	<b>0.0559</b>		<b>1,977.7507</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
<b>Total</b>	<b>3.4062</b>	<b>28.5063</b>	<b>18.5066</b>	<b>0.0268</b>		<b>1.9674</b>	<b>1.9674</b>		<b>1.8485</b>	<b>1.8485</b>	<b>0.0000</b>	<b>2,669.2864</b>	<b>2,669.2864</b>	<b>0.6620</b>		<b>2,683.1890</b>

### 3.5 Building Construction - 2016

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5238	4.3986	6.2251	0.0105	0.2978	0.0648	0.3626	0.0849	0.0596	0.1445		1,052.8124	1,052.8124	8.2700e-003		1,052.9860
Worker	0.3580	0.4744	5.3279	0.0109	0.9147	7.0700e-003	0.9218	0.2426	6.4800e-003	0.2491		923.7638	923.7638	0.0477		924.7647
<b>Total</b>	<b>0.8817</b>	<b>4.8730</b>	<b>11.5530</b>	<b>0.0214</b>	<b>1.2125</b>	<b>0.0719</b>	<b>1.2844</b>	<b>0.3275</b>	<b>0.0661</b>	<b>0.3936</b>		<b>1,976.5761</b>	<b>1,976.5761</b>	<b>0.0559</b>		<b>1,977.7507</b>

### 3.6 Paving - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.0898</b>	<b>22.3859</b>	<b>14.8176</b>	<b>0.0223</b>		<b>1.2610</b>	<b>1.2610</b>		<b>1.1601</b>	<b>1.1601</b>		<b>2,316.3767</b>	<b>2,316.3767</b>	<b>0.6987</b>		<b>2,331.0495</b>



### 3.6 Paving - 2016

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0554	0.0734	0.8239	1.6800e-003	0.1415	1.0900e-003	0.1426	0.0375	1.0000e-003	0.0385		142.8501	142.8501	7.3700e-003		143.0048
<b>Total</b>	<b>0.0554</b>	<b>0.0734</b>	<b>0.8239</b>	<b>1.6800e-003</b>	<b>0.1415</b>	<b>1.0900e-003</b>	<b>0.1426</b>	<b>0.0375</b>	<b>1.0000e-003</b>	<b>0.0385</b>		<b>142.8501</b>	<b>142.8501</b>	<b>7.3700e-003</b>		<b>143.0048</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.0898</b>	<b>22.3859</b>	<b>14.8176</b>	<b>0.0223</b>		<b>1.2610</b>	<b>1.2610</b>		<b>1.1601</b>	<b>1.1601</b>	<b>0.0000</b>	<b>2,316.3767</b>	<b>2,316.3767</b>	<b>0.6987</b>		<b>2,331.0495</b>

### 3.6 Paving - 2016

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0554	0.0734	0.8239	1.6800e-003	0.1415	1.0900e-003	0.1426	0.0375	1.0000e-003	0.0385		142.8501	142.8501	7.3700e-003			143.0048
<b>Total</b>	<b>0.0554</b>	<b>0.0734</b>	<b>0.8239</b>	<b>1.6800e-003</b>	<b>0.1415</b>	<b>1.0900e-003</b>	<b>0.1426</b>	<b>0.0375</b>	<b>1.0000e-003</b>	<b>0.0385</b>		<b>142.8501</b>	<b>142.8501</b>	<b>7.3700e-003</b>			<b>143.0048</b>

### 3.7 Architectural Coating - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Archit. Coating	319.9541					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332			282.1449
<b>Total</b>	<b>320.3225</b>	<b>2.3722</b>	<b>1.8839</b>	<b>2.9700e-003</b>		<b>0.1966</b>	<b>0.1966</b>		<b>0.1966</b>	<b>0.1966</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0332</b>			<b>282.1449</b>

### 3.7 Architectural Coating - 2016

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0701	0.0929	1.0436	2.1300e-003	0.1792	1.3800e-003	0.1806	0.0475	1.2700e-003	0.0488		180.9434	180.9434	9.3400e-003		181.1395
<b>Total</b>	<b>0.0701</b>	<b>0.0929</b>	<b>1.0436</b>	<b>2.1300e-003</b>	<b>0.1792</b>	<b>1.3800e-003</b>	<b>0.1806</b>	<b>0.0475</b>	<b>1.2700e-003</b>	<b>0.0488</b>		<b>180.9434</b>	<b>180.9434</b>	<b>9.3400e-003</b>		<b>181.1395</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	319.9541					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
<b>Total</b>	<b>320.3225</b>	<b>2.3722</b>	<b>1.8839</b>	<b>2.9700e-003</b>		<b>0.1966</b>	<b>0.1966</b>		<b>0.1966</b>	<b>0.1966</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0332</b>		<b>282.1449</b>

### 3.7 Architectural Coating - 2016

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0701	0.0929	1.0436	2.1300e-003	0.1792	1.3800e-003	0.1806	0.0475	1.2700e-003	0.0488		180.9434	180.9434	9.3400e-003		181.1395
<b>Total</b>	<b>0.0701</b>	<b>0.0929</b>	<b>1.0436</b>	<b>2.1300e-003</b>	<b>0.1792</b>	<b>1.3800e-003</b>	<b>0.1806</b>	<b>0.0475</b>	<b>1.2700e-003</b>	<b>0.0488</b>		<b>180.9434</b>	<b>180.9434</b>	<b>9.3400e-003</b>		<b>181.1395</b>

### 4.0 Operational Detail - Mobile

#### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.1617	13.0894	72.8279	0.1528	11.4515	0.1896	11.6410	3.0609	0.1742	3.2350		13,293.5023	13,293.5023	0.5818		13,305.7193
Unmitigated	7.1617	13.0894	72.8279	0.1528	11.4515	0.1896	11.6410	3.0609	0.1742	3.2350		13,293.5023	13,293.5023	0.5818		13,305.7193

#### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Office Park	2,158.38	309.96	143.64	4,026,286	4,026,286
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
<b>Total</b>	<b>2,158.38</b>	<b>309.96</b>	<b>143.64</b>	<b>4,026,286</b>	<b>4,026,286</b>

#### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Office Park	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.579021	0.062765	0.176333	0.114336	0.029695	0.004181	0.015593	0.003984	0.002598	0.003702	0.006580	0.000230	0.000982

#### 5.0 Energy Detail

##### 4.4 Fleet Mix

Historical Energy Use: N

#### 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1090	0.9909	0.8324	5.9500e-003		0.0753	0.0753		0.0753	0.0753		1,189.1314	1,189.1314	0.0228	0.0218	1,196.3682
NaturalGas Unmitigated	0.1090	0.9909	0.8324	5.9500e-003		0.0753	0.0753		0.0753	0.0753		1,189.1314	1,189.1314	0.0228	0.0218	1,196.3682

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Office Park	10107.6	0.1090	0.9909	0.8324	5.9500e-003		0.0753	0.0753		0.0753	0.0753		1,189.1314	1,189.1314	0.0228	0.0218	1,196.3682
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.1090</b>	<b>0.9909</b>	<b>0.8324</b>	<b>5.9500e-003</b>		<b>0.0753</b>	<b>0.0753</b>		<b>0.0753</b>	<b>0.0753</b>		<b>1,189.1314</b>	<b>1,189.1314</b>	<b>0.0228</b>	<b>0.0218</b>	<b>1,196.3682</b>

## 5.2 Energy by Land Use - NaturalGas

### Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Office Park	10.1076	0.1090	0.9909	0.8324	5.9500e-003		0.0753	0.0753		0.0753	0.0753		1,189.1314	1,189.1314	0.0228	0.0218	1,196.3682
<b>Total</b>		<b>0.1090</b>	<b>0.9909</b>	<b>0.8324</b>	<b>5.9500e-003</b>		<b>0.0753</b>	<b>0.0753</b>		<b>0.0753</b>	<b>0.0753</b>		<b>1,189.1314</b>	<b>1,189.1314</b>	<b>0.0228</b>	<b>0.0218</b>	<b>1,196.3682</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.6999	1.9000e-004	0.0200	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0418	0.0418	1.2000e-004		0.0443
Unmitigated	6.6999	1.9000e-004	0.0200	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0418	0.0418	1.2000e-004		0.0443

## 6.2 Area by SubCategory

### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7889					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.9090					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.9500e-003	1.9000e-004	0.0200	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0418	0.0418	1.2000e-004		0.0443
<b>Total</b>	<b>6.6999</b>	<b>1.9000e-004</b>	<b>0.0200</b>	<b>0.0000</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>0.0418</b>	<b>0.0418</b>	<b>1.2000e-004</b>		<b>0.0443</b>

### Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7889					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.9090					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.9500e-003	1.9000e-004	0.0200	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0418	0.0418	1.2000e-004		0.0443
<b>Total</b>	<b>6.6999</b>	<b>1.9000e-004</b>	<b>0.0200</b>	<b>0.0000</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>0.0418</b>	<b>0.0418</b>	<b>1.2000e-004</b>		<b>0.0443</b>

## 7.0 Water Detail



## 7.1 Mitigation Measures Water

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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## 10.0 Vegetation

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No Results.

**Addendum to  
the Big Wave Wellness Center and Office Park Project EIR  
North Parcel Alternative**

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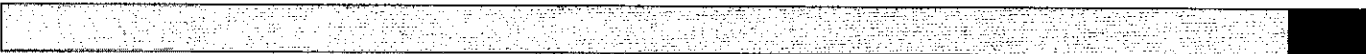
**Attachment H**

**EECAP Development Checklist**

# EECAP DEVELOPMENT CHECKLIST

## EECAP DEVELOPMENT CHECKLIST

Measure	Description & Performance Criteria	Compliance			
		Complies	Does Not Comply	N/A	See Discussion
1.1	Energy Upgrade California			✓	
1.2	Residential Energy Efficiency Financing			✓	
1.3	Low-Income Weatherization			✓	
1.4	Tree Planting	✓			
1.5	Propane Switch			✓	
2.1	Commercial and Industrial Efficiency			✓	
2.2	Commercial Financing			✓	
2.3	Institutional Energy Efficiency			✓	
3.1	Green Building Ordinance				<p>✓ LEED Cal green is required by County.</p>



# EECAP DEVELOPMENT CHECKLIST

Measure	Description & Performance Criteria	Compliance			
		Complies	Does Not Comply	N/A	See Discussion
3.2	Green Building Incentives	Comply with the Green Building Ordinance and achieve CALGreen Tier 1 energy efficiency standards, regardless of applicability of the Green Building Ordinance.	✓		
3.3	Urban Heat Island	Install shading, "cool" surfaces design, and/or open-grid paving to reduce hardscape through strategies such as interlocking concrete pavement, stones, or blocks.	✓ <i>pavers</i>		
3.6	Regional Energy Efficiency Efforts	Procure and install energy-efficient equipment, through programs such as bulk-purchasing, to achieve a minimum of 8% energy savings.	✓		
4.1	Solar PV Incentives	Install a solar photovoltaic system, using private resources and/or local or state incentives, including County incentives, and state rebates through the California Solar Initiative.	✓		
4.2	Solar Water Heater Incentives	Install solar water heaters, using private resources and/or local or state incentives, including County incentives and state rebates through the California Solar Initiative.			✓ <i>solar panels to provide energy for a variety of uses.</i>
4.3	<u>Pre-Wired Solar Homes</u>	Pre-wire and pre-plumb for solar thermal or PV systems.		✓	
4.4	Pilot Solar Program	Install a solar photovoltaic system through a development project program.	✓		
4.5	Renewable Financing	Install a solar photovoltaic system or solar water heater using financing programs such as power purchase agreements or Property Assessed Clean Energy.	✓		



# EECAP DEVELOPMENT CHECKLIST

Measure	Description & Performance Criteria	Compliance			
		Complies	Does Not Comply	N/A	See Discussion
4.7	Incentivize Wind Energy			✓	
4.9	Emissions Offset Programs			✓ solar	
5.1	General Plan and Zoning Updates	✓			mixed use its on bus route. helps job/hsg imbalance
5.3	Pedestrian Design	✓			coastal trail expansion
6.1	Neighborhood Retail			✓	wellness centr
6.2	Traffic Calming in New Construction			✓	will install round about/ signal if warrant is met.
6.4	Expand Transit			✓	on site shuttle services
7.1	Parking Ordinance			✓	parking provided based on intensity of future tenant use.
7.3	Unbundled Parking			✓	County does not monitor parking in the area.

# EECAP DEVELOPMENT CHECKLIST

Measure	Description & Performance Criteria	Compliance			
		Complies	Does Not Comply	N/A	See Discussion
8.1	Employee Commute	Provide a Commute Trip Reduction program to discourage single-occupancy vehicle trips and encourage other modes of alternative transportation.	✓		
8.2	Workplace Parking	Implement workplace parking pricing programs.			✓ <i>residents don't live tenants not selected yet.</i>
8.3	Employer Transit Subsidies	Provide transit subsidies or transit passes to employees.	✓		
8.4	Work Shuttles	Expand worker shuttle programs.	✓		<i>Shuttle for wellness center residents</i>
10.1	Low Carbon Fuel Infrastructure	Install electric vehicle charging stations or provide neighborhood electric vehicle networks.			
13.1	Use of Recycled Materials	Incorporate a minimum of 15% recycled materials into construction.	✓		LEED
13.2	Zero Waste	Provide trash, recycling, and composting collection enclosures.	✓		
14.1	Smart Water Meters	Install smart water meters.	✓		
14.2	Water Reuse	Use grey, rain, and recycled water for landscaping or agricultural purposes.			✓ <i>Water use at Office Park to be monitored and managed by B.W. Water.</i>
15.1	Construction Idling	Construction equipment for new development to comply with best management practices from Bay Area Air Quality Management District guidance.	✓		<i>see Air Quality mit. measures</i>
15.2	Electrification in New Homes	Provide outdoor electrical outlets for charging outdoor household equipment.			✓



**Addendum to  
the Big Wave Wellness Center and Office Park Project EIR  
North Parcel Alternative**

---

**Attachment I**

**Geology Report**



April 28, 2014

Jeff Peck  
Big Wave Project  
P.O. Box 1901  
El Granada, CA 94018

Subject: Fault Trench Study: Big Wave Project, Half Moon Bay.

Dear Mr. Peck:

This report presents the results of a fault trench study we performed to evaluate the fault rupture risk on the Big Wave site in the Princeton area of Half Moon Bay, California. The site location is shown in Figure 1. The project will consist of a clustered building development in the large agricultural field between the road to the northeast, and the trees to the southwest. Figure 2 shows the field, as well as the fault trench location. Figure 2 also includes the eastern boundary of the Special Studies Zone, which is 500 east of the mapped trace of the Seal Cove fault. Figure 3 shows the site location in relation to the mapped trace of the Seal Cove fault. As Figures 2 and 3 show, the project site is well away from the mapped trace of the fault, but since it falls within a portion of the 500-foot-wide Special Studies Zone, this fault trench study was performed.

The fault trench was excavated over a two-day period and logged across its entire length on the second day, November 6, 2012. The trench was 490 feet long, 3 feet wide, and about 9 feet deep. Groundwater was encountered at a depth of about 7 feet, making it necessary to continually drain the trench with a sump pump. Hydraulic shores were used to stabilize the trench during continuous logging.

Figure 4 shows the general location of the trench, looking east. Note the power pole to the left. This corresponds to the northern power pole visible in Figure 2. The remaining three photographs in Figures 4 and 5 show the well-developed soil horizon and include views of a distinctive orange and black lens (upper photograph, Figure 5). Because there was essentially no change in the appearance of the soil horizon across the entire trench, additional photographs would be redundant. As Figure 6 shows, the trench revealed 2 feet of dark brown clay topsoil over 2 feet of orange-brown sandy clay. The sandy clay changes fairly abruptly to a greenish gray coarse sand. At the base of the coarse sand is a distinctly laminated lens of clay and sand, typically 2 to 4 inches thick. This is an excellent marker bed for evaluating any fault features that may exist. The bottom 3 feet of the trench contained an olive-brown sandy clay. The marker bed appeared along the entire length of the trench, as logged.

If there had been any fault activity intersecting the trench, the marker bed would have shown such activity. The photograph in Figure 5 is representative of the entire length of the marker bed. It is finely and distinctly laminated. The black layer appears in a lens of coarse sand that is less than 1 inch thick. The fact that the marker bed is undisturbed along the length of the trench indicates a lack of fault activity. In actuality, the marker bed is disturbed in one location. About 100 feet from the western end of the trench, the marker bed is upwarped in what appears to be a liquefaction feature. This feature appears on the north side of the trench wall, but is completely absent on the south side of the trench wall. The lack of disturbance on the south side of the trench indicates a discreet feature that cannot be indicative of fault movement.





The age of the materials comprising the marker bed could not be directly determined. There were no traces of organic matter or charcoal visible, even with a hand lens. The black coloring of the sand may be a remnant of a swampy environment long ago. The USGS geologic map of San Mateo County, Open File Report 98-137, identifies the geology of the area as a Pleistocene-age alluvial fan and stream terrace deposit consisting of poorly consolidated gravel, sand, and silt. Pleistocene deposits are, by definition, between 11,700 and 2.6 million years old. The soils exposed in the trench appear to match the published description, and the well-developed soil horizon indicates an age of at least a few thousand years.

The Seal Cove fault has been studied by way of fault trenching in the area. For example, a fault trench was excavated just north of the adjacent mobile home park. These studies indicated that the most recent sizeable seismic event on the fault occurred between 600 and 730 years ago. This event appears to have resulted in about 3 meters of offset. Both the previous studies and the Special Studies Zone map (Figure 3) indicate that the fault trace is located within the steep scarp to the west. No fault traces have ever been identified in the flat land to the east of the scarp.

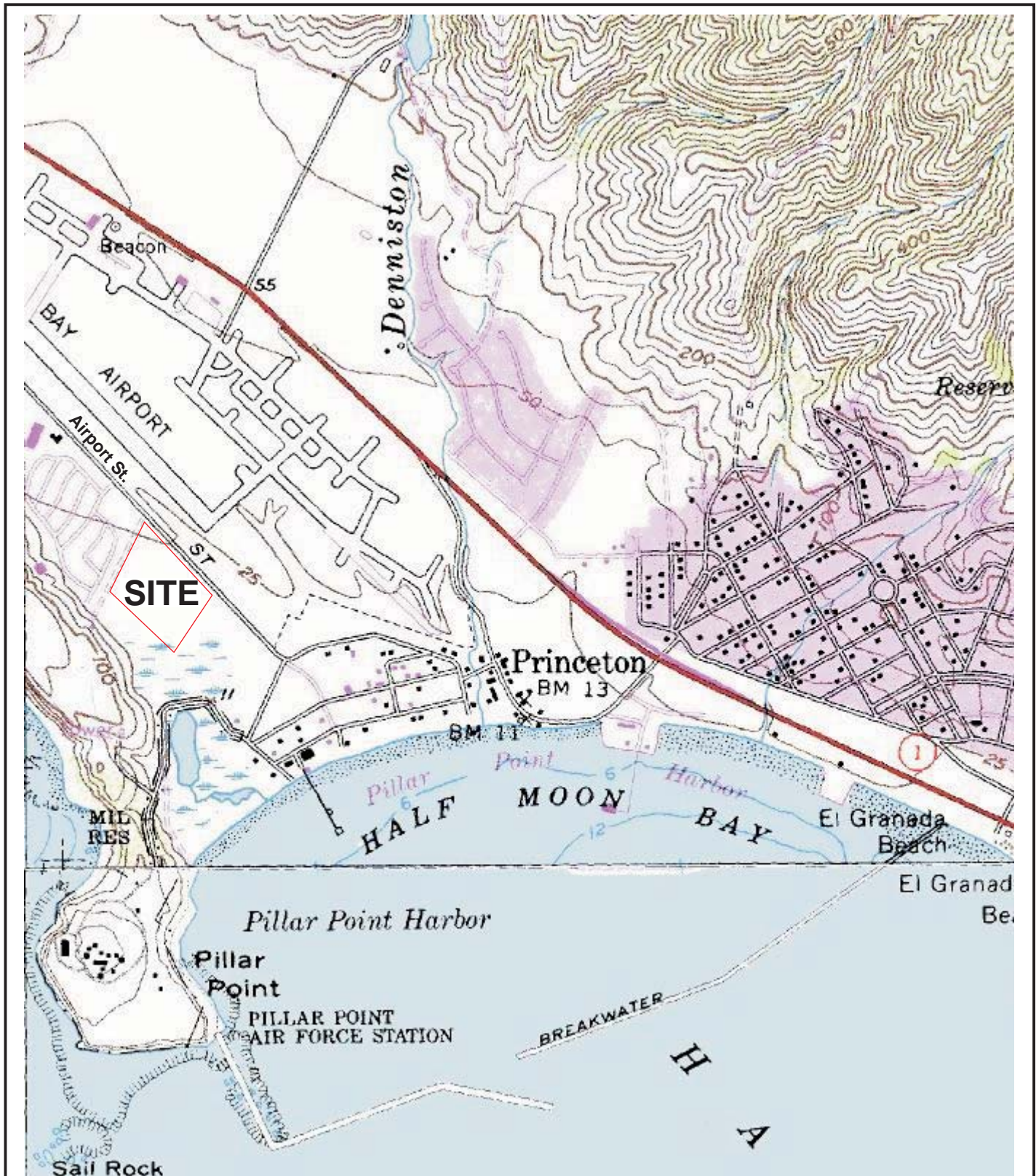
In conclusion, all indications are that the Seal Cove fault does not cross the proposed project site, and no fault offsets are necessary. The fault is likely located as shown in Figure 3, about 500 feet west of the property. The distinct marker bed that was revealed in the trench is clearly undisturbed by fault activity and is older than the most recent fault activity.

There are other potential geologic hazards that may affect the site, mainly liquefaction potential. In addition, a subsurface geotechnical study should be performed to arrive at recommendations for foundation design and site drainage design. To obtain subsurface information, we recommend several cone penetration tests (CPTs) as well as several soil borings. There are 9 buildings proposed for this project. We recommend a CPT at the center of each building footprint, for a total of 9 CPTs. Each CPT should extend at least 50 feet below ground surface. If very poor soil conditions still exist at a depth of 50 feet, the project geologist may opt to go deeper. We also recommend 2 soil borings at each building site, for a total of 18 soil borings. Each soil boring should be approximately 20 feet deep. Between the 9 CPTs and 18 soil borings, ample site coverage should be achieved.

If there are any questions regarding the contents of this letter, please do not hesitate to call at (650) 728-3590.

Yours,  
Sigma Prime Geosciences

Charles Kissick, C.E.G., P.E.



Sigma Prime Geosciences, Inc.

Figure	1
Date:	11/26/12
Job No.:	12-154

### Location Map

Big Wave Project, Half Moon Bay

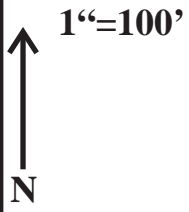
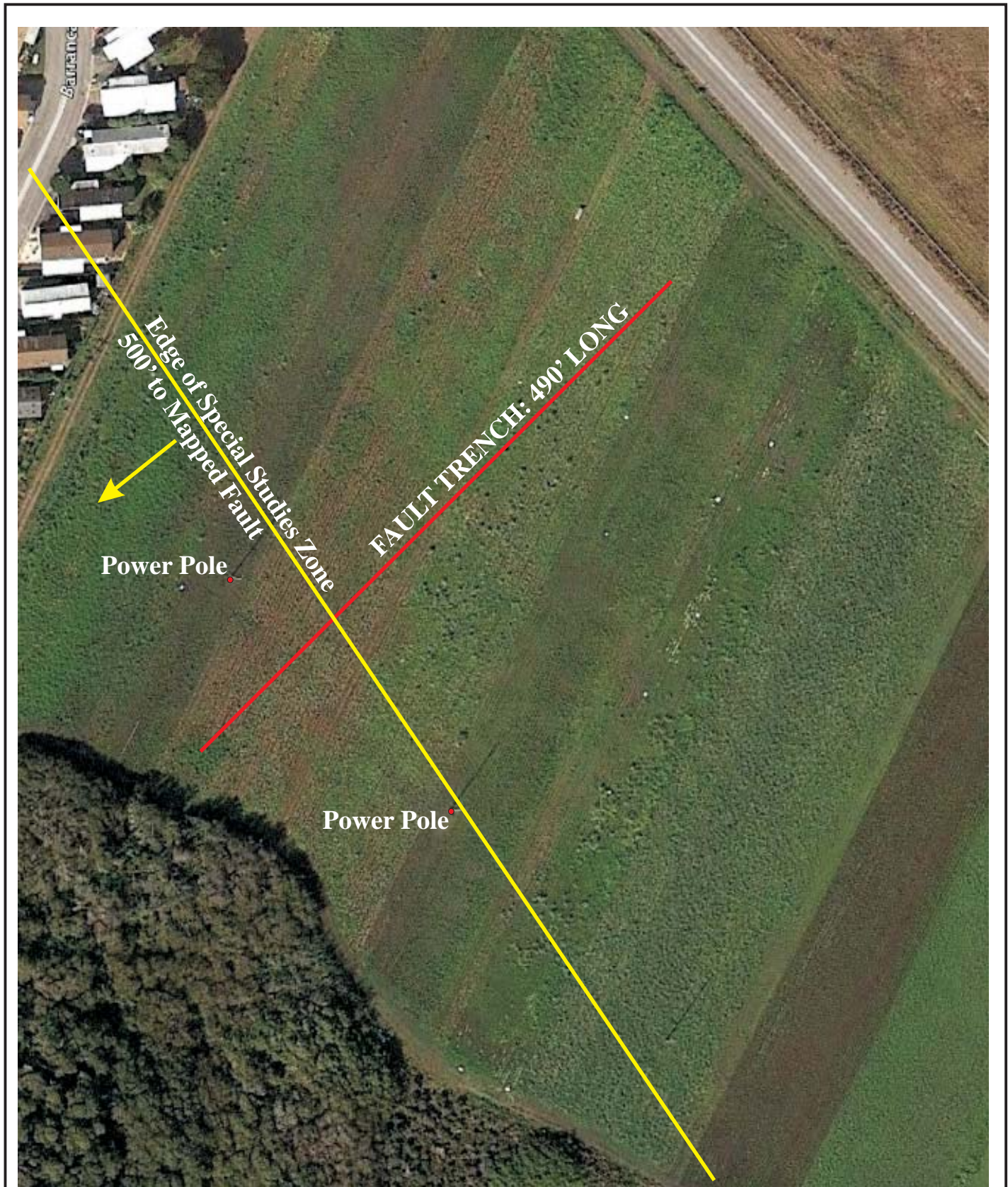
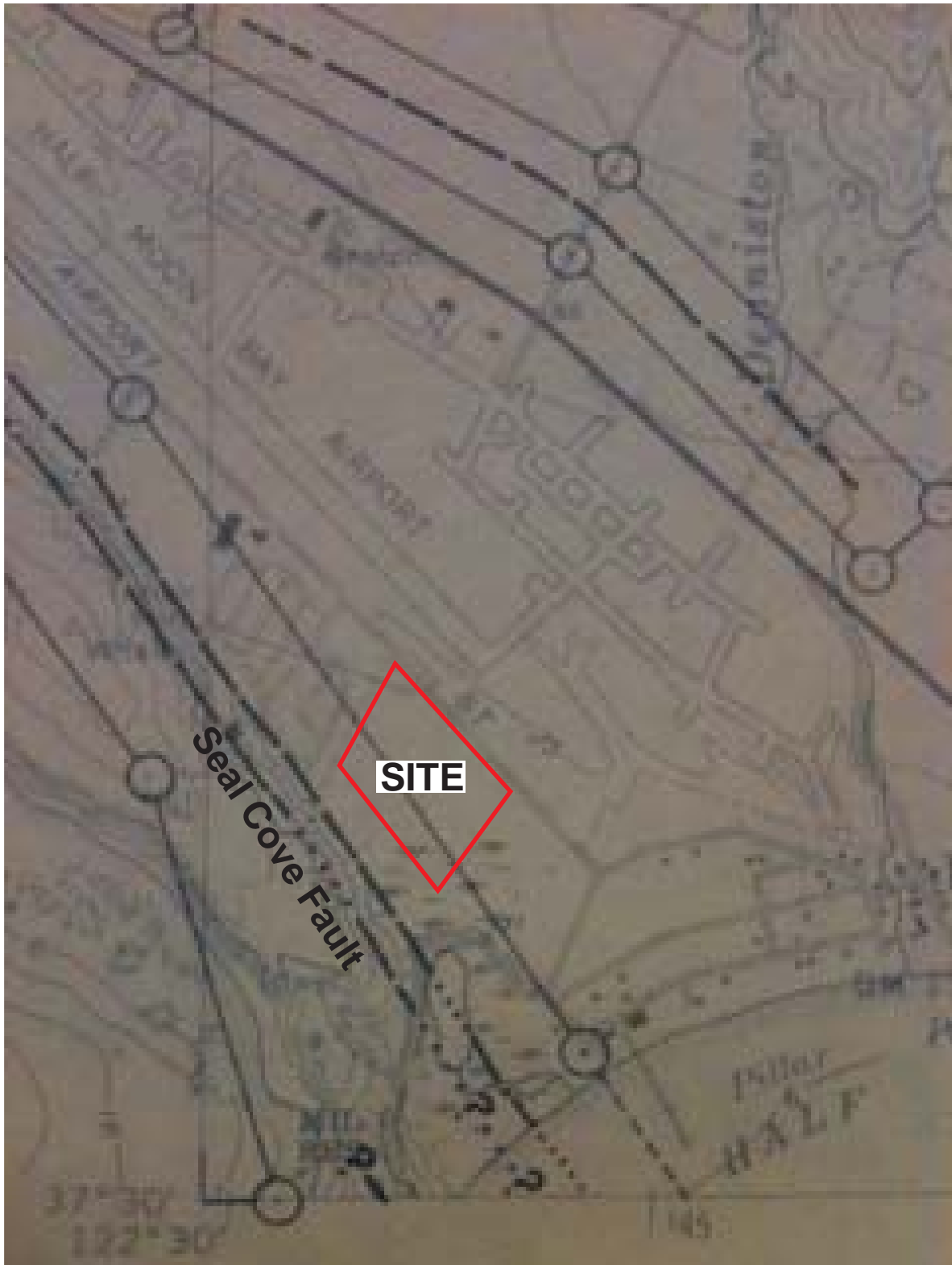


	Figure	2
	Date:	11/26/12
	Job No.:	12-154

**SITE MAP**  
Big Wave Project, Half Moon Bay




Sigma Prime Geosciences, Inc.


Figure	3
Date:	11/26/12
Job No.:	12-154

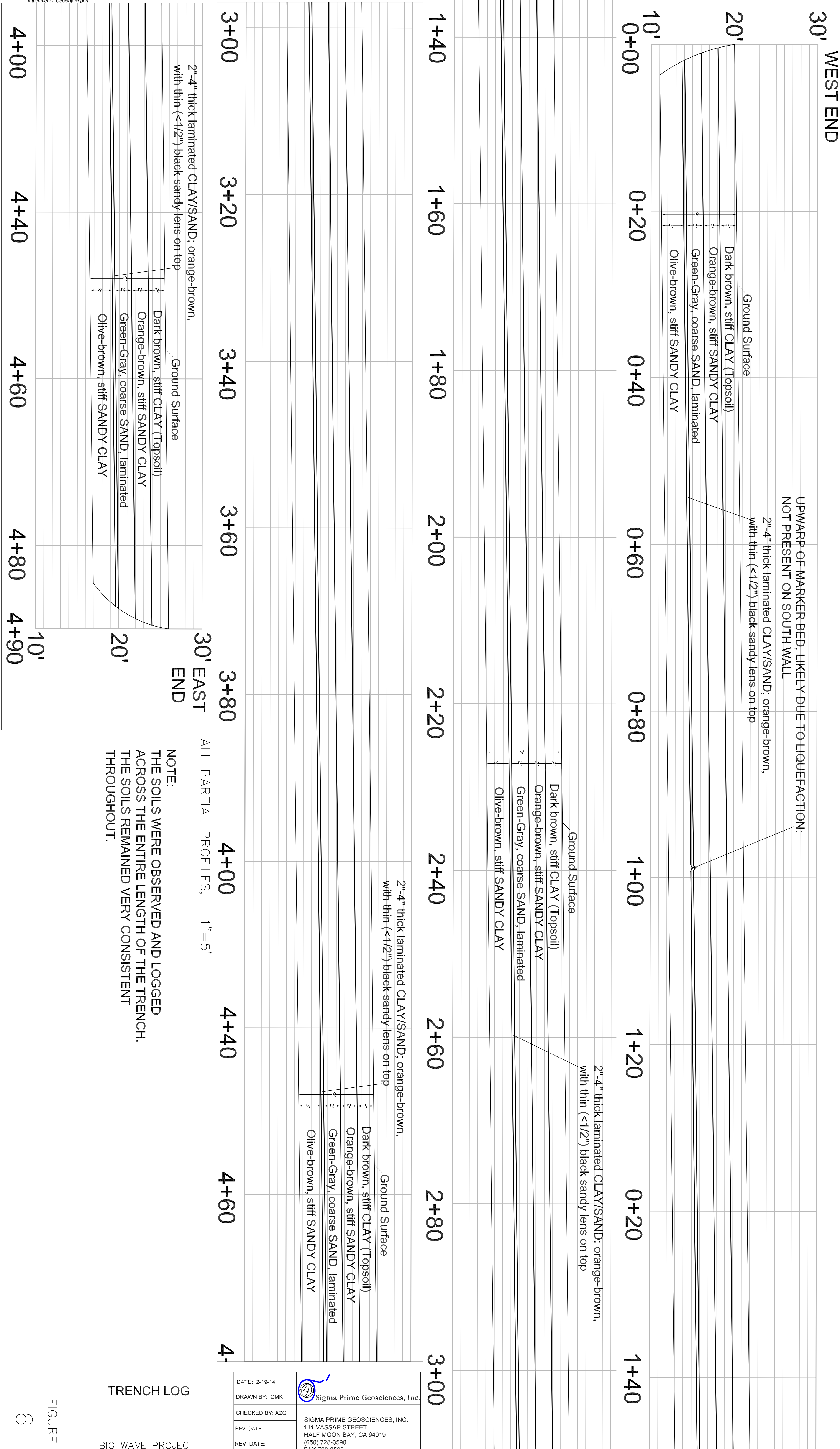
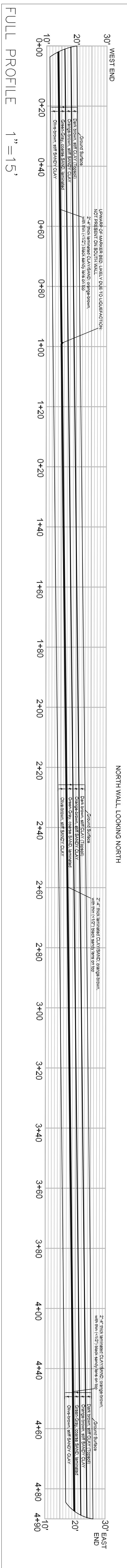
**Special Studies Zone Map**  
Big Wave Project, Half Moon Bay



 Sigma Prime Geosciences, Inc.	Figure	4
	Date:	11/26/12
	Job No.:	12-154
<b>PHOTOGRAPHS</b> Big Wave Project, Half Moon Bay		



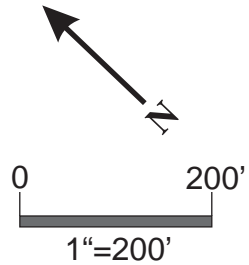
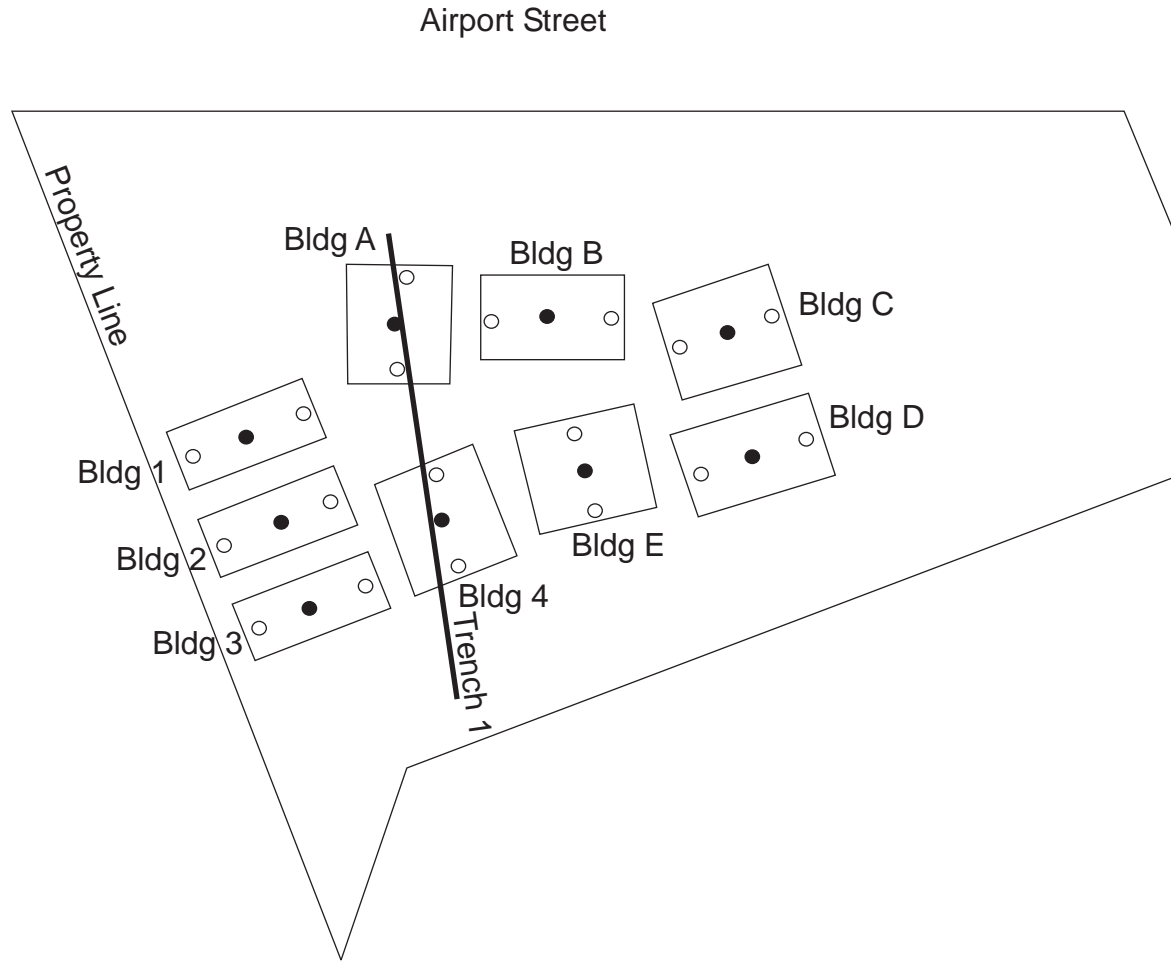
 Sigma Prime Geosciences, Inc.	Figure	5
	Date:	11/26/12
	Job No.:	12-154
<b>PHOTOGRAPHS</b> Big Wave Project, Half Moon Bay		



ALL PARTIAL PROFILES, 1"=5'

NOTE:  
THE SOILS WERE OBSERVED AND LOGGED ACROSS THE ENTIRE LENGTH OF THE TRENCH. THE SOILS REMAINED VERY CONSISTENT THROUGHOUT.

DATE: 2-19-14		<p>SIGMA PRIME GEOSCIENCES, INC. 111 VASSAR STREET HALF MOON BAY, CA 94019 (650) 728-3590 FAX 728-3593</p>
DRAWN BY: CMK		
CHECKED BY: AZG		
REV. DATE:		
REV. DATE:		
REV. DATE:		
<p><b>TRENCH LOG</b></p> <p>BIG WAVE PROJECT HALF MOON BAY, CA</p>		
<p>FIGURE 6</p>		



- Proposed Soil Boring
- Proposed Cone Penetration Test



Sigma Prime Geosciences, Inc.

Figure	7
Date:	2/25/14
Job No.:	12-154

**Proposed Subsurface Study Plan**  
Big Wave Project, Half Moon Bay



**Addendum to  
the Big Wave Wellness Center and Office Park Project EIR  
North Parcel Alternative**

---

**Attachment J**

**Traffic Report**



# HEXAGON TRANSPORTATION CONSULTANTS, INC.

## Big Wave North Parcel Alternative

Drafted Transportation Impact Analysis

*Prepared for:*

County of San Mateo

*July 17, 2014*

Hexagon Office: 111 W. St. John Street, Suite 850  
San Jose, California

Hexagon Job Number: 14GB24

Document Name: Big Wave Draft TIA.docx

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Areawide Circulation Plans Corridor Studies Pavement Delineation Plans Traffic Handling Plans Impact Fees Interchange Analysis Parking Studies  
Transportation Planning Neighborhood Traffic Calming Traffic Operations Traffic Impact Analysis Traffic Signal Design Travel Demand Forecasting



Big Wave North Parcel Alternative

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## Big Wave North Parcel Alternative

# Executive Summary

This report presents the results of the traffic study for the proposed Big Wave Project that would be located on Airport Street, north of the Princeton/Pillar Point Harbor area in unincorporated San Mateo County, CA. The 19.53-acre project site is currently vacant. The proposed project includes a 70,500 square-foot Wellness Center and five commercial buildings totaling 161,263 square feet. The proposed project includes the following components:

### **Wellness Center**

- Housing for developmentally disabled adults and their aides: including 57 bedrooms to provide affordable housing for a maximum of 50 developmentally disabled adults and 20 staff persons.
- Gym and basketball court
- 27,500 s.f. of storage space

### **Office Park**

- The proposed office/industrial park includes 161,263 square feet (s.f.) in five buildings. For purposes of the traffic study, based on parking constraints, the office/industrial park was assumed to include 64,505 s.f. of office use, 40,316 s.f. of research and development (R&D) use, 32,253 s.f. of light manufacturing use, and 24,189 s.f. of storage space.

### **South Parcel**

- The project also includes free public parking for beach access and a gated boat storage yard, in which boat owners can rent storage space. The boat storage yard is intended to raise additional revenue for operations of the Wellness Center.

Access to the project site would be provided by driveways along Airport Street.

## Project Trip Estimates

Trip generation estimates were based on rates obtained from the Institute of Transportation Engineers (ITE) published Trip Generation Manual, *Ninth Edition*, 2012. The General Office (ITE category 710) rates were applied to the proposed office use; the Research and Development (ITE category 760) rates were applied to the proposed R&D use, the ITE Manufacturing (ITE land use code 140) rates were applied to the proposed Light Manufacturing portion, and the ITE Warehousing (ITE category 150) rates were applied to the storage space because these rates best represent the project description. The 57 bedrooms for developmentally disabled adults would not generate any trips as the residents would not drive. The residents would have staff/care-givers residing on the project site who would drive them to and from activities, appointments, errands, etc. The residential units for the 20 staff/care-givers were treated as 20 apartments (Apartment, ITE category 220). In reality the trips probably would be less because the staff will live and work on site. Application of ITE standard trip generation rates to the proposed development shows that the project is estimated to generate 1,479 daily trips, including 199 trips (163 inbound and 36 outbound) during the AM peak hour, and 192 trips (42 inbound and 150 outbound) during the PM peak hour (see Table ES-1).

Big Wave North Parcel Alternative

**Table ES 1  
Project Trip Generation Estimates - Weekday**

Land Use	ITE Code	Size	Daily Trip Rates	Daily Trips	AM Peak Hour			PM Peak Hour				
					Pk-Hr Rate	Trips		Pk-Hr Rate	Trips			
					In	Out	Total	In	Out	Total		
<b>Office Park</b>												
Office Building <sup>1</sup>	710	64,505 s.f.	11.03	711	1.56	89	12	101	1.49	16	80	96
Research & Development <sup>2</sup>	760	40,316 s.f.	8.11	327	1.22	41	8	49	1.07	6	37	43
Storage <sup>3</sup>	150	24,189 s.f.	3.56	86	0.30	6	1	7	0.32	2	6	8
Light Manufacturing <sup>4</sup>	140	32,253 s.f.	3.82	123	0.73	18	6	24	0.73	8	16	24
<b>Office Park Total</b>		<b>161,263</b>		<b>1,248</b>		<b>154</b>	<b>27</b>	<b>181</b>		<b>32</b>	<b>139</b>	<b>171</b>
<b>Wellness Center</b>												
Storage <sup>3</sup>	150	27,500 s.f.	3.56	98	0.30	7	1	8	0.32	2	7	9
Apartments <sup>5</sup>	220	20 units	6.65	133	0.51	2	8	10	0.62	8	4	12
<b>Wellness Center Total</b>				<b>231</b>		<b>9</b>	<b>9</b>	<b>18</b>		<b>10</b>	<b>11</b>	<b>21</b>
<b>Total Project Trips</b>				<b>1,479</b>		<b>163</b>	<b>36</b>	<b>199</b>		<b>42</b>	<b>150</b>	<b>192</b>

**Notes:**

- <sup>1</sup> Rate base on ITE Land Use Code 710 (General Office), average rates used.
  - <sup>2</sup> Rate base on ITE Land Use Code 760 (Research & Development), average rates used.
  - <sup>3</sup> Rate base on ITE Land Use Code 150 (Warehousing), average rates used.
  - <sup>4</sup> Rate base on ITE Land Use Code 140 (Manufacturing), average rates used.
  - <sup>5</sup> Rates base on ITE Land Use Code 220 (Apartment), average rates used.
- Source: ITE Trip Generation, 9th Edition 2012.

**Intersection Level of Service Impacts**

Table ES-2 summarizes the results of the weekday peak hour intersection level of service analysis under the following conditions: existing (Chapter 2), existing plus project (Chapter 3), background (Chapter 4), background plus project (Chapter 5), and cumulative with project (Chapter 6) conditions. The results of the level of service calculations show that all of the study intersections, except for the intersection of Highway 1 and Cypress Avenue, would operate at level of service (LOS) C or better under existing, existing plus project, background, and background plus project conditions, which is in accordance with County of San Mateo LOS standards.

Under cumulative conditions, 9 of the 11 study intersections would operate at level of service (LOS) C or better. The intersection at Highway 1 and Main Street would operate at LOS D, which may be allowed since the intersection is located in a relative dense urban area based on the County LOS standards.

Table ES-3 summarizes the results of the Saturday midday peak hour intersection level of service analysis for the six intersections along state highways. The results of the level of service calculations show that most of the study intersections would operate at level of service (LOS) C or better under all conditions, which is in accordance with County of San Mateo LOS standards. At the intersection of Highway 1 and Capistrano Road (North), the eastbound left turn movement would operate at LOS E under existing and existing plus project conditions. The project would not add any trips to this movement. At the intersection of Highway 1 and Cypress Avenue, the eastbound to northbound left turn movement would operate at LOS F under project conditions. This constitutes a significant impact according to the San Mateo County LOS standards.

## Big Wave North Parcel Alternative

### Recommended Improvements

At the intersection of Highway 1 and Cypress Avenue, two potential mitigation measures were tested:

#### Signalization of Intersection at Highway 1 and Cypress Avenue

Under project conditions, the peak hour signal warrant would be met at the intersection of Highway 1 at Cypress Avenue. With a traffic signal, the Highway 1/Cypress Avenue intersection would operate at LOS C during both the AM and PM peak hours under existing plus project, background, and background plus project conditions and would operate at LOS D under cumulative plus project conditions. Under signalized conditions, the existing roadway geometry would be adequate to handle the anticipated traffic demand.

#### Roundabout at the Intersection of Highway 1 and Cypress Avenue

Caltrans now considers roundabouts whenever evaluating potential intersection improvements. The roundabout analysis at the intersection of Highway 1 and Cypress Avenue shows that a one-lane roundabout would operate with acceptable delay and LOS during the AM and PM peak hour under background plus project conditions on weekdays. During the midday peak hour on Saturday, there would be a need for a bypass lane for the southbound right-turn traffic in order for the intersection to operate at an acceptable level of service C under existing plus project conditions. Under cumulative plus project conditions, a one-lane roundabout would not work well to bring an acceptable delay and LOS at this intersection. A detailed study for a feasible roundabout design to accommodate the future traffic would be recommended. The roundabout analysis calculation sheets are included in Appendix D. Hexagon has not evaluated whether the intersection is large enough to accommodate a roundabout or whether additional right-of-way would be required.

Per County requirements, mitigation measures should be installed as part of the project prior to occupancy.

### Site Access and Circulation

The site access and circulation review is based on the site plan dated 5/28/2014 by Macleod and Associates. The site access was evaluated in accordance with generally accepted traffic engineering standards. Access to the north parcel project site would be provided by two full access driveways and one inbound only driveway on Airport Street. Access to the south parcel project site, where the boat storage is located, would be provided by one full access driveway on Airport Street. The onsite circulation was reviewed in accordance with generally accepted traffic engineering standards. Generally, the proposed plan would provide adequate access and on-site circulation for cars and trucks. One minor necessary modification is to change the 90 degree parking spaces in front of the boat storage lot to angled spaces and to provide a parking buffer so they don't back out directly on to Airport Street.

Big Wave North Parcel Alternative

**Table ES 2**  
**Intersection Level of Service Summary - Weekday**

Study Number	Intersection	Peak Hour	Count Date	Existing				Existing + Project				Background				Background + Project				Cumulative + Project			
				Average		Worst		Average		Worst		Average		Worst		Average		Worst		Average		Worst	
				Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS
1	Prospect Way and Capistrano Rd (Unsignalized)	AM	05/07/14	7.5	A	9.4	A	7.8	A	9.7	A	7.5	A	9.4	A	7.8	A	9.8	A	7.5	A	9.5	B
		PM	05/07/14	7.2	A	10.4	B	8.0	A	11.0	B	7.3	A	10.4	B	8.0	A	11.0	B	7.7	A	11.0	B
2	Broadway and Prospect Way (Unsignalized)	AM	05/07/14	8.4	A	10.2	B	9.0	A	10.6	B	8.5	A	10.2	B	9.0	A	10.7	B	8.9	A	10.6	B
		PM	05/07/14	8.1	A	10.4	B	8.6	A	11.3	B	8.1	A	10.5	B	8.6	A	11.4	B	8.7	A	11.2	B
3	Airport St and Stanford Ave/Cornell Ave (Unsignalized)	AM	05/07/14	5.3	A	11.3	B	4.9	A	12.8	B	5.3	A	11.4	A	4.9	A	12.8	B	5.9	A	12.8	B
		PM	05/07/14	6.0	A	10.7	B	5.4	A	12.2	B	5.9	A	10.8	B	5.3	A	12.2	B	6.5	A	11.1	B
4	Airport St and La Granada Ave (Unsignalized)	AM	05/07/14	7.3	A	9.4	A	5.7	A	10.1	B	7.2	A	9.4	A	5.7	A	10.1	B	6.4	A	9.9	B
		PM	05/07/14	4.1	A	9.5	A	3.2	A	9.4	A	4.1	A	9.2	A	3.3	A	9.4	A	4.1	A	9.2	A
5	Airport St and Los Banos Ave (Unsignalized)	AM	05/07/14	2.3	A	9.1	A	1.4	A	9.6	A	2.2	A	9.1	A	1.4	A	9.6	A	1.5	A	9.6	A
		PM	05/07/14	1.6	A	9.2	A	1.2	A	9.6	A	1.6	A	9.2	A	1.2	A	9.6	A	1.6	A	9.2	A
6	SR 1 and Cypress Ave (Unsignalized)	AM	05/07/14	3.3	A	<b>36.5</b>	<b>E</b>	5.0	A	<b>51.6</b>	<b>F</b>	3.6	A	<b>41.3</b>	<b>E</b>	5.6	A	<b>60.9</b>	<b>F</b>	<b>50.3</b>	<b>F</b>	<b>(1)</b>	<b>F</b>
		PM	05/07/14	4.3	A	<b>78.8</b>	<b>F</b>	28.8	B	<b>(1)</b>	<b>F</b>	5.1	A	<b>96.1</b>	<b>F</b>	34.1	B	<b>(1)</b>	<b>F</b>	<b>(1)</b>	<b>F</b>	<b>(1)</b>	<b>F</b>
7	SR 1 and Capistrano Rd (N) (Unsignalized)	AM	05/07/14	0.2	A	17.8	C	0.2	A	17.8	C	0.2	A	18.5	C	0.2	A	18.5	C	0.2	A	30.5	D
		PM	05/07/14	0.6	A	24.3	C	0.6	A	24.3	C	0.6	A	25.8	D	0.6	A	25.8	D	0.8	A	<b>46.7</b>	<b>E</b>
8	SR 1 and Capistrano Road (S)	AM	05/07/14	14.9	B	--	--	16.1	B	--	--	15.1	B	--	--	16.3	B	--	--	21.1	C	--	--
		PM	05/07/14	14.8	B	--	--	15.0	B	--	--	15.3	B	--	--	15.4	B	--	--	20.4	C	--	--
9	SR 1 and Main St	AM	05/07/14	30.7	C	--	--	31.0	C	--	--	31.5	C	--	--	31.9	C	--	--	42.4	D	--	--
		PM	05/07/14	32.5	C	--	--	32.9	C	--	--	33.3	C	--	--	33.9	C	--	--	<b>66.6</b>	<b>E</b>	--	--
10	SR 1 and SR 92 *	AM	04/01/13	24.5	C	--	--	24.8	C	--	--	25.9	C	--	--	26.2	C	--	--	31.9	C	--	--
		PM	04/01/13	23.5	C	--	--	23.6	C	--	--	25.6	C	--	--	25.8	C	--	--	50.6	D	--	--
11	Main St and SR 92 *	AM	04/01/13	22.6	C	--	--	22.6	C	--	--	23.2	C	--	--	23.3	C	--	--	23.2	C	--	--
		PM	04/01/13	19.7	B	--	--	19.9	B	--	--	19.9	B	--	--	20.1	C	--	--	28.9	C	--	--

Notes:

\* Denotes CMP intersection

**Bold** indicates a substandard level of service.

**Bold** indicates a significant impact.

(1) indicates the delay cannot be calculated, V/C >1.0

Big Wave North Parcel Alternative

**Table ES 3**  
**Intersection Level of Service Summary - Weekend**

Study Number	Intersection	Peak Hour	Count Date	Existing				Existing Plus Project			
				Average		Worst		Average		Worst	
				Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS
6	SR 1 and Cypress Ave <i>(Unsignalized)</i>	Midday	05/24/14	6.9	A	<b>137.2</b>	<b>F</b>	12.3	B	<b>(1)</b>	<b>F</b>
7	SR 1 and Capistrano Rd (N) <i>(Unsignalized)</i>	Midday	05/24/14	1.4	A	<b>38.9</b>	<b>E</b>	1.4	A	<b>38.9</b>	<b>E</b>
8	SR 1 and Capistrano Road (S)	Midday	05/24/14	18.6	B	--	--	18.8	B	--	--
9	SR 1 and Main St	Midday	05/24/14	32.8	C	--	--	33.2	C	--	--
10	SR 1 and SR 92 *	Midday	05/24/14	28.4	C	--	--	28.7	C	--	--
11	Main St and SR 92 *	Midday	05/24/14	22.6	C	--	--	22.8	C	--	--

Notes:  
 \* Denotes CMP intersection  
**Bold** indicates a substandard level of service.  
**Bold** indicates a significant project impact.  
 (1) indicates the delay cannot be calculated, V/C >1.0



## Big Wave North Parcel Alternative

# 1. Introduction

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This report presents the results of the traffic study for the proposed Big Wave Project that would be located on Airport Street, north of the Princeton/Pillar Point Harbor area in unincorporated San Mateo County, CA. The 19.53-acre project site is currently vacant. The proposed project includes a 70,500 square-foot Wellness Center and five commercial buildings totaling 161,263 square feet. The proposed project includes the following components:

### **Wellness Center**

- Housing for developmentally disabled adults and their aides: including 57 bedrooms to provide affordable housing for a maximum of 50 developmentally disabled adults and 20 staff persons.
- Gym and basketball court
- 27,500 s.f. of storage space

### **Office Park**

- The proposed office park includes 161,263 square feet (s.f.) in five buildings. For purposes of the traffic study, based on parking constraints, the office park was assumed to include 64,505 s.f. of office use, 40,316 s.f. of research and development (R&D) use, 32,253 s.f. of light manufacturing use, and 24,189 s.f. of storage space.

### **South Parcel**

- The project also includes free public parking for beach access and a gated boat storage yard, in which boat owners can rent storage space. The boat storage yard is intended to raise additional revenue for operations of the Wellness Center.

The project would have three full-access driveways and one inbound only driveway on Airport Street. Parking for the project would be provided on site. Currently the site is vacant. The project site and the surrounding study area are shown on Figure 1. The project site plan is shown on Figure 2.

## Scope of Study

The purpose of the traffic analysis is to determine whether the proposed Big Wave project would have any transportation impacts as defined by the San Mateo County transportation study guidelines. Mitigation measures are identified for any significant impacts. The study includes 11 intersections (7 unsignalized intersections and 4 signalized intersections), plus the segment of Highway 1 along the Half Moon Bay airport. The study time periods are the AM (7:00 - 9:00 AM) and PM (4:00 - 6:00 PM) weekday commute hours. Hexagon also conducted weekend traffic counts and analysis at the 6 study intersections that are on state highways. The study intersections are as follows:

## Big Wave North Parcel Alternative

### Unsignalized Intersections

1. SR 1 and Cypress Avenue
2. SR 1 and Capistrano Road (North)
3. Airport Street and Los Banos Avenue
4. Airport Street and La Granada Lane
5. Airport Street and Stanford Avenue/Cornell Avenue
6. Broadway and Prospect Way
7. Prospect Way and Capistrano Road

### Signalized Intersections

1. SR 1 and Capistrano Road (South)
2. SR 92 and SR 1
3. SR 92 and Main Street
4. SR 1 and Main Street

New turning-movement counts were collected during the weekday AM and PM peak periods at the 7 unsignalized study intersections and the two signalized intersections of SR 1 & Capistrano Road (South) and SR 1 and Main Street. Current weekday counts were available from other studies at the other two signalized study intersections. Hexagon also conducted manual turning-movement counts Saturday from 1:00 – 3:00 PM over the Memorial Day weekend at the 6 study intersections along the regional roadways. Hourly traffic counts for Highway 1 along the Half Moon Bay airport were obtained from Caltrans.

Traffic conditions were evaluated for the following scenarios:

- Scenario 1:** *Existing Conditions.* Existing intersection volumes were obtained from new manual turning-movement counts conducted in 2014. New traffic count data are contained in Appendix A.
- Scenario 3:** *Background Conditions.* Background conditions traffic volumes were estimated by adding to existing peak hour volumes the projected volumes from approved but not yet constructed developments in the study area. Projected traffic volumes associated with the approved developments were estimated based on the project size (dwelling units or square footage) using ITE trip generation rates. The total approved trips were added to the existing peak hour volumes. Hexagon also applied a 2% per year growth factor for two years to the volumes on SR 1 and SR 92 to account for general traffic growth in the area.
- Scenario 2:** *Existing Plus Project Conditions.* Existing plus project traffic volumes were estimated by adding to existing traffic volumes the trips associated with the proposed project. Project impacts to the Highway 1 segment were evaluated based on volume-to-capacity ratios.
- Scenario 4:** *Background Plus Project Conditions.* Background plus project traffic volumes were estimated by adding to background traffic volumes the trips associated with the proposed project. Project impacts to the Highway 1 segment were evaluated based on volume-to-capacity ratios.
- Scenario 5:** *Cumulative Plus Project Conditions.* Cumulative Plus Project traffic volumes were estimated using the San Mateo County Travel Demand Model for a 20 year horizon. The model land use includes the Big Wave project. Level of service calculations were conducted to estimate the operating levels of the study intersections during the peak hours under cumulative plus project conditions.

Attachment J, Traffic Report  
Big Wave North Parcel Alternative



LEGEND



-  = Site Location
-  = Study Intersection

Figure 1  
Site Location and Study Intersections

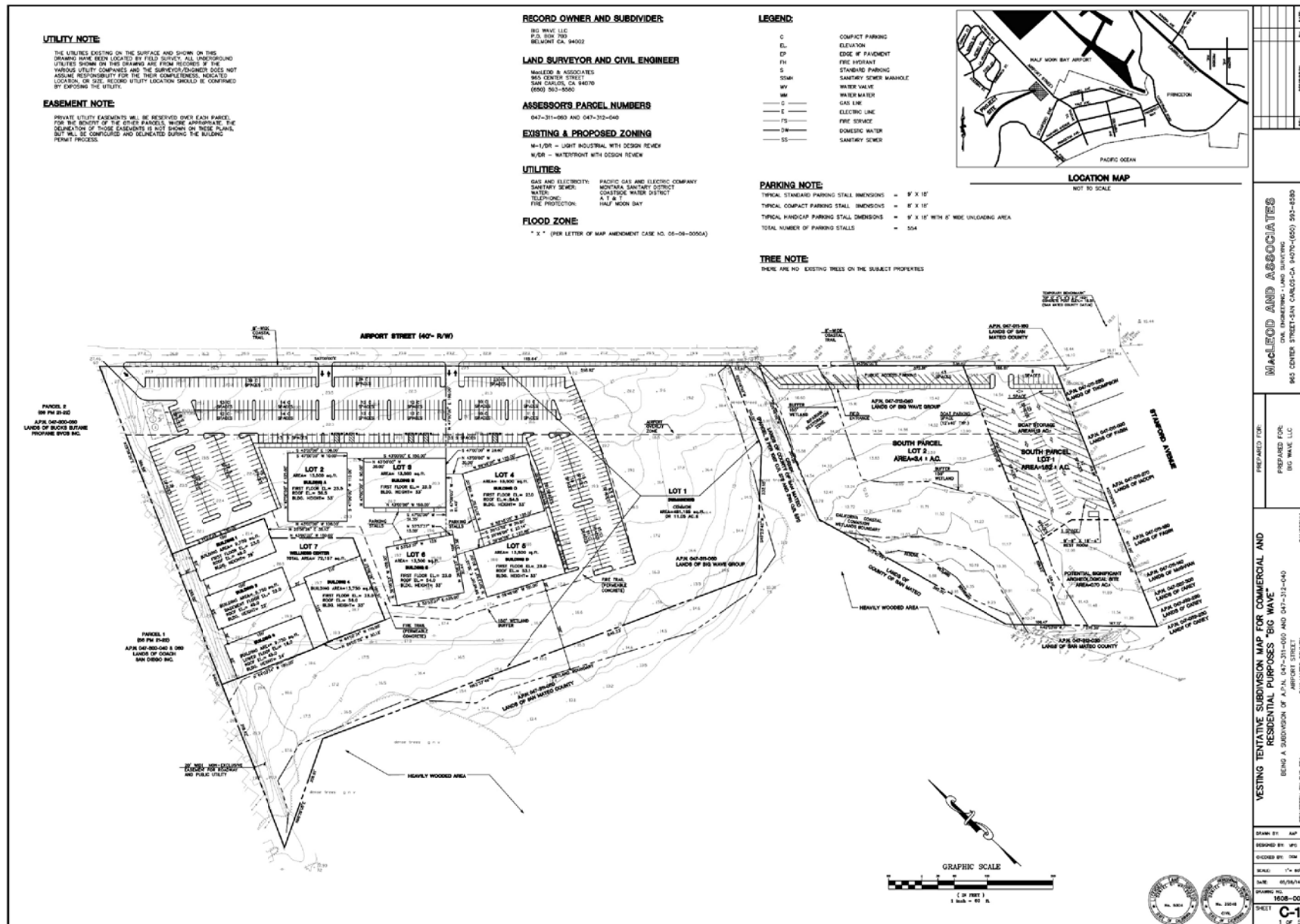


Figure 2  
 Site Plan

## Big Wave North Parcel Alternative

### Methodology

This section describes the methods used to determine the traffic conditions for each scenario described above. It includes descriptions of the data requirements, the analysis methodologies, and the applicable level of service standards.

### Data Requirements

The data required for the analysis were obtained from field observations, new traffic counts, previous traffic studies, the County of San Mateo, and the Institute of Transportation Engineers (ITE) manual entitled *Trip Generation, 9th Edition*. The following data were collected from these sources:

- existing intersection volumes
- existing lane geometries
- signal timing and phasing
- approved but not yet completed projects
- applicable trip generation rates

### Analysis Methodologies and Level of Service Standards

Traffic conditions at the study intersections were evaluated using level of service (LOS). *Level of Service* is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. The various analysis methods are described below.

This study utilizes Synchro software to determine level of service. The Synchro methodology is based on the *2000 Highway Capacity Manual (HCM)* method for intersections, and evaluates intersection operations on the basis of average delay for all vehicles at the intersection. This average delay can then be correlated to a level of service as shown in Table 1 for signalized intersections. The level of service correlation for unsignalized intersections is shown in Table 2. For two-way stop controlled intersections, both the average and worst movement levels of service are reported.

In addition to the level of service evaluation an assessment was made of the need for signalization of unsignalized intersections. This assessment was made on the basis of the Peak-hour Volume Signal Warrant as described in the *Manual on Uniform Traffic Control Devices (MUTCD), 2010*. This method makes no evaluation of intersection level of service, but simply provides an indication whether peak-hour traffic volumes are, or would be, sufficient to justify installation of a traffic signal.

The minimum acceptable design level of service (LOS) in San Mateo County is 'C'. At intersections, analyses should show an overall LOS of 'C' with no individual movement operating at less than 'D'. On occasion, level of service 'D' may be allowed for peak periods in dense urban conditions at the County's discretion.

The intersections of Highway 1/SR 92 and Main Street/SR 92 are San Mateo County Congestion Management Program (CMP) intersections. The San Mateo County of Governments (C/CAG) has developed LOS standards for roadways on the designated CMP network. The Highway 1 and SR 92 intersection has a CMP LOS standard of LOS E and the intersection of Main Street/SR 92 has a CMP LOS standard of LOS F.

Big Wave North Parcel Alternative

**Table 1**  
**Signalized Intersection Level of Service Based on Average Delay**

Level of Service	Description	Average Control Delay Per Vehicle (sec.)
A	Signal progression is extremely favorable. Most vehicles arrive during the green phase and do not stop at all. Short cycle lengths may also contribute to the very low vehicle delay.	10.0 or less
B	Operations characterized by good signal progression and/or short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average vehicle delay.	10.1 to 20.0
C	Higher delays may result from fair signal progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, though may still pass through the intersection without stopping.	20.1 to 35.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable signal progression, long cycle lengths, or high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	This is considered to be the limit of acceptable delay. These high delay values generally indicate poor signal progression, long cycle lengths, and high volume-to-capacity (V/C) ratios. Individual cycle failures occur frequently.	55.1 to 80.0
F	This level of delay is considered unacceptable by most drivers. This condition often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes of such delay levels.	greater than 80.0

Source: Transportation Research Board, *2000 Highway Capacity Manual* (Washington, D.C., 2000) p10-16.

Big Wave North Parcel Alternative

**Table 2**  
**Unsignalized Intersection Level of Service Definitions Based on Delay**

Level of Service	Description	Average Delay Per Vehicle (Sec.)
A	Little or no traffic delay	10.0 or less
B	Short traffic delays	10.1 to 15.0
C	Average traffic delays	15.1 to 25.0
D	Long traffic delays	25.1 to 35.0
E	Very long traffic delays	35.1 to 50.0
F	Extreme traffic delays	greater than 50.0

Source: Transportation Research Board, *2000 Highway Capacity Manual* (Washington, D.C., 2000) p17-2.

### Significant Impact Criteria

Significance criteria are used to establish what constitutes an impact. For this analysis the relevant criteria for impacts at intersections are based on the County of San Mateo intersection Level of Service standards.

#### County of San Mateo Definitions of Significant Intersection LOS Impacts

According to the County of San Mateo Traffic Impact Study Requirements (9/1/2013), a development is said to create a significant adverse impact on traffic conditions at a signalized intersection if for either peak hour:

1. Intersection currently in compliance with LOS standard: A project will be considered to have a significant impact if the project will cause the intersection to operate at a level of service that violates the standard overall LOS of 'C' with no individual movement operating at worse than 'D'. On occasion, level of service 'D' may be allowed for peak periods in very dense urban conditions at the County's discretion.
2. Intersection currently NOT in compliance with LOS standard: A project will be considered to have a significant impact if the project will cause the intersection to operate at a level of service that violates the standard LOS mentioned above and the proposed project increases average control delay at the intersection by four (4) seconds or more.

#### CMP Intersections

The intersections of Highway 1/SR 92 and Main Street/SR 92 are San Mateo County Congestion Management Program (CMP) intersections. The San Mateo County of Governments (C/CAG) has developed LOS standards for roadways on the designated CMP network. The Highway 1 and SR 92 intersection has a CMP LOS standard of LOS E and the intersection of Main Street/SR 92 has a CMP LOS standard of LOS F. Significant traffic impacts at CMP intersections are defined to occur when the addition of new project traffic causes:

- Peak hour intersection operations to deteriorate from an acceptable level (LOS E or better) to an unacceptable level (LOS F); or

## Big Wave North Parcel Alternative

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- Exacerbation of unacceptable operations by increasing the average critical delay by four (4) seconds or more at an intersection operating at LOS F.

### Report Organization

The remainder of this report is divided into six chapters. Chapter 2 describes existing conditions, including the existing roadway network, transit service, and existing bicycle and pedestrian facilities. Chapter 3 presents the intersection operations under existing plus project conditions and describes the method used to estimate project traffic. Chapter 4 presents the intersection levels of service under background conditions. Chapter 5 presents the project impact on the transportation system and describes the recommended mitigation measures under background plus project conditions. Chapter 6 describes cumulative traffic conditions. Chapter 7 presents the conclusions of the traffic study.





## Big Wave North Parcel Alternative



## 2. Existing Conditions

This chapter describes the existing conditions for all of the major transportation facilities in the vicinity of the site, including the roadway network, transit service, and bicycle and pedestrian facilities.

### Existing Roadway Network

Access to the project site is provided via State Route 1, Capistrano Road and Airport Street. These facilities are described below.

*State Route 1* is a two- to four-lane highway that runs in a north-south direction. Route 1 extends from San Francisco to southern California along the Pacific Ocean coast.

*Capistrano Road* is a two-lane roadway that runs primarily in a north-south direction. This local roadway extends from Alhambra Avenue in the south (just west of State Route 1) to its terminus at State Route 1 in the north.

*Airport Street* is a two-lane north-south collector street that provides access to the project site. Airport Street extends from its intersection with Stanford Avenue/Cornell Avenue in the south where it operates as Vassar Street to its terminus at Cypress Avenue in the north.

Other local roadways in the project vicinity include: *Cypress Avenue, Prospect Way, Coral Reef Avenue, Los Banos Avenue, La Granada Avenue, Broadway Avenue, Stanford Avenue and Cornell Avenue*, which are two-lane residential roadways.

*Cypress Avenue* is unusual in that it has a segment that is only about 20 feet wide with no centerline. This segment is on a straight section of road with good visibility; therefore, it does not present any operational or safety problems. The roadway width, while not equal to typical standards, is enough for two cars or trucks to pass. The narrow segment has low volume, and the constrained width tends to slow down traffic. Bicycles on this segment need to take the lane because there is not enough room for a car to pass.

### Existing Bicycle and Pedestrian Facilities

According to the San Mateo County Bicycle Map, there are the following designated bike routes within the vicinity of the project site:

- State Route 1 within the vicinity of the project site
- Airport Street within the vicinity of the project site
- Cypress Avenue between Airport Street and State Route 1

## Big Wave North Parcel Alternative

- Capistrano Road between State Route 1 and Prospect Way
- Prospect Way
- California Avenue
- Cornell Avenue

Bicycle facilities are shown on Figure 3.

There are generally no sidewalks in the project vicinity. The Princeton area of Half Moon Bay is somewhat rural. Airport Street has minimal fronting development, thus no existing need for sidewalks.

## Existing Transit Service

Existing transit service to the study area is provided by the San Mateo County Transit District (SamTrans). The existing SamTrans service is described below and shown on Figure 4.

The 17 *line* provides service between the Seton Medical Center Coastside and the Miramontes Point Road area with 1- to 2-hour headways (according to SamTrans staff) and operates along Airport Street in the vicinity of the project. Route 17 bus stops in the project vicinity are as follows:

- Capistrano Road at Pillar Point Harbor
- Capistrano Road at Prospect Way
- Airport Street at La Granada\*
- Airport Street at Los Banos Avenue

\*closest to project site

## Existing Lane Configurations and Traffic Volumes

The existing lane configurations at the study intersections were obtained from field observations and previous traffic impact analyses in the study area (see Figure 5). Existing traffic volumes were obtained from new manual peak-hour turning-movement counts (see Figure 6). New traffic counts are included in Appendix A.

Big Wave North Parcel Alternative



LEGEND








-  = Site Location
-  = Study Intersection
-  = Existing Bike Route

Figure 3  
Existing Bicycle Facilities

Big Wave North Parcel Alternative



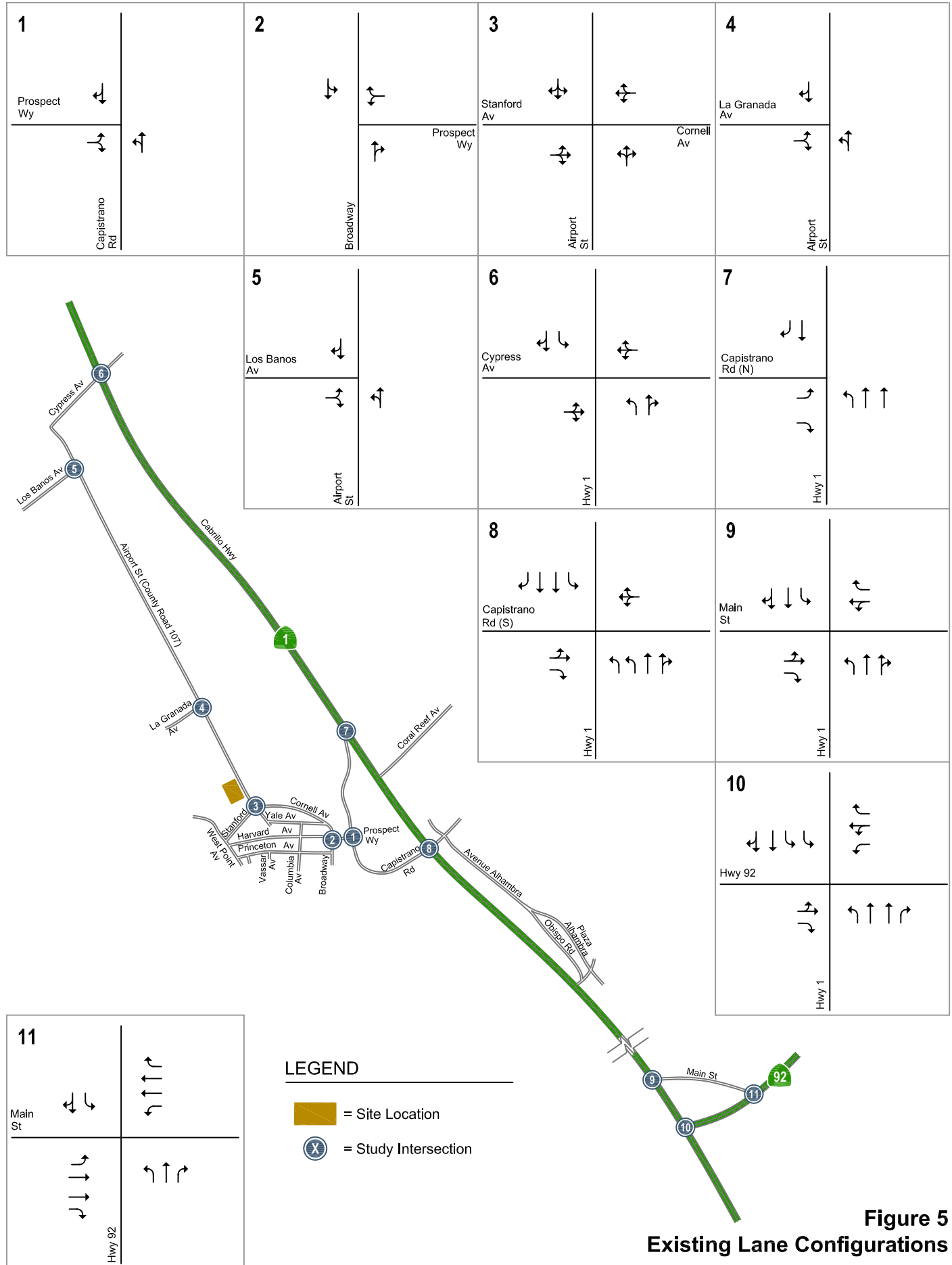
LEGEND

-  = Site Location
-  = Study Intersection
-  = Existing Bus Route
-  = Bus Stops in Project Vicinity

**Figure 4**  
**Existing Transit Facilities**

Attachment J, Traffic Report

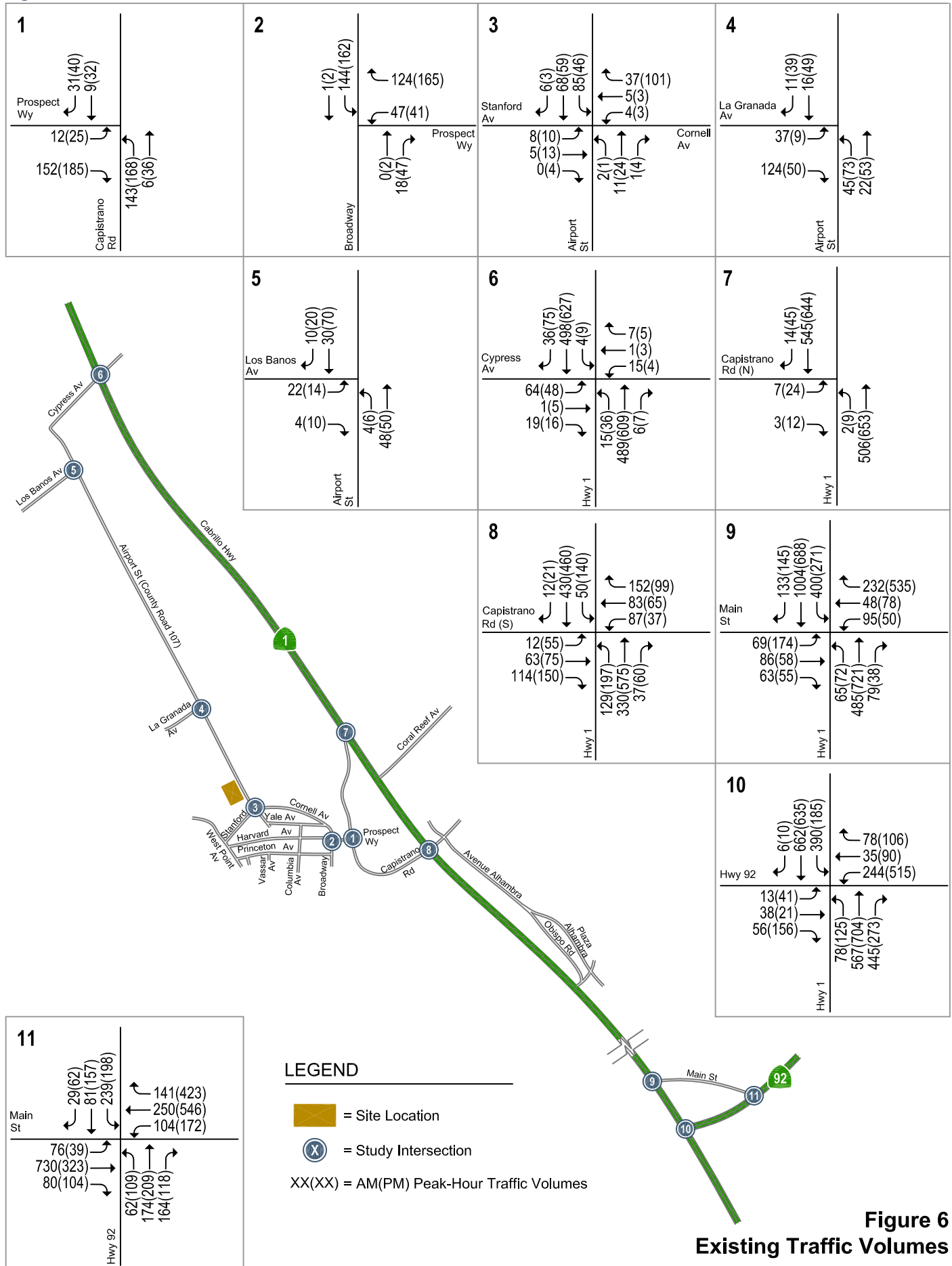
Big Wave North Parcel Alternative



**Figure 5**  
**Existing Lane Configurations**

Attachment J, Traffic Report

Big Wave North Parcel Alternative



**Figure 6**  
**Existing Traffic Volumes**

Big Wave North Parcel Alternative

## Existing Intersection Levels of Service

The results of the intersection level of service analysis under existing conditions show that all of the study intersections, except for the intersection of Highway 1 and Cypress Avenue, currently operate at acceptable levels of service during both the AM and PM peak hours of traffic on weekdays (see Table 3). The eastbound left-turn movement at the intersection of Highway 1 and Cypress Avenue is shown to operate at LOS E with a delay of 36.5 seconds during the AM peak hour and operate at LOS F with a delay of 78.8 seconds during the PM peak hour under existing conditions.

The results of the intersection level of service analysis for the midday peak hour on Saturday of Memorial Day weekend show that four of the intersections along state highways currently operate at acceptable levels of service (see Table 4). At the intersection of Highway 1 and Cypress Avenue the eastbound left-turn movement is shown to operate at LOS F with a delay of 137.2 seconds during the midday peak. The eastbound left-turn movement at the intersection of Highway 1 and Capistrano Road (N) is operating at LOS E with a delay of 38.9 seconds. The level of service calculation sheets are included in Appendix D.

**Table 3**  
**Existing Intersection Levels of Service - Weekday**

Study Number	Intersection	Peak Hour	Count Date	Average		Worst	
				Delay (sec.)	LOS	Delay (sec.)	LOS
1	Prospect Way and Capistrano Rd	AM	05/07/14	7.5	A	9.4	A
		PM	05/07/14	7.2	A	10.4	B
2	Broadway and Prospect Way	AM	05/07/14	8.4	A	10.2	B
		PM	05/07/14	8.1	A	10.4	B
3	Airport St and Stanford Ave/Cornell Ave	AM	05/07/14	5.3	A	11.3	B
		PM	05/07/14	6.0	A	10.7	B
4	Airport St and La Granada Ave	AM	05/07/14	7.3	A	9.4	A
		PM	05/07/14	4.1	A	9.5	A
5	Airport St and Los Banos Ave	AM	05/07/14	2.3	A	9.1	A
		PM	05/07/14	1.6	A	9.2	A
6	SR 1 and Cypress Ave	AM	05/07/14	3.3	A	<b>36.5</b>	<b>E</b>
		PM	05/07/14	4.3	A	<b>78.8</b>	<b>F</b>
7	SR 1 and Capistrano Rd (N)	AM	05/07/14	0.2	A	17.8	C
		PM	05/07/14	0.6	A	24.3	C
8	SR 1 and Capistrano Road (S)	AM	05/07/14	14.9	B	--	--
		PM	05/07/14	14.8	B	--	--
9	SR 1 and Main St	AM	05/07/14	30.7	C	--	--
		PM	05/07/14	32.5	C	--	--
10	SR 1 and SR 92 *	AM	04/01/13	24.5	C	--	--
		PM	04/01/13	23.5	C	--	--
11	Main St and SR 92 *	AM	04/01/13	22.6	C	--	--
		PM	04/01/13	19.7	B	--	--

Notes:  
\* Denotes CMP intersection  
**Bold** indicates a substandard level of service.

Big Wave North Parcel Alternative

**Table 4**  
**Existing Intersection Levels of Service - Saturday**

Study Number	Intersection	Peak Hour	Count Date	Existing			
				Average		Worst	
				Delay (sec.)	LOS	Delay (sec.)	LOS
6	SR 1 and Cypress Ave (Unsignalized)	Midday	05/24/14	6.9	A	<b>137.2</b>	<b>F</b>
7	SR 1 and Capistrano Rd (N) (Unsignalized)	Midday	05/24/14	1.4	A	<b>38.9</b>	<b>E</b>
8	SR 1 and Capistrano Road (S)	Midday	05/24/14	18.6	B	--	--
9	SR 1 and Main St	Midday	05/24/14	32.8	C	--	--
10	SR 1 and SR 92 *	Midday	05/24/14	28.4	C	--	--
11	Main St and SR 92 *	Midday	05/24/14	22.6	C	--	--

**Notes:**  
\* Denotes CMP intersection  
**Bold** indicates a substandard level of service.

**Observed Existing Traffic Conditions**

Traffic conditions in the field were observed in order to identify existing operational deficiencies and to confirm the accuracy of calculated levels of service. The purpose of this effort was (1) to identify any existing traffic problems that may not be directly related to intersection level of service, and (2) to identify any locations where the level of service calculation does not accurately reflect level of service in the field.

Overall the study intersections operated adequately during both the AM and PM peak hours of traffic, and the level of service analysis appears to accurately reflect actual existing traffic conditions. During the AM peak hour, southbound traffic along Highway 1 backs up north of the intersection of Highway 1 and Main Street. During the PM peak hour, northbound through traffic queues up along Highway 1 and backs up for nearly a quarter mile north of the intersection of Highway 1 and Main Street due to the lane drop from two lanes to one lane. Close to the project site, there is no noticeable congestion along Highway 1.

The analysis of the 2013 hourly traffic counts from Caltrans supports the field observations. During the weekday AM peak hour, the Caltrans 2013 hourly counts show that there are 705 northbound vehicles and 1,439 southbound vehicles on Highway 1 just north of the intersection at Main Street. In the vicinity of the project site, the northbound AM peak hour traffic volume drops to 440 vehicles, and the southbound volume drops to 525 vehicles.

During the weekday PM peak hour, the 2013 hourly counts show that there are 1,427 northbound vehicles and 1,096 southbound vehicles on Highway 1 just north of the intersection at Main Street. In the vicinity of the project site, the PM peak hour northbound traffic volume drops to 688 vehicles, and the southbound volume drops to 632 vehicles.

The counts show that the highest traffic volume along Highway 1 in the vicinity of the project site happens during the midday hours on weekends and holidays. During the midday peak hours, the Caltrans 2013 hourly counts show that there are 1,327 northbound vehicles and 1,314 southbound vehicles on Highway 1 just north of the intersection at Main Street. In the vicinity of the project site,



### Big Wave North Parcel Alternative

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the northbound AM peak hour traffic volume drops to 841 vehicles, and the southbound volume drops to 894 vehicles, which are much higher than the regular weekday peak hour volumes.





### 3.

## Existing Plus Project Conditions

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This chapter describes existing plus project traffic conditions, including the method by which project traffic is estimated. Existing plus project traffic conditions could potentially occur if the project were to be occupied prior to the other approved projects in the area. It is unlikely that this traffic condition would occur, since other approved projects expected to add traffic to the study area would likely be built and occupied during the time the project is going through the development review process.

### Transportation Network Under Existing Plus Project Conditions

It is assumed in this analysis that the transportation network under existing plus project conditions would be the same as the existing transportation network.

### Project Trip Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear are estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic entering and exiting the site is estimated for the AM and PM peak hours. As part of the project trip distribution, an estimate is made of the directions to and from which the project trips would travel. In the project trip assignment, the project trips are assigned to specific streets. These procedures are described further in the following sections.

### Trip Generation

Through empirical research, data have been collected that correlate trip making to building size for various land use types. For many types of land use there are standard trip generation rates that can be applied to help predict the future traffic increases that would result from a new development. The standard trip generation rates are published in the Institute of Transportation Engineers (ITE) manual entitled *Trip Generation*, 9<sup>th</sup> Edition. The project includes a Wellness Center and an Office Park with the following components:

#### **Wellness Center**

- Housing for developmentally disabled adults and their aides: including 57 bedrooms to provide affordable housing for a maximum of 50 developmentally disabled adults and 20 staff persons.
- Gym and basketball court
- 27,500 s.f. of storage space

## Big Wave North Parcel Alternative

### Office Park

- The proposed office park includes 161,263 square feet in five buildings. For purposes of the traffic study, based on parking constraints, the office park was assumed to include 64,505 s.f. of office use, 40,316 s.f. of research and development (R&D) use, 32,253 s.f. of light manufacturing use, and 24,189 s.f. of storage space. The General Office (ITE category 710) rates were applied to the proposed office use; the Research and Development (ITE category 760) rates were applied to the proposed R&D use, the ITE Manufacturing (ITE land use code 140) rates were applied to the proposed Light Manufacturing portion, and the ITE Warehousing (ITE category 150) rates were applied to the Storage space because these rates best represent the project description..

The estimated peak-hour and daily trip generation totals for the project are shown in Table 5. The project is estimated to generate 1,479 daily trips, including 199 trips (163 inbound and 36 outbound) during the AM peak hour, and 192 trips (42 inbound and 150 outbound) during the PM peak hour.

Because of the high volume of recreational traffic on weekends, the project trip generation for the Saturday peak hour also was estimated. The standard trip generation rates for Saturday published in the Institute of Transportation Engineers (ITE) manual entitled *Trip Generation*, 9<sup>th</sup> Edition were used to calculate the project trips. The Saturday trips for the office park are fairly low because most of the businesses typically would be closed. It is assumed that the trip generation for the Wellness Center would be the same on weekends versus weekdays. It was estimated that the proposed project would generate 64 trips during the midday peak hour on Saturdays (see Table 6).

**Table 5**  
**Project Trip Generation Estimates - Weekday**

Land Use	ITE Code	Size	Daily Trip Rates	Daily Trips	AM Peak Hour			PM Peak Hour				
					Pk-Hr Rate	Trips		Pk-Hr Rate	Trips			
					In	Out	Total	In	Out	Total		
<b>Office Park</b>												
Office Building <sup>1</sup>	710	64,505 s.f.	11.03	711	1.56	89	12	101	1.49	16	80	96
Research & Development <sup>2</sup>	760	40,316 s.f.	8.11	327	1.22	41	8	49	1.07	6	37	43
Storage <sup>3</sup>	150	24,189 s.f.	3.56	86	0.30	6	1	7	0.32	2	6	8
Light Manufacturing <sup>4</sup>	140	32,253 s.f.	3.82	123	0.73	18	6	24	0.73	8	16	24
<b>Office Park Total</b>		<b>161,263</b>		<b>1,248</b>		<b>154</b>	<b>27</b>	<b>181</b>		<b>32</b>	<b>139</b>	<b>171</b>
<b>Wellness Center</b>												
Storage <sup>3</sup>	150	27,500 s.f.	3.56	98	0.30	7	1	8	0.32	2	7	9
Apartments <sup>5</sup>	220	20 units	6.65	133	0.51	2	8	10	0.62	8	4	12
<b>Wellness Center Total</b>				<b>231</b>		<b>9</b>	<b>9</b>	<b>18</b>		<b>10</b>	<b>11</b>	<b>21</b>
<b>Total Project Trips</b>				<b>1,479</b>		<b>163</b>	<b>36</b>	<b>199</b>		<b>42</b>	<b>150</b>	<b>192</b>

**Notes:**

<sup>1</sup> Rate base on ITE Land Use Code 710 (General Office), average rates used.

<sup>2</sup> Rate base on ITE Land Use Code 760 (Research & Development), average rates used.

<sup>3</sup> Rate base on ITE Land Use Code 150 (Warehousing), average rates used.

<sup>4</sup> Rate base on ITE Land Use Code 140 (Manufacturing), average rates used.

<sup>5</sup> Rates base on ITE Land Use Code 220 (Apartment), average rates used.

Source: ITE Trip Generation, 9th Edition 2012.

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**Table 6  
Project Trip Generation Estimates - Saturday**

Land Use	ITE Code	Size	Daily Trip Rates	Daily Trips	Midday Peak Hour					
					Pk-Hr Rate	Splits		Trips		Total
						In	Out	In	Out	
<b>Office Park</b>										
Office Building <sup>1</sup>	710	64,505 s.f.	2.46	159	0.43	54%	46%	15	13	28
Research & Development <sup>2</sup>	760	40,316 s.f.	1.90	77	0.24	50%	50%	5	5	10
Storage <sup>3</sup>	150	24,189 s.f.	1.23	30	0.13	64%	36%	2	1	3
Light Manufacturing <sup>4</sup>	140	32,253 s.f.	1.49	48	0.28	50%	50%	5	4	9
<b>Office Park Total</b>		<b>161,263</b>		<b>313</b>				<b>27</b>	<b>23</b>	<b>50</b>
<b>Wellness Center</b>										
Storage <sup>3</sup>	150	27,500 s.f.	1.23	34	0.13	64%	36%	2	2	4
Apartments <sup>5</sup>	220	20 units	6.39	128	0.52	50%	50%	5	5	10
<b>Wellness Center Total</b>				<b>162</b>				<b>7</b>	<b>7</b>	<b>14</b>
<b>Total Project Trips</b>				<b>475</b>				<b>34</b>	<b>30</b>	<b>64</b>
<b>Notes:</b>										
<sup>1</sup> Rate base on ITE Land Use Code 710 (General Office), average rates for Saturday used.										
<sup>2</sup> Rate base on ITE Land Use Code 760 (Research & Development), average rates for Saturday used. Directional split is not available for peak hour, used daily values.										
<sup>3</sup> Rate base on ITE Land Use Code 150 (Warehousing), average rates for Saturday used.										
<sup>4</sup> Rate base on ITE Land Use Code 140 (Manufacturing), average rates for Saturday used. Directional split is not available for peak hour, used daily values.										
<sup>5</sup> Rates base on ITE Land Use Code 220 (Apartment), average rates for Saturday used. Directional split is not available for peak hour, used daily values.										
Source: ITE Trip Generation, 9th Edition.										

**Project Trip Distribution and Assignment**

The trip distribution pattern for the proposed project was estimated based on existing travel patterns on the surrounding roadway system and the locations of complementary land uses. Separate trip distribution patterns were developed for the Office Park (including office, R&D, light manufacturing, and storage) and apartment components of the proposed project. It was assumed that 20% of the project trips would be added to SR 92. However, the project would add jobs to a residential area and potentially might reduce the work trips on SR 92. During the AM peak, most of the project trips would travel westbound on SR 92 to the project site, which is the non-peak direction. During the PM peak, project trips would also travel the non-peak direction on SR 92. Therefore, the project impact on SR 92 might be less than the analysis presented in this report.

In determining the trip distribution patterns for vehicles traveling from the project site to northbound Highway 1, Hexagon conducted travel time runs from the proposed project site to northbound Highway 1 using two different routes: 1) the first route was northbound Airport Street to eastbound Cypress Avenue to northbound Highway 1; 2) the second route was southbound Airport Street to eastbound Cornell Avenue to eastbound Prospect Way to northbound Capistrano Road to northbound Highway 1. The travel time runs showed that the northbound Airport Street route took half the time of the southbound Airport Street route (three minutes as opposed to six minutes). As a result, Hexagon assumed that vehicular traffic traveling from the project site to northbound Highway 1 would proceed north on Airport Street to Cypress Avenue and turn left onto Highway 1.

The peak-hour trips generated by the project were assigned to the roadway system in accordance with the trip distribution pattern shown. The trip distribution patterns are shown graphically on Figures 7 and 8. Figure 9 shows the assignment of project trips at each study intersection.

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## Existing Plus Project Traffic Volumes

The project trips were added to existing traffic volumes to obtain existing plus project traffic volumes (see Figure 10). Traffic volumes for all components of traffic are tabulated in Appendix C.



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**Figure 7**  
**Project Trip Distribution**  
**Pattern for Office Park**

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Figure 8  
Project Trip Distribution  
Pattern for Apartments

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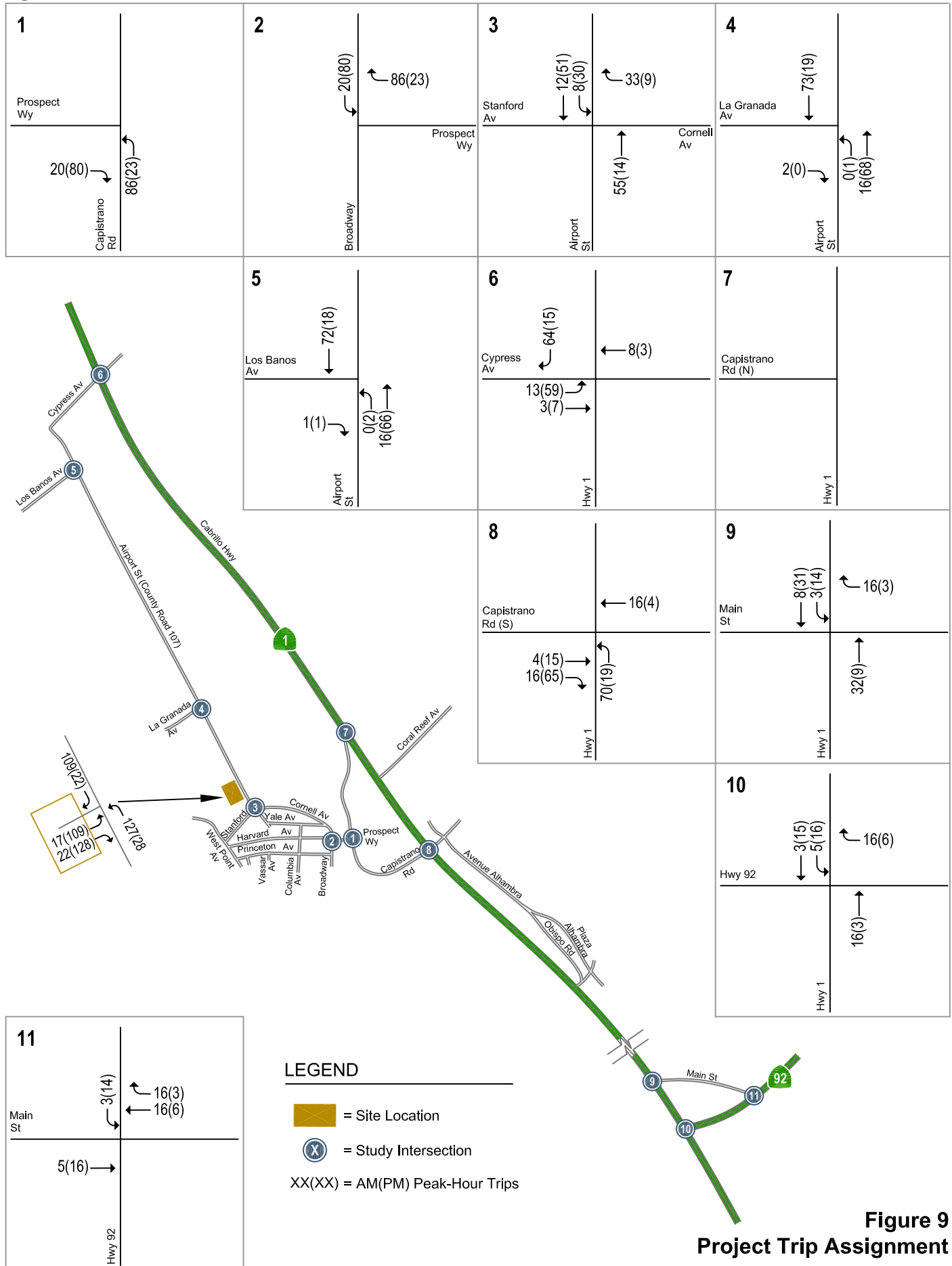
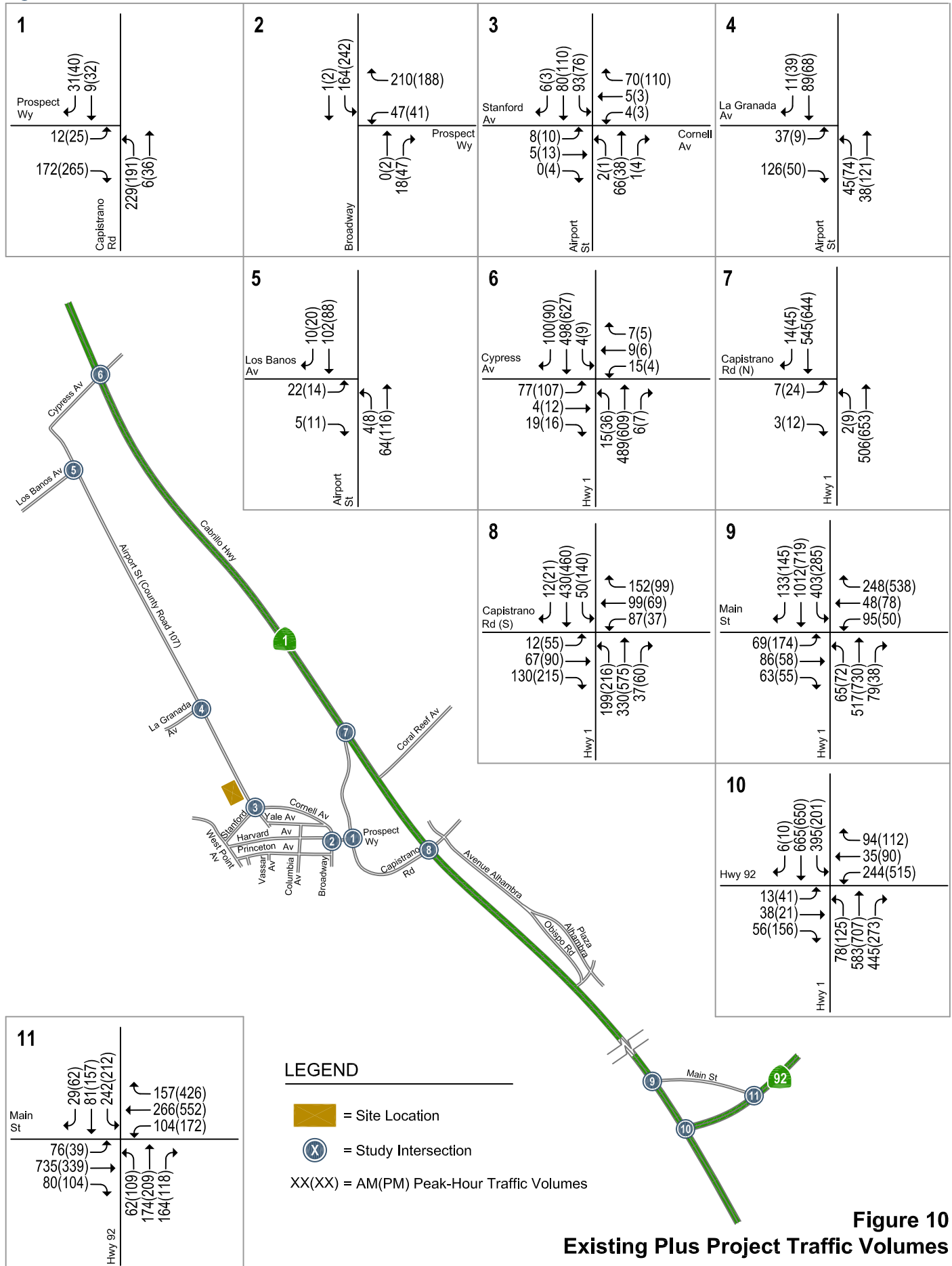


Figure 9  
Project Trip Assignment



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**Figure 10**  
**Existing Plus Project Traffic Volumes**

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## Existing Plus Project Intersection Levels of Service

The results of the intersection level of service analysis under existing plus project conditions for weekdays are summarized in Table 7. The results show that all of the study intersections would operate at an acceptable LOS C or better, except for the intersection at Highway 1 and Cypress Avenue. The eastbound left-turn movement at the intersection of Highway 1 and Cypress Avenue is shown to operate at LOS F with a delay of 51.6 seconds during the AM peak hour. During the PM peak hour, the projected volume increases are so high that the LOS software cannot accurately calculate the delay, but the increase would be more than 4 seconds. Hexagon found that there are no improvements possible at this intersection to improve this LOS F other than signalization or installation of a roundabout. The level of service calculation sheets are included in Appendix D.

**Table 7**  
**Existing Plus Project Intersection Levels of Service - Weekday**

Study Number	Intersection	Peak Hour	Existing		Existing + Project					
			Average Delay (sec.)	Worst Delay (sec.)	Average Delay (sec.)	Worst Delay (sec.)				
1	Prospect Way and Capistrano Rd (Unsignalized)	AM	7.5	A	9.4	A	7.8	A	9.7	A
		PM	7.2	A	10.4	B	8.0	A	11.0	B
2	Broadway and Prospect Way (Unsignalized)	AM	8.4	A	10.2	B	9.0	A	10.6	B
		PM	8.1	A	10.4	B	8.6	A	11.3	B
3	Airport St and Stanford Ave/Cornell Ave (Unsignalized)	AM	5.3	A	11.3	B	4.9	A	12.8	B
		PM	6.0	A	10.7	B	5.4	A	12.2	B
4	Airport St and La Granada Ave (Unsignalized)	AM	7.3	A	9.4	A	5.7	A	10.1	B
		PM	4.1	A	9.5	A	3.2	A	9.4	A
5	Airport St and Los Banos Ave (Unsignalized)	AM	2.3	A	9.1	A	1.4	A	9.6	A
		PM	1.6	A	9.2	A	1.2	A	9.6	A
6	SR 1 and Cypress Ave (Unsignalized)	AM	3.3	A	<b>36.5</b>	<b>E</b>	5.0	A	<b>51.6</b>	<b>F</b>
		PM	4.3	A	<b>78.8</b>	<b>F</b>	28.8	B	<b>(1)</b>	<b>F</b>
7	SR 1 and Capistrano Rd (N) (Unsignalized)	AM	0.2	A	17.8	C	0.2	A	17.8	C
		PM	0.6	A	24.3	C	0.6	A	24.3	C
8	SR 1 and Capistrano Road (S)	AM	14.9	B	--	--	16.1	B	--	--
		PM	14.8	B	--	--	15.0	B	--	--
9	SR 1 and Main St	AM	30.7	C	--	--	31.0	C	--	--
		PM	32.5	C	--	--	32.9	C	--	--
10	SR 1 and SR 92 *	AM	24.5	C	--	--	24.8	C	--	--
		PM	23.5	C	--	--	23.6	C	--	--
11	Main St and SR 92 *	AM	22.6	C	--	--	22.6	C	--	--
		PM	19.7	B	--	--	19.9	B	--	--

Notes:  
\* Denotes CMP intersection  
**Bold** indicates a substandard level of service.  
**Bold** indicates a significant project impact.  
(1) indicates the delay cannot be calculated, V/C >1.0

During the midday peak hour on Saturday, the results of the level of service analysis show that all of the study intersections would operate at an acceptable LOS C or better, except for the intersection at Highway 1/Cypress Avenue and Highway 1/Capistrano Road (N) . The eastbound left-turn movement at the intersection of Highway 1 and Cypress Avenue is shown to operate at LOS F. The eastbound left-turn movement at the intersection of Highway 1 and Capistrano Road (N) is shown to operate at LOS E.

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**Table 8**  
**Existing Plus Project Intersection Levels of Service - Saturday**

Study Number	Intersection	Peak Hour	Count Date	Existing				Existing Plus Project			
				Average		Worst		Average		Worst	
				Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS
6	SR 1 and Cypress Ave (Unsignalized)	Midday	05/24/14	6.9	A	<b>137.2</b>	<b>F</b>	12.3	B	<b>(1)</b>	<b>F</b>
7	SR 1 and Capistrano Rd (N) (Unsignalized)	Midday	05/24/14	1.4	A	<b>38.9</b>	<b>E</b>	1.4	A	<b>38.9</b>	<b>E</b>
8	SR 1 and Capistrano Road (S)	Midday	05/24/14	18.6	B	--	--	18.8	B	--	--
9	SR 1 and Main St	Midday	05/24/14	32.8	C	--	--	33.2	C	--	--
10	SR 1 and SR 92 *	Midday	05/24/14	28.4	C	--	--	28.7	C	--	--
11	Main St and SR 92 *	Midday	05/24/14	22.6	C	--	--	22.8	C	--	--

**Notes:**  
 \* Denotes CMP intersection  
**Bold** indicates a substandard level of service.  
**Bold** indicates a significant project impact.  
 (1) indicates the delay cannot be calculated, V/C >1.0

### Traffic on Highway 1

The project would add very little, if any, traffic to Highway 1 along the Airport segment. Traffic to and from the north would use Cypress Avenue to get to and from Highway 1. Traffic to and from the south would use Capistrano Road to get to and from Highway 1. The impact of the project to the highway operations is reflected in the intersection analyses.

The counts show that the highest traffic volume along Highway 1 in the vicinity of the project site happens on weekends and holidays. Because the office/industrial park component of the project would generate little traffic on weekends, its impact to Highway 1 on weekends would be minimal. The Wellness Center would also have little impact on traffic volumes on weekends and holidays simply because it generates so little traffic during any time period. The developmentally disabled residents of the proposed apartments would not drive and therefore would not generate traffic at any time. The proposed project provides space for staff of the Wellness Center to live on-site, so there is expected to be relatively little traffic generated by employees, either. Further, trips taken by employees on weekends and holidays are likely to have a different trip distribution pattern than recreational traffic, i.e., Wellness Center employees may head eastbound “over the hill” on Hwy 92 or north on Hwy 1 early in the day, whereas recreational traffic flows in the opposite direction in the mornings. The reverse patterns would occur at the end of the day. Thus, the proposed project’s impact on traffic volumes and intersection levels of service on weekends and holidays would be negligible.

### CMP Policy

As the regional administrator of the San Mateo Countywide Congestion Management Program (CMP), the City/County Association of Governments (C/CAG) requires new development projects to limit their impact on regional roadway facilities. According to C/CAG CMP guidelines:

Local jurisdictions must ensure that the developer and/or tenants will reduce the demand for all new peak hour trips (including the first 100 trips) projected to be generated by the

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development. The local jurisdiction can select one or more of the options that follow or may propose other methods for mitigating the trips. It is up to the local jurisdiction working together with the project sponsor to choose the method(s) that will be compatible with the intended purpose of the project and the community that it will serve.

This project would add more than 100 trips to Highway 1 which is a CMP facility. Therefore, this project will need to prepare and submit a trip reduction plan in accordance with the C/CAG guideline.

### Site Access and Circulation

The site access and circulation review is based on the site plan dated 5/28/2014 by Macleod and Associates. The site access was evaluated in accordance with generally accepted traffic engineering standards. Access to the north parcel project site would be provided by two full access driveways and one inbound only driveway on Airport Street. Because of the relatively low traffic volume on Airport Street, vehicles would experience no delays or queuing going into or out of the site.

Access to the south parcel project site, where the boat storage is located, would be provided by one full access driveway on Airport Street. The south parcel also includes public beach parking in diagonal spaces separated from Airport Street by islands. Some of the spaces are shown as 90 degree parking without an island. This needs to be corrected because perpendicular parking backing directly onto a public street is not allowed.

The onsite circulation was reviewed in accordance with generally accepted traffic engineering standards. The plan shows good on-site circulation.

Bicycle access to the site is adequate. Airport Street is a designated bike route. While it doesn't have bike lanes or shoulders, it has relatively low traffic volume, even with the project. Pedestrian access to the site is limited. There are no sidewalks on any of the streets south of the site. However, this is a largely industrial area with few walking destinations. There is a sidewalk on the west side of Airport Street north of the site. The project proposes a sidewalk along its frontage. This sidewalk should be made to connect to the existing sidewalk. That would create a continuous sidewalk to the nearby bus stop at La Granada Lane.





## 4. Background Conditions

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This chapter describes background traffic conditions, which are defined as conditions with the addition of traffic from approved but not constructed projects in the area. Traffic volumes for background conditions comprise volumes from the existing traffic counts plus traffic generated by approved projects in the vicinity of the site. Hexagon also applied a 2% per year growth factor for two years to the volumes on SR 1 and SR 92 to account for general traffic growth in the area. This chapter describes the procedure used to determine approved traffic volumes and the resulting traffic conditions.

### Background Transportation Network

It is assumed in this analysis that the transportation network under background conditions would be the same as the existing transportation network.

### Approved Developments

Table 9 lists the approved but not-yet-completed developments in the project vicinity, which would add traffic to the roadway network under background conditions. The list was obtained from the County of San Mateo Planning Department. Projected traffic volumes associated with the approved developments were estimated based on the project size (dwelling units or square footage) using ITE trip generation rates, and project trips were assigned to the study roadway network.

These approved trips are tabulated in the Volume Summary Tables in Appendix C.

### Background Traffic Volumes

Background peak-hour traffic volumes were calculated by adding to existing volumes the estimated traffic from approved but not yet constructed developments and by applying a 2% per year growth factor for two years to the volumes on SR 1 and SR 92 to account for general traffic growth in the area. Background traffic volumes are shown on Figure 11.

### Background Intersection Levels of Service

The results of the intersection level of service analysis under existing and background conditions are summarized in Table 10. The results show that all of the study intersections would operate within the adopted level of service standard, except for the intersection at Highway 1 and Cypress Avenue. The eastbound left-turn movement at the intersection of Highway 1 and Cypress Avenue is

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shown to operate at LOS E with a delay of 41.3 seconds during the AM peak hour and at LOS F with a delay of 96.1 seconds during the PM peak hour under Background Conditions. The level of service calculation sheets are included in Appendix D.

**Table 9  
Approved Project List**

Address	Case	Status	Project Description
332 and 334 Princeton	BLD2011-00237	Under Construction	New 5,100 sf mixed-use building for office and residence
102 California	BLD2009-00009	Under Construction	new 2-story warehouse (1,981 sf) & office (400 sf)
105 California	BLD2013-00366	Under Construction	New 2,755 sf warehouse
134 Harvard	PLN2009-00339	Approved and not expired	New 5,820 sf warehouse/storage

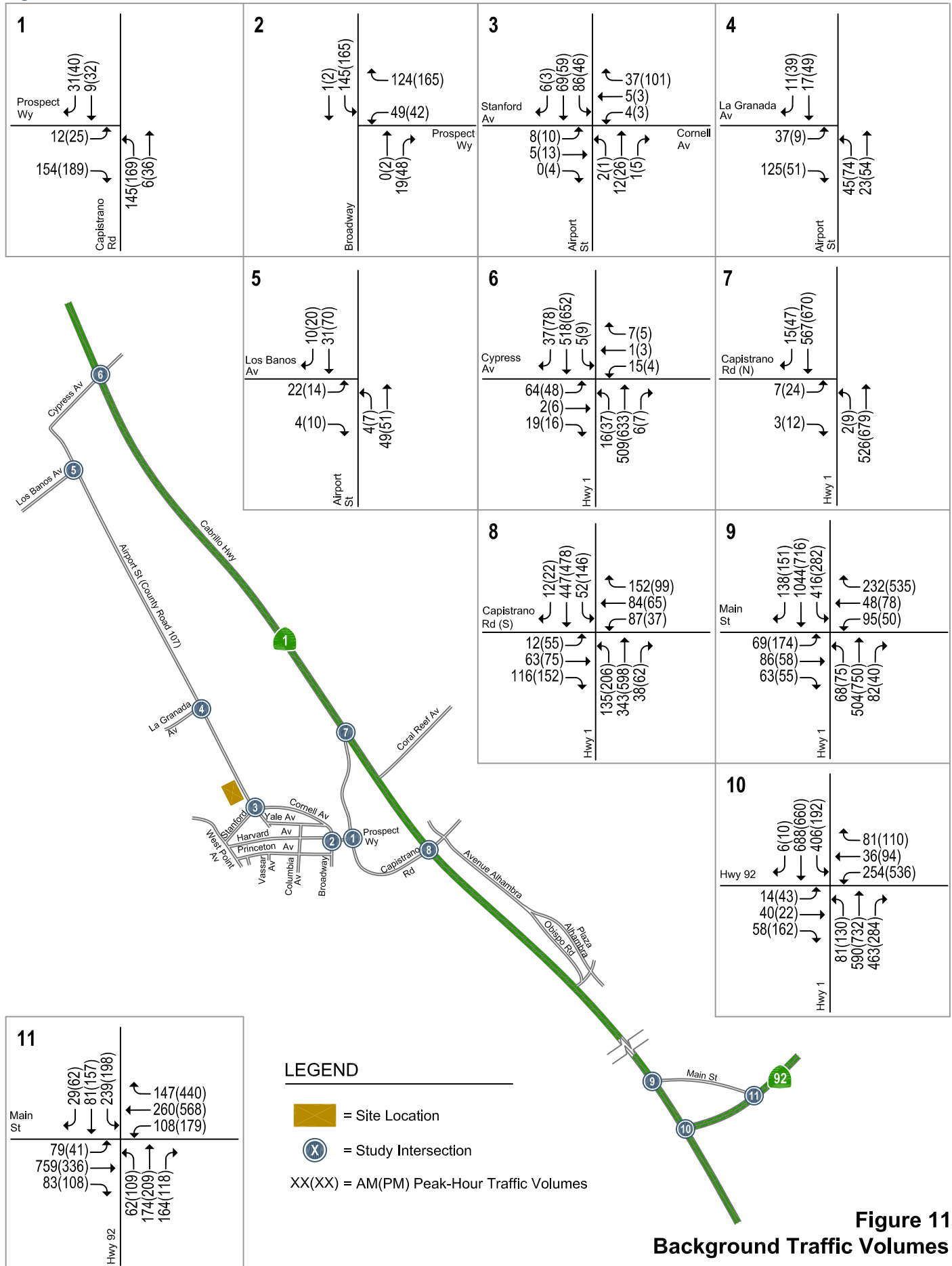
**Table 10  
Intersection Levels of Service Under Background Conditions**

Study Number	Intersection	Peak Hour	Existing				Background			
			Average		Worst		Average		Worst	
			Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS
1	Prospect Way and Capistrano Rd (Unsignalized)	AM	7.5	A	9.4	A	7.5	A	9.4	A
		PM	7.2	A	10.4	B	7.3	A	10.4	B
2	Broadway and Prospect Way (Unsignalized)	AM	8.4	A	10.2	B	8.5	A	10.2	B
		PM	8.1	A	10.4	B	8.1	A	10.5	B
3	Airport St and Stanford Ave/Cornell Ave (Unsignalized)	AM	5.3	A	11.3	B	5.3	A	11.4	A
		PM	6.0	A	10.7	B	5.9	A	10.8	B
4	Airport St and La Granada Ave (Unsignalized)	AM	7.3	A	9.4	A	7.2	A	9.4	A
		PM	4.1	A	9.5	A	4.1	A	9.2	A
5	Airport St and Los Banos Ave (Unsignalized)	AM	2.3	A	9.1	A	2.2	A	9.1	A
		PM	1.6	A	9.2	A	1.6	A	9.2	A
6	SR 1 and Cypress Ave (Unsignalized)	AM	3.3	A	<b>36.5</b>	<b>E</b>	3.6	A	<b>41.3</b>	<b>E</b>
		PM	4.3	A	<b>78.8</b>	<b>F</b>	5.1	A	<b>96.1</b>	<b>F</b>
7	SR 1 and Capistrano Rd (N) (Unsignalized)	AM	0.2	A	17.8	C	0.2	A	18.5	C
		PM	0.6	A	24.3	C	0.6	A	25.8	D
8	SR 1 and Capistrano Road (S)	AM	14.9	B	--	--	15.1	B	--	--
		PM	14.8	B	--	--	15.3	B	--	--
9	SR 1 and Main St	AM	30.7	C	--	--	31.5	C	--	--
		PM	32.5	C	--	--	33.3	C	--	--
10	SR 1 and SR 92 *	AM	24.5	C	--	--	25.9	C	--	--
		PM	23.5	C	--	--	25.6	C	--	--
11	Main St and SR 92 *	AM	22.6	C	--	--	23.2	C	--	--
		PM	19.7	B	--	--	19.9	B	--	--

**Notes:**  
\* Denotes CMP intersection  
**Bold** indicates a substandard level of service.

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**Figure 11**  
**Background Traffic Volumes**



## 5. Background Plus Project Conditions



This chapter describes near-term traffic conditions that most likely would occur when the project is complete. It includes a description of the significance criteria used to establish what constitutes a project impact, the method by which project traffic is estimated, and any impacts caused by the project. Background plus project conditions were evaluated relative to background conditions in order to determine potential project impacts. This traffic scenario represents a more congested traffic condition than the existing plus project scenario, since it includes traffic generated by approved but not yet built projects in the area.



### Significant Impact Criteria

Significance criteria are used to establish what constitutes an impact. For this analysis, the criteria used to determine significant impacts on study intersections are based on County of San Mateo Traffic Impact Study Requirements (9/1/2013).



#### *Intersection Currently in Compliance with LOS Standard*

A project will be considered to have a significant impact if the project will cause the intersection to operate at a level of service that violates the standard overall LOS of 'C' with no individual movement operating at worse than 'D'. On occasion, level of service 'D' may be allowed for peak periods in very dense urban conditions at the County's discretion.



#### *Intersection Currently Not in Compliance with LOS Standard*

A project will be considered to have a significant impact if the project will cause the intersection to operate at a level of service that violates the standard LOS mentioned above and the proposed project increases average control delay at the intersection by four (4) seconds or more.



### CMP Intersection

The intersections of Highway 1/SR 92 and Main Street/SR 92 are San Mateo County Congestion Management Program (CMP) intersections. The San Mateo County of Governments (C/CAG) has developed LOS standards for roadways on the designated CMP network. The Highway 1 and SR 92 intersection has a CMP LOS standard of LOS E and the intersection of Main Street/SR 92 has a CMP LOS standard of LOS F. Significant traffic impacts at CMP intersections are defined to occur when the addition of new project traffic causes:

- Peak hour intersection operations to deteriorate from an acceptable level (LOS E or better) to an unacceptable level (LOS F); or





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- Exacerbation of unacceptable operations by increasing the average critical delay by four (4) seconds or more at an intersection operating at LOS F.

### Background Plus Project Conditions Transportation Network

It is assumed in this analysis that the transportation network under background plus project conditions, including roadways and intersection lane configurations, would be the same as that described under existing conditions.

### Project Trip Estimates

As previously described in Chapter 3 (see Table 5), the project is estimated to generate 1,479 daily trips, including 199 trips (163 inbound and 36 outbound) during the AM peak hour, and 192 trips (42 inbound and 150 outbound) during the PM peak hour.

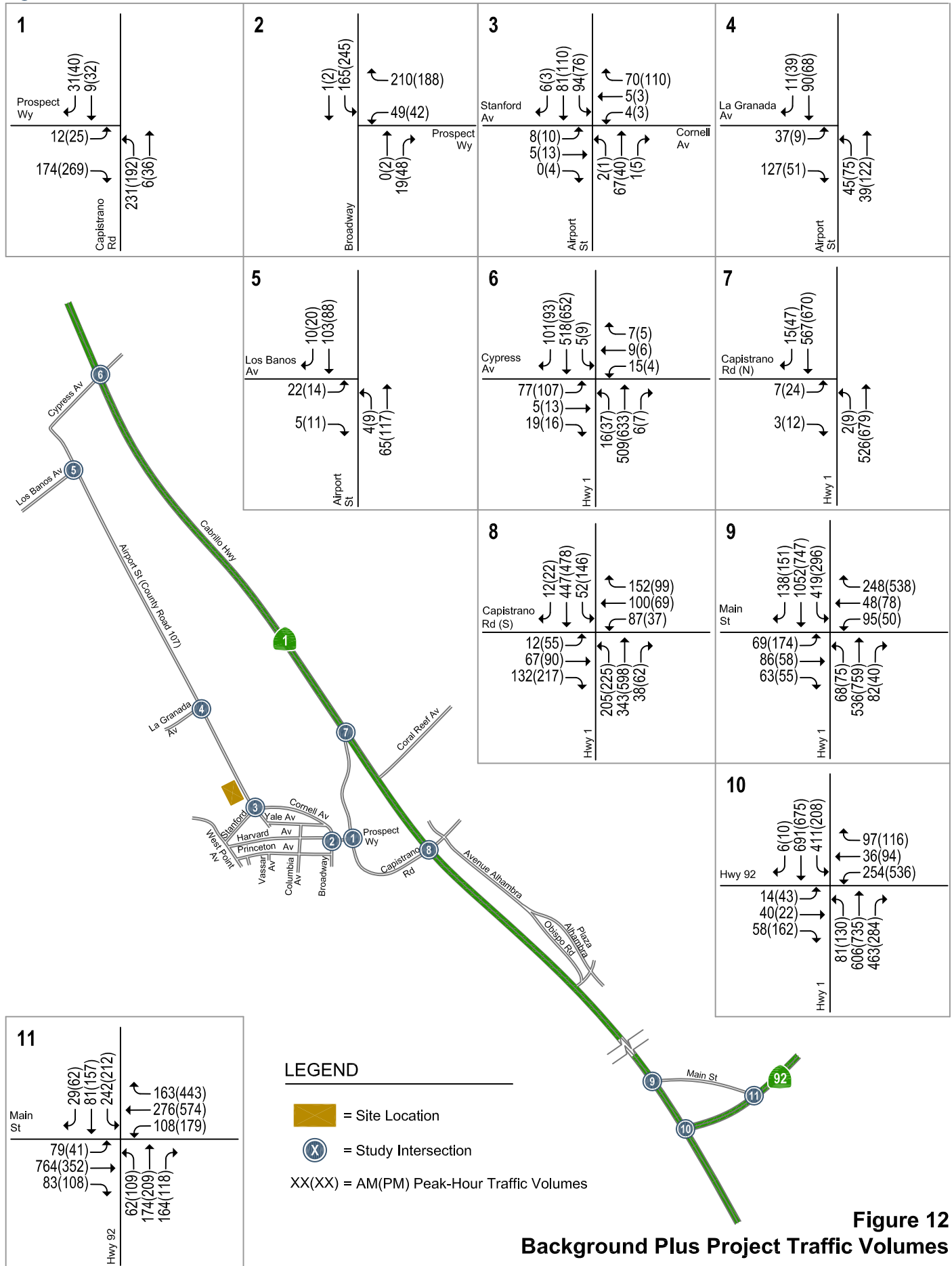
### Background Plus Project Traffic Volumes

The peak hour trips generated by the project were added to background traffic volumes to obtain background plus project traffic volumes (see Figure 12). The project trips were assigned to the roadway system in accordance with the trip distribution pattern discussed in Chapter 3. Traffic volumes for all components of traffic are tabulated in Appendix C.



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**Figure 12**  
**Background Plus Project Traffic Volumes**

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## Background Plus Project Intersection Level of Service Analysis

The results of the intersection level of service analysis under background plus project conditions are summarized in Table 11. The results of the level of service calculations show that under background plus project conditions, all of the study intersections would continue to operate at acceptable levels of service, except for the intersection at Highway 1 and Cypress Avenue. Under background conditions, there would be a 41.3 second delay during the AM peak hour and a 96.1 second delay during the PM peak hour for the worst movement (eastbound left) of the Cypress Avenue at Highway 1 intersection. This delay would increase with the addition of the project. The delay for this movement would be 19.6 seconds more than without the project during the AM peak hour. During the PM peak hour, the projected volume increases are so high that the LOS software cannot accurately calculate the delay, but the increase would be more than 4 seconds.. This constitutes a significant project impact according to the County LOS standards.

**Table 11**  
**Background plus Project Intersection Levels of Service**

Study Number	Intersection	Peak Hour	Background				Background + Project			
			Average		Worst		Average		Worst	
			Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS
1	Prospect Way and Capistrano Rd (Unsignalized)	AM	7.5	A	9.4	A	7.8	A	9.8	A
		PM	7.3	A	10.4	B	8.0	A	11.0	B
2	Broadway and Prospect Way (Unsignalized)	AM	8.5	A	10.2	B	9.0	A	10.7	B
		PM	8.1	A	10.5	B	8.6	A	11.4	B
3	Airport St and Stanford Ave/Cornell Ave (Unsignalized)	AM	5.3	A	11.4	A	4.9	A	12.8	B
		PM	5.9	A	10.8	B	5.3	A	12.2	B
4	Airport St and La Granada Ave (Unsignalized)	AM	7.2	A	9.4	A	5.7	A	10.1	B
		PM	4.1	A	9.2	A	3.3	A	9.4	A
5	Airport St and Los Banos Ave (Unsignalized)	AM	2.2	A	9.1	A	1.4	A	9.6	A
		PM	1.6	A	9.2	A	1.2	A	9.6	A
6	SR 1 and Cypress Ave (Unsignalized)	AM	3.6	A	<b>41.3</b>	<b>E</b>	5.6	A	<b>60.9</b>	<b>F</b>
		PM	5.1	A	<b>96.1</b>	<b>F</b>	34.1	B	<b>(1)</b>	<b>F</b>
7	SR 1 and Capistrano Rd (N) (Unsignalized)	AM	0.2	A	18.5	C	0.2	A	18.5	C
		PM	0.6	A	25.8	D	0.6	A	25.8	D
8	SR 1 and Capistrano Road (S)	AM	15.1	B	--	--	16.3	B	--	--
		PM	15.3	B	--	--	15.4	B	--	--
9	SR 1 and Main St	AM	31.5	C	--	--	31.9	C	--	--
		PM	33.3	C	--	--	33.9	C	--	--
10	SR 1 and SR 92 *	AM	25.9	C	--	--	26.2	C	--	--
		PM	25.6	C	--	--	25.8	C	--	--
11	Main St and SR 92 *	AM	23.2	C	--	--	23.3	C	--	--
		PM	19.9	B	--	--	20.1	C	--	--

**Notes:**

\* Denotes CMP intersection

**Bold** indicates a substandard level of service.

**Bold** indicates a significant project impact.

(1) indicates the delay cannot be calculated, V/C >1.0

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### Mitigation

Hexagon found that the significant impact could be mitigated with the installation of a traffic signal or roundabouts described below.



### Signal Warrant Analysis

With the project, the peak hour signal warrant would be met at the intersection of Highway 1 at Cypress Avenue. With signalization, this intersection would operate at LOS C under both the AM and the PM peak hours. Under signalized conditions, the existing roadway geometry would be adequate to handle the anticipated traffic demand. It is not advisable to install a traffic signal prior to a warrant being met, and the warrant is not met under existing conditions. The signal warrant analysis sheets are included in Appendix D.



### Roundabout

Caltrans now considers roundabouts whenever evaluating potential intersection improvements. The roundabout analysis at the intersection of Highway 1 and Cypress Avenue shows that a one-lane roundabout would operate with acceptable delay and LOS during the AM and PM peak hour under all project conditions on weekdays. During the midday peak hour on Saturday, there would be a need for a by-pass lane for the southbound right-turn traffic in order for the intersection to operate at an acceptable level of service C under existing plus project conditions. The roundabout analysis calculation sheets are included in Appendix D. Hexagon has not evaluated whether the intersection is large enough to accommodate a roundabout or whether additional right-of-way would be required.



Per County requirements, mitigation measures should be installed as part of the project prior to occupancy.



The roundabout analysis calculation sheets are included in Appendix D.





## 6. Cumulative Plus Project Conditions

This chapter presents a summary of the traffic conditions that would occur under cumulative plus project conditions with a 20 year horizon. It is assumed in this analysis that the transportation network under cumulative conditions would be the same as described under existing conditions.

### Cumulative Plus Project Condition Traffic Volumes

Traffic volumes under cumulative plus project conditions were estimated using the San Mateo County Travel Demand Model long range forecast in the study area, which represents cumulative with project conditions. The peak hour cumulative traffic volumes are shown on Figure 13.

Traffic volumes for all components of traffic are tabulated in Appendix C.

### Cumulative Plus Project Conditions Intersection Levels of Service

The intersection levels of service under Cumulative Plus Project Conditions are summarized in Table 12. The level of service calculation sheets are included in Appendix C. The results of the level of service calculations show that under cumulative plus project conditions, eight of the eleven study intersections would continue to operate at levels of service C or better. At the intersection of Highway 1 and Cypress Avenue, the LOS software cannot accurately calculate the delay due to the high volumes in the future during both AM and PM peak hours. The increase in delay would be more than 4 seconds.

At the intersection of Highway 1 and Capistrano (North), the worst movement (eastbound left-turn) delay would increase to 46.7 seconds with LOS E during the PM peak hour, which is due to the traffic growth in the overall area. As shown in the trip distribution pattern, the project would not add any traffic to this movement.

The intersection at Highway 1 and Main Street would operate at LOS E during the PM peak hour under cumulative conditions. The deficiency would be caused mostly by overall traffic growth with a small contribution from the project. The project would add 57 trips to this intersection during the PM peak hour, which is 12% of the total growth. If any improvements are planned for this intersection, it would be appropriate for the project to make a fair share contribution toward the cost of improvements.

### Cumulative Signal Warrant Analysis

The peak-hour signal warrant (*MUTCD 2010*, Rural Warrant) was checked for the intersection at Highway 1 and Cypress Avenue to determine whether signalization would be justified on the basis of cumulative peak-hour volumes. The analysis showed that the study intersection of Highway 1 at

Big Wave North Parcel Alternative

Cypress Avenue would meet the peak hour signal warrant under cumulative conditions. With signalization, this intersection would operate at LOS D under the AM and PM peak hours. The signal warrant analysis sheets are included in Appendix D.

### Cumulative Roundabout Analysis

The roundabout analysis at the intersection of Highway 1 and Cypress Avenue shows that a one-lane roundabout would not work well to bring an acceptable delay and LOS at this intersection during either AM or PM peak hour under cumulative plus project conditions. A detailed study about a feasible roundabout design would be recommended to accommodate future volumes. The roundabout analysis sheets are included in Appendix D.

**Table 12**  
**Cumulative with Project Intersection Level of Service**

Study Number	Intersection	Peak Hour	Cumulative + Project			
			Average		Worst	
			Delay (sec.)	LOS	Delay (sec.)	LOS
1	Prospect Way and Capistrano Rd (Unsignalized)	AM	7.5	A	9.5	B
		PM	7.7	A	11.0	B
2	Broadway and Prospect Way (Unsignalized)	AM	8.9	A	10.6	B
		PM	8.7	A	11.2	B
3	Airport St and Stanford Ave/Cornell Ave (Unsignalized)	AM	5.9	A	12.8	B
		PM	6.5	A	11.1	B
4	Airport St and La Granada Ave (Unsignalized)	AM	6.4	A	9.9	B
		PM	4.1	A	9.2	A
5	Airport St and Los Banos Ave (Unsignalized)	AM	1.5	A	9.6	A
		PM	1.6	A	9.2	A
6	SR 1 and Cypress Ave (Unsignalized)	AM	<b>50.3</b>	<b>F</b>	<b>(1)</b>	<b>F</b>
		PM	<b>(1)</b>	<b>F</b>	<b>(1)</b>	<b>F</b>
7	SR 1 and Capistrano Rd (N) (Unsignalized)	AM	0.2	A	30.5	D
		PM	0.8	A	<b>46.7</b>	<b>E</b>
8	SR 1 and Capistrano Road (S)	AM	21.1	C	--	--
		PM	20.4	C	--	--
9	SR 1 and Main St	AM	42.4	D	--	--
		PM	<b>66.6</b>	<b>E</b>	--	--
10	SR 1 and SR 92 *	AM	31.9	C	--	--
		PM	50.6	D	--	--
11	Main St and SR 92 *	AM	23.2	C	--	--
		PM	28.9	C	--	--

Notes:

\* Denotes CMP intersection

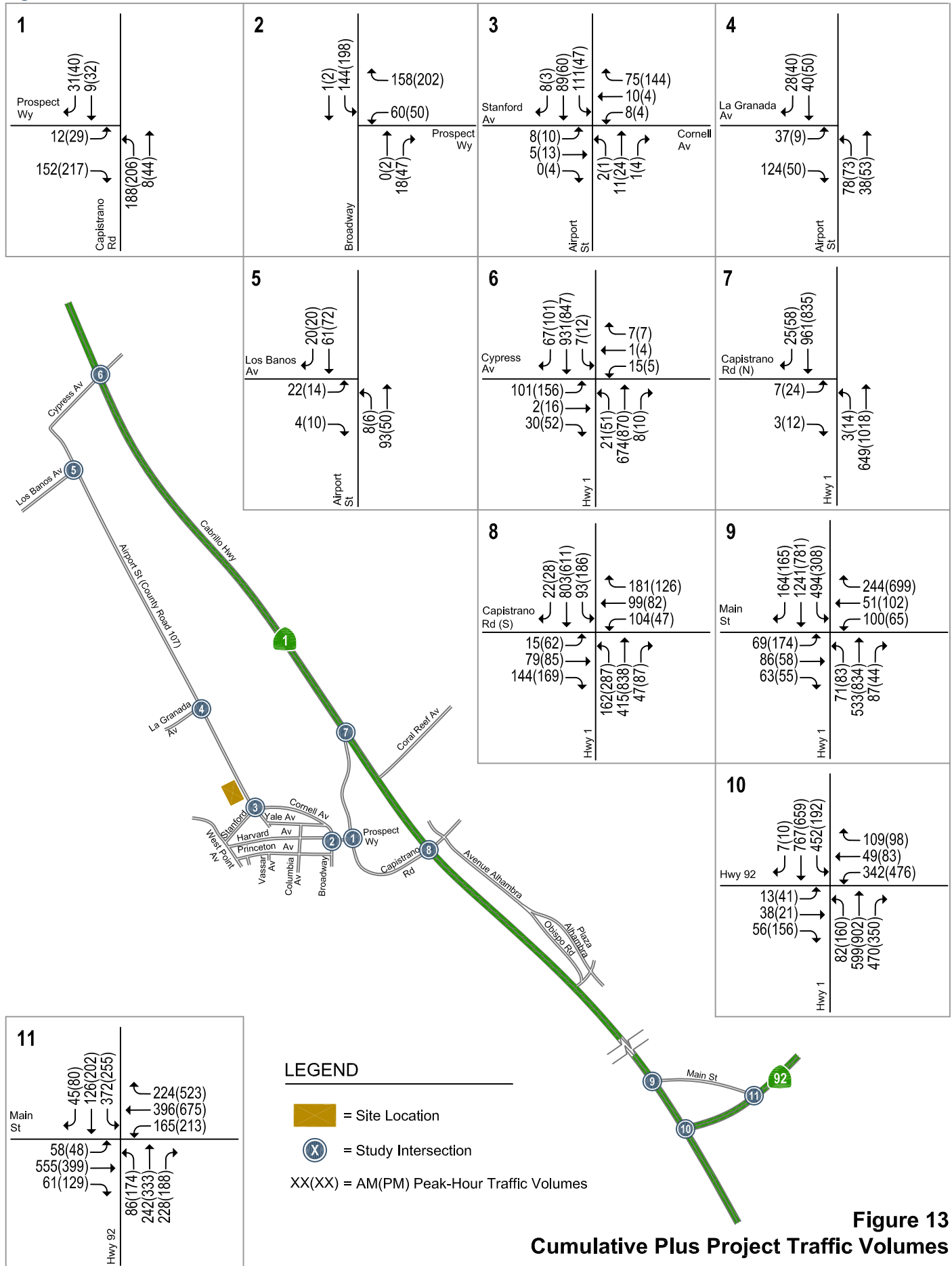
**Bold** indicates a substandard level of service.

**Bold** indicates a significant impact.

(1) indicates the delay cannot be calculated, V/C >1.0

Attachment J, Traffic Report

Big Wave North Parcel Alternative



**Figure 13**  
**Cumulative Plus Project Traffic Volumes**

## Big Wave North Parcel Alternative

# 7. Conclusions

This report presents the results of the traffic impact analysis conducted for the Big Wave Office Park and Wellness Center. The project site is located on Airport Street, north of the Princeton/Pillar Point Harbor area in unincorporated San Mateo County. The project includes a Wellness Center and an Office Park with the following components:

- Housing for developmentally disabled adults and their aides: including 57 bedrooms to provide affordable housing for a maximum of 50 developmentally disabled adults and 20 staff persons.
- Gym and basketball court
- 27,500 s.f. of storage space

In addition to the Wellness Center, the proposed project would include an Office Park, which includes 161,263 s.f. for office, research and development, light manufacturing, and storage uses. The project would have two full-access driveways and one inbound-only driveway on Airport Street. Parking for the project would be provided on site. Currently the site is vacant.

The potential impacts of the project were evaluated in accordance with the standards set forth by the County of San Mateo. The study included an analysis of AM and PM peak-hour traffic conditions at four signalized intersections and seven unsignalized intersections.

## Project Trip Generation

Application of ITE standard trip generation rates to the proposed development shows that the project is estimated to generate 1,479 daily trips, including 199 trips (163 inbound and 36 outbound) during the AM peak hour, and 192 trips (42 inbound and 150 outbound) during the PM peak hour.

## Project Impacts

The results of the level of service calculations show that under all project conditions, the LOS for the worst movement at the intersection at Highway 1 and Cypress Avenue would be F and the delay increase would be more than 4 seconds. This constitutes a significant project impact according to the County LOS standards.



## Big Wave North Parcel Alternative

### Mitigation

Hexagon found that the significant impact could be mitigated with the installation of a traffic signal or roundabouts described below.

#### Signalization of Intersection at Highway 1 and Cypress Avenue

Under project conditions, the peak hour signal warrant would be met at the intersection of Highway 1 at Cypress Avenue. With a traffic signal, the Highway 1/Cypress Avenue intersection would operate at LOS C during both the AM and PM peak hours under existing plus project, background, and background plus project conditions and would operate at LOS D under cumulative plus project conditions. Under signalized conditions, the existing roadway geometry would be adequate to handle the anticipated traffic demand. It is not advisable to install a traffic signal prior to a warrant being met, and the warrant is not met under existing conditions.

#### Roundabout at the Intersection of Highway 1 and Cypress Avenue

Caltrans now considers roundabouts whenever evaluating potential intersection improvements. The roundabout analysis at the intersection of Highway 1 and Cypress Avenue shows that a one-lane roundabout would operate with acceptable delay and LOS during the AM and PM peak hour under background plus project conditions on weekdays. Under cumulative plus project conditions, the one-lane roundabout would not work well to bring acceptable delay and LOS at this intersection during either AM or PM peak hour. A detailed study about a feasible roundabout design would be recommended to accommodate future volume growth at this intersection. During the midday peak hour on Saturday, there would be a need for a by-pass lane for the southbound right-turn traffic in order for the intersection to operate at an acceptable level of service C under existing plus project conditions. The roundabout analysis calculation sheets are included in Appendix D. Hexagon has not evaluated whether the intersection is large enough to accommodate a roundabout or whether additional right-of-way would be required.

Per County requirements, mitigation measures should be installed as part of the project prior to occupancy.

### Site Access and Circulation

The site access and circulation review is based on the site plan dated 5/28/2014 by Macleod and Associates. The site access was evaluated in accordance with generally accepted traffic engineering standards. Access to the north parcel project site would be provided by two full access driveways and one inbound only driveway on Airport Street. Because of the relatively low traffic volume on Airport Street, vehicles would experience no delays or queuing going into or out of the site.

Access to the south parcel project site, where the boat storage is located, would be provided by one full access driveway on Airport Street. The south parcel also includes public beach parking in diagonal spaces separated from Airport Street by islands. Some of the spaces are shown as 90 degree parking without an island. This needs to be corrected because perpendicular parking backing directly onto a public street is not allowed.

The onsite circulation was reviewed in accordance with generally accepted traffic engineering standards. The plan shows good on-site circulation.

Bicycle access to the site is adequate. Airport Street is a designated bike route. While it doesn't have bike lanes or shoulders, it has relatively low traffic volume, even with the project. Pedestrian access to the site is limited. There are no sidewalks on any of the streets south of the site. However, this is a largely industrial area with few walking destinations. There is a sidewalk on the west side of Airport Street north of the site. The project proposes a sidewalk along its frontage. This sidewalk should be made to connect to the existing sidewalk. That would create a continuous sidewalk to the nearby bus stop at La Granada Lane.

## **Big Wave North Parcel Alternative Technical Appendices**

July 17, 2014

## **Appendix A**

### **Intersection Traffic Counts**

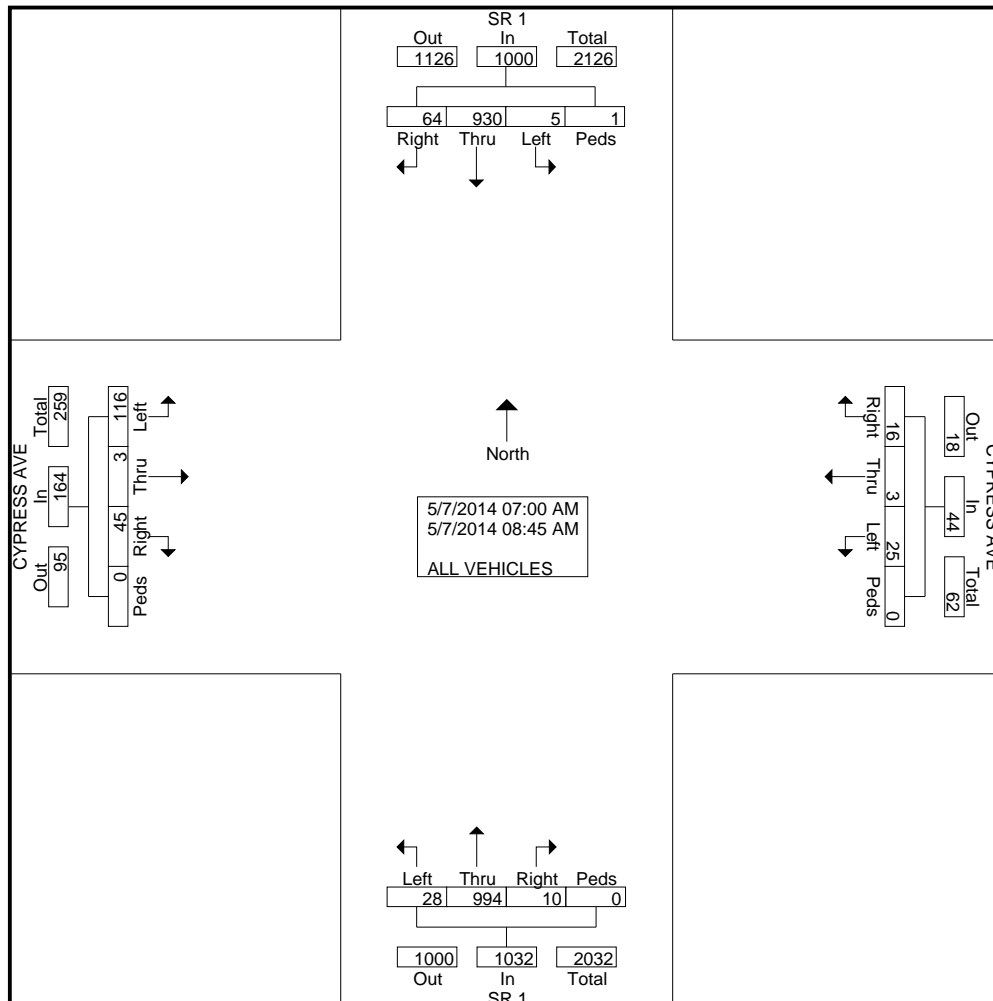
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2187 Kingsbury Cir  
Santa Clara, CA, 95054  
www.Alltrafficdata.net

File Name : #1 SR1&CYPRESSAM  
Site Code : 1  
Start Date : 5/7/2014  
Page No : 1

Groups Printed- ALL VEHICLES

Start Time	SR 1 Southbound				CYPRESS AVE Westbound				SR 1 Northbound				CYPRESS AVE Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	3	110	0	0	2	0	4	0	0	134	5	0	4	1	15	0	278
07:15 AM	8	96	0	0	4	0	1	0	0	138	0	0	7	0	13	0	267
07:30 AM	8	100	0	0	1	0	1	0	1	125	2	0	12	0	13	0	263
07:45 AM	9	119	1	1	4	0	6	0	3	130	4	0	6	0	12	0	295
Total	28	425	1	1	11	0	12	0	4	527	11	0	29	1	53	0	1103
08:00 AM	4	117	2	0	0	0	4	0	1	123	2	0	2	0	13	0	268
08:15 AM	10	124	1	0	1	0	2	0	1	138	3	0	3	1	22	0	306
08:30 AM	13	138	0	0	2	1	3	0	1	98	6	0	8	0	17	0	287
08:45 AM	9	126	1	0	2	2	4	0	3	108	6	0	3	1	11	0	276
Total	36	505	4	0	5	3	13	0	6	467	17	0	16	2	63	0	1137
Grand Total	64	930	5	1	16	3	25	0	10	994	28	0	45	3	116	0	2240
Apprch %	6.4	93	0.5	0.1	36.4	6.8	56.8	0	1	96.3	2.7	0	27.4	1.8	70.7	0	
Total %	2.9	41.5	0.2	0	0.7	0.1	1.1	0	0.4	44.4	1.2	0	2	0.1	5.2	0	

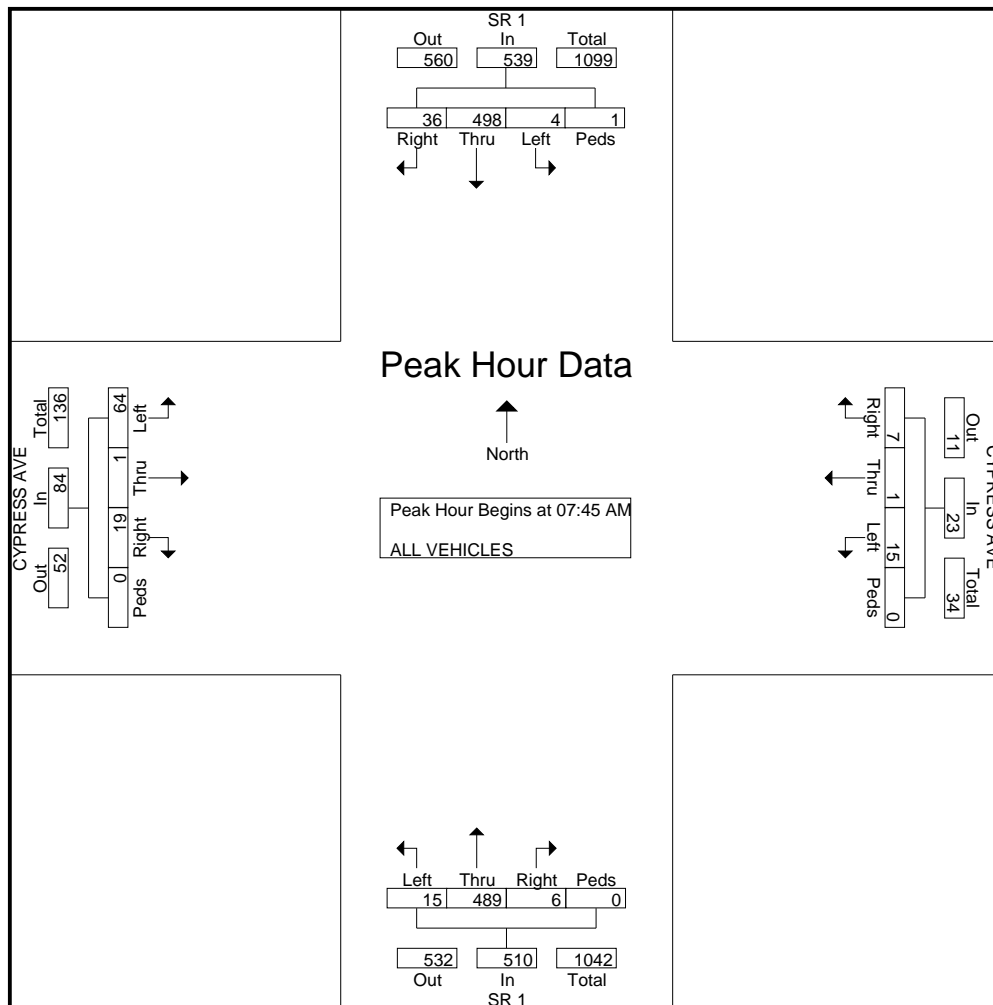


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Site Code : 1  
Start Date : 5/7/2014  
Page No : 2

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	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	9	119	1	1	130	4	0	6	0	10	3	130	4	0	137	6	0	12	0	18	295
08:00 AM	4	117	2	0	123	0	0	4	0	4	1	123	2	0	126	2	0	13	0	15	268
08:15 AM	10	124	1	0	135	1	0	2	0	3	1	138	3	0	142	3	1	22	0	26	306
08:30 AM	13	138	0	0	151	2	1	3	0	6	1	98	6	0	105	8	0	17	0	25	287
Total Volume	36	498	4	1	539	7	1	15	0	23	6	489	15	0	510	19	1	64	0	84	1156
% App. Total	6.7	92.4	0.7	0.2		30.4	4.3	65.2	0		1.2	95.9	2.9	0		22.6	1.2	76.2	0		
PHF	.692	.902	.500	.250	.892	.438	.250	.625	.000	.575	.500	.886	.625	.000	.898	.594	.250	.727	.000	.808	.944



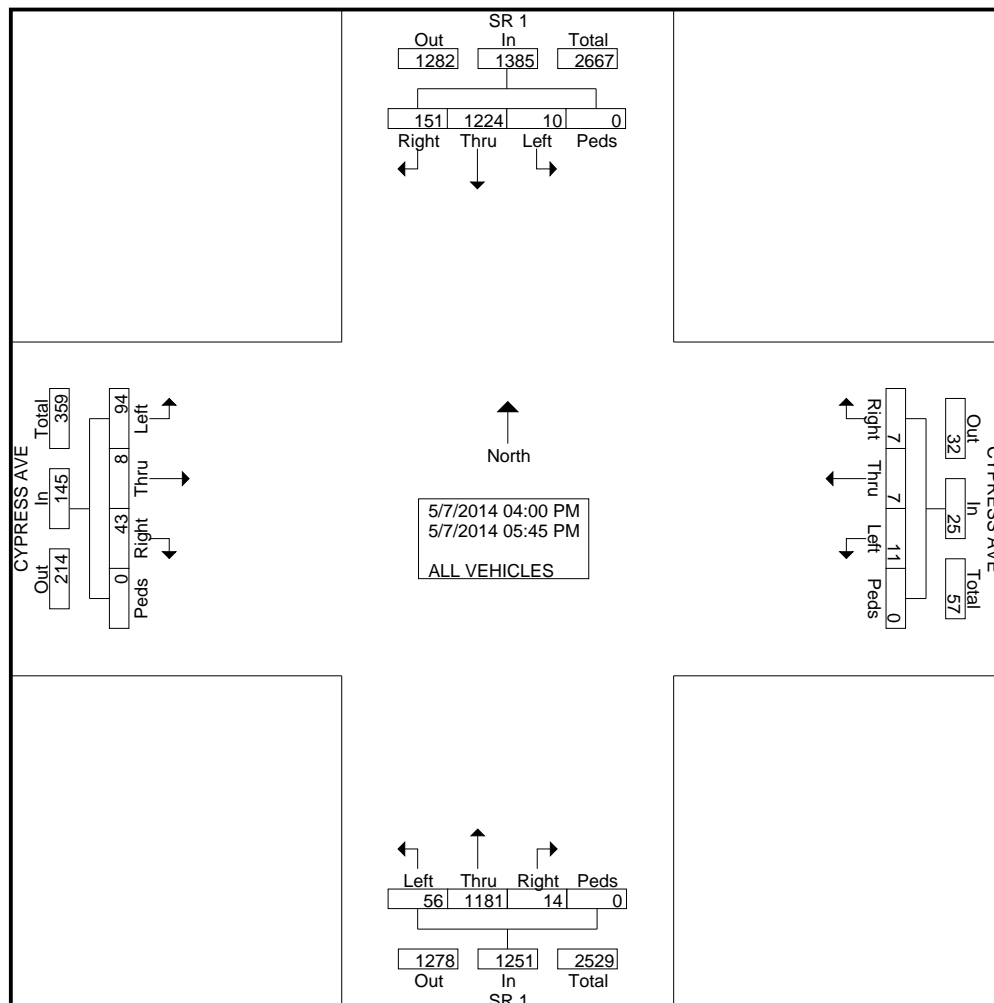
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Start Date : 5/7/2014  
Page No : 1

Groups Printed- ALL VEHICLES

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04:00 PM	17	149	0	0	1	0	0	0	2	131	4	0	5	1	14	0	324
04:15 PM	16	162	0	0	0	1	1	0	2	139	5	0	9	0	8	0	343
04:30 PM	20	131	0	0	0	3	4	0	0	152	3	0	9	1	13	0	336
04:45 PM	23	158	3	0	1	2	1	0	3	154	10	0	1	1	7	0	364
Total	76	600	3	0	2	6	6	0	7	576	22	0	24	3	42	0	1367
05:00 PM	21	170	0	0	1	0	2	0	1	154	7	0	8	1	11	0	376
05:15 PM	12	162	2	0	0	1	1	0	1	158	8	0	4	2	16	0	367
05:30 PM	19	137	4	0	3	0	0	0	2	143	11	0	3	1	14	0	337
05:45 PM	23	155	1	0	1	0	2	0	3	150	8	0	4	1	11	0	359
Total	75	624	7	0	5	1	5	0	7	605	34	0	19	5	52	0	1439
Grand Total	151	1224	10	0	7	7	11	0	14	1181	56	0	43	8	94	0	2806
Apprch %	10.9	88.4	0.7	0	28	28	44	0	1.1	94.4	4.5	0	29.7	5.5	64.8	0	
Total %	5.4	43.6	0.4	0	0.2	0.2	0.4	0	0.5	42.1	2	0	1.5	0.3	3.3	0	

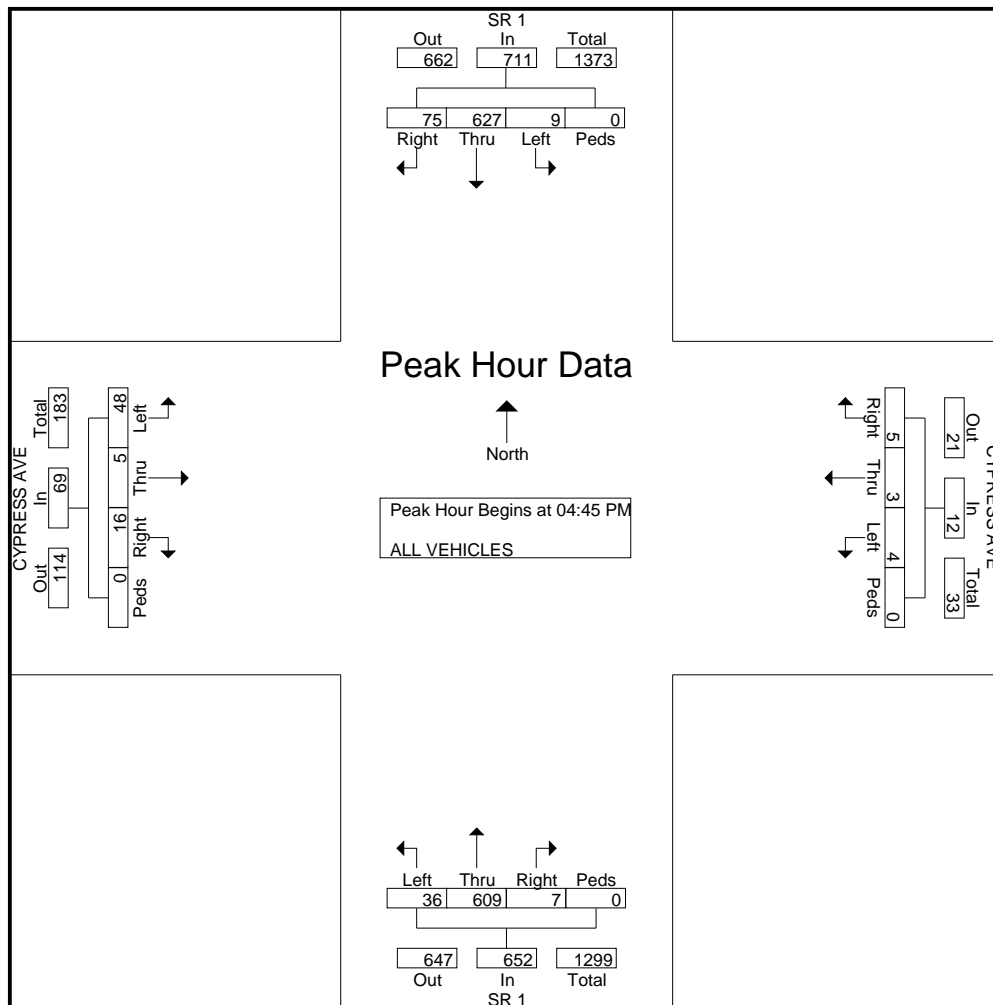


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2187 Kingsbury Cir  
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Site Code : 1  
Start Date : 5/7/2014  
Page No : 2

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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	23	158	3	0	184	1	2	1	0	4	3	154	10	0	167	1	1	7	0	9	364
05:00 PM	21	170	0	0	191	1	0	2	0	3	1	154	7	0	162	8	1	11	0	20	376
05:15 PM	12	162	2	0	176	0	1	1	0	2	1	158	8	0	167	4	2	16	0	22	367
05:30 PM	19	137	4	0	160	3	0	0	0	3	2	143	11	0	156	3	1	14	0	18	337
Total Volume	75	627	9	0	711	5	3	4	0	12	7	609	36	0	652	16	5	48	0	69	1444
% App. Total	10.5	88.2	1.3	0		41.7	25	33.3	0		1.1	93.4	5.5	0		23.2	7.2	69.6	0		
PHF	.815	.922	.563	.000	.931	.417	.375	.500	.000	.750	.583	.964	.818	.000	.976	.500	.625	.750	.000	.784	.960



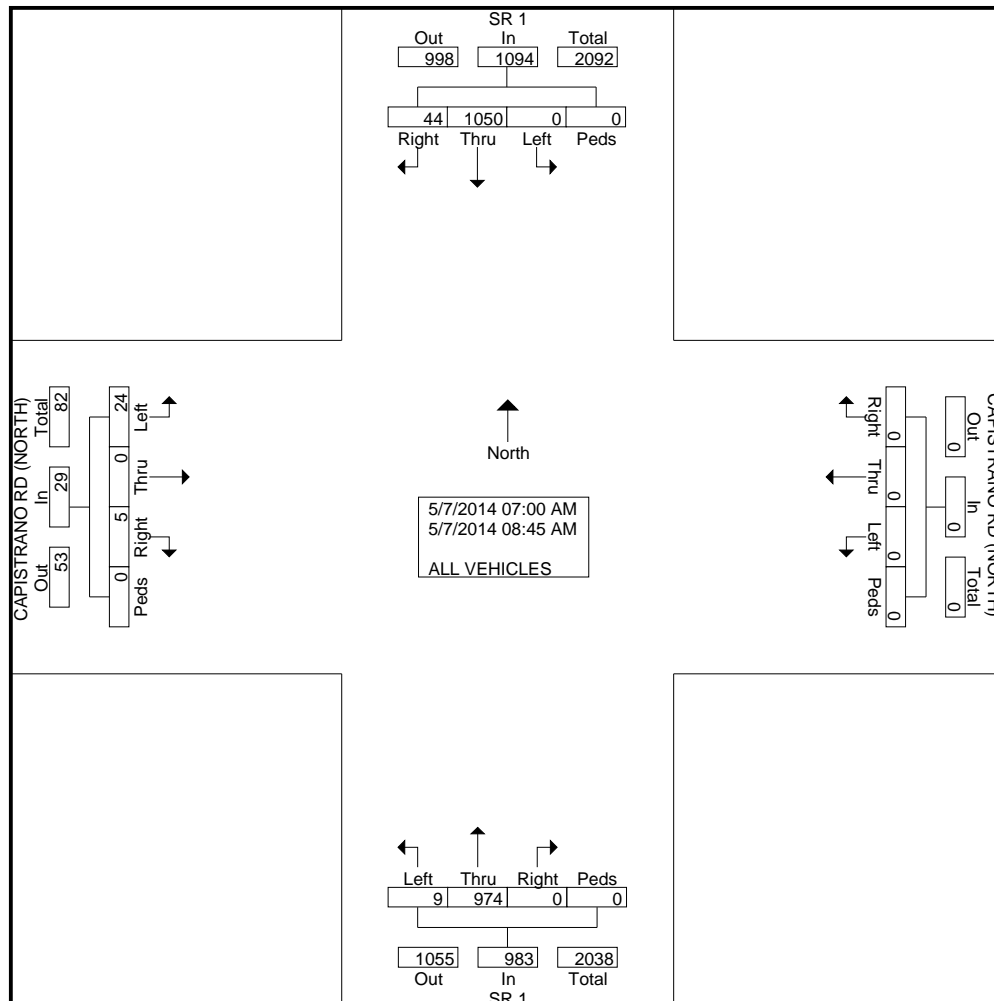
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Page No : 1

Groups Printed- ALL VEHICLES

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07:15 AM	0	124	0	0	0	0	0	0	0	131	0	0	1	0	3	0	259
07:30 AM	4	107	0	0	0	0	0	0	0	117	1	0	0	0	0	0	229
07:45 AM	7	149	0	0	0	0	0	0	0	134	1	0	1	0	2	0	294
Total	14	545	0	0	0	0	0	0	0	506	2	0	3	0	7	0	1077
08:00 AM	4	125	0	0	0	0	0	0	0	115	4	0	0	0	3	0	251
08:15 AM	4	129	0	0	0	0	0	0	0	134	0	0	1	0	5	0	273
08:30 AM	8	119	0	0	0	0	0	0	0	108	2	0	0	0	4	0	241
08:45 AM	14	132	0	0	0	0	0	0	0	111	1	0	1	0	5	0	264
Total	30	505	0	0	0	0	0	0	0	468	7	0	2	0	17	0	1029
Grand Total	44	1050	0	0	0	0	0	0	0	974	9	0	5	0	24	0	2106
Apprch %	4	96	0	0	0	0	0	0	0	99.1	0.9	0	17.2	0	82.8	0	
Total %	2.1	49.9	0	0	0	0	0	0	0	46.2	0.4	0	0.2	0	1.1	0	



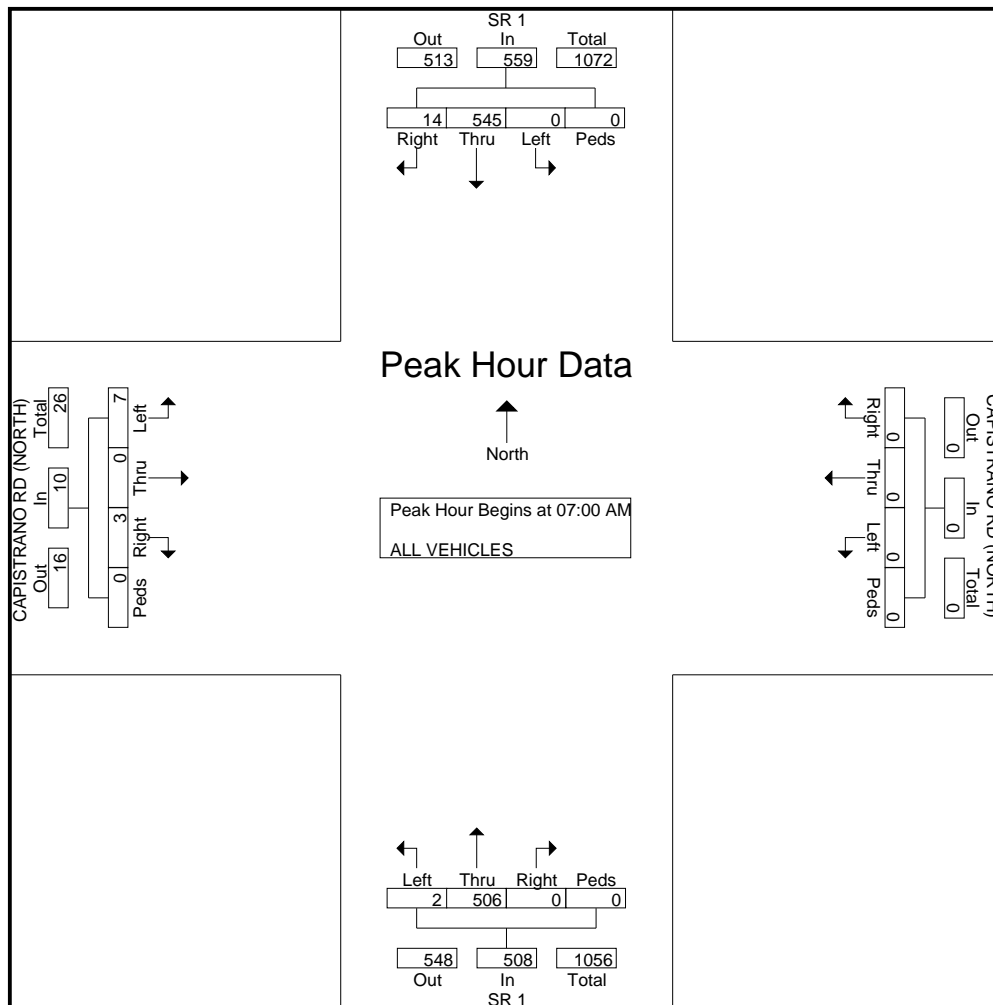


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Start Date : 5/7/2014  
Page No : 2

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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	3	165	0	0	168	0	0	0	0	0	0	124	0	0	124	1	0	2	0	3	295
07:15 AM	0	124	0	0	124	0	0	0	0	0	0	131	0	0	131	1	0	3	0	4	259
07:30 AM	4	107	0	0	111	0	0	0	0	0	0	117	1	0	118	0	0	0	0	0	229
07:45 AM	7	149	0	0	156	0	0	0	0	0	0	134	1	0	135	1	0	2	0	3	294
Total Volume	14	545	0	0	559	0	0	0	0	0	0	506	2	0	508	3	0	7	0	10	1077
% App. Total	2.5	97.5	0	0		0	0	0	0		0	99.6	0.4	0		30	0	70	0		
PHF	.500	.826	.000	.000	.832	.000	.000	.000	.000	.000	.000	.944	.500	.000	.941	.750	.000	.583	.000	.625	.913



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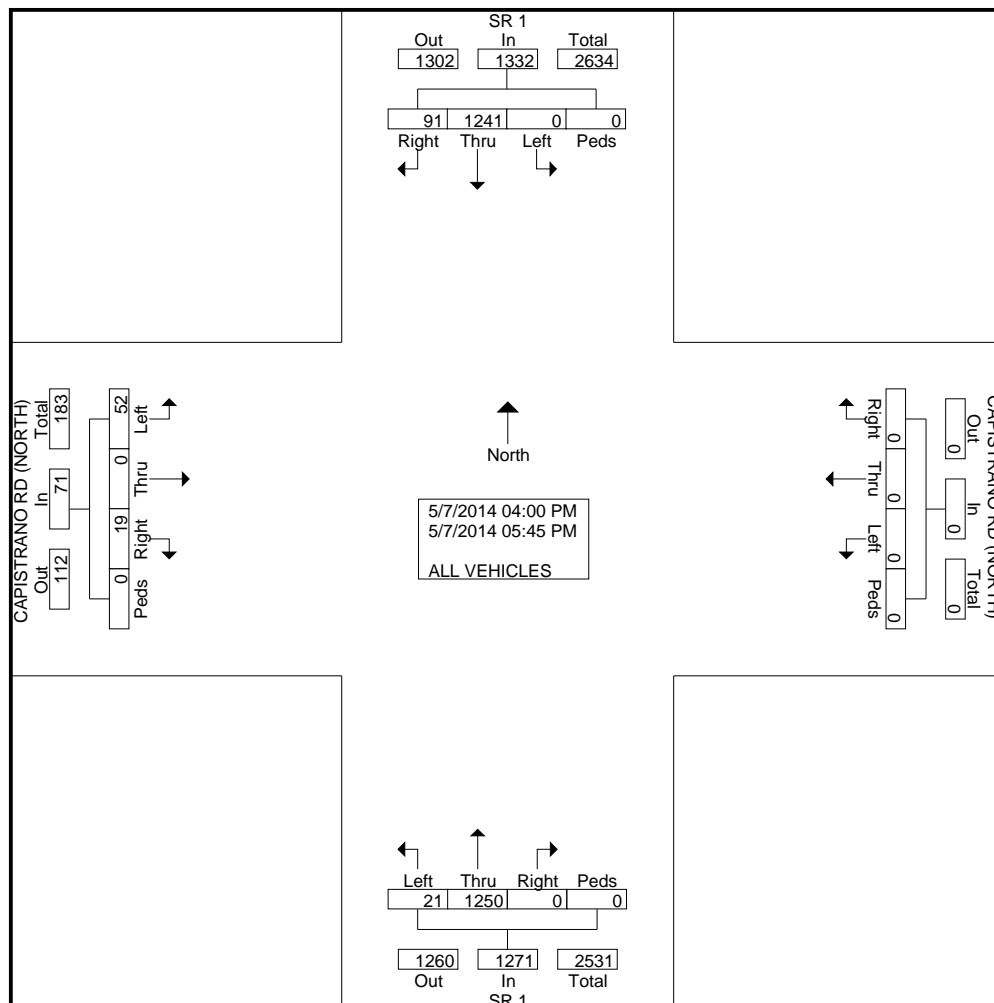
Site Code : 2

Start Date : 5/7/2014

Page No : 1

Groups Printed- ALL VEHICLES

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	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	13	147	0	0	0	0	0	0	0	142	4	0	1	0	5	0	312
04:15 PM	9	181	0	0	0	0	0	0	0	137	1	0	2	0	7	0	337
04:30 PM	11	128	0	0	0	0	0	0	0	167	4	0	2	0	7	0	319
04:45 PM	13	141	0	0	0	0	0	0	0	151	3	0	2	0	9	0	319
Total	46	597	0	0	0	0	0	0	0	597	12	0	7	0	28	0	1287
05:00 PM	18	173	0	0	0	0	0	0	0	172	3	0	3	0	5	0	374
05:15 PM	12	170	0	0	0	0	0	0	0	164	1	0	4	0	8	0	359
05:30 PM	3	146	0	0	0	0	0	0	0	153	2	0	2	0	6	0	312
05:45 PM	12	155	0	0	0	0	0	0	0	164	3	0	3	0	5	0	342
Total	45	644	0	0	0	0	0	0	0	653	9	0	12	0	24	0	1387
Grand Total	91	1241	0	0	0	0	0	0	0	1250	21	0	19	0	52	0	2674
Apprch %	6.8	93.2	0	0	0	0	0	0	0	98.3	1.7	0	26.8	0	73.2	0	
Total %	3.4	46.4	0	0	0	0	0	0	0	46.7	0.8	0	0.7	0	1.9	0	

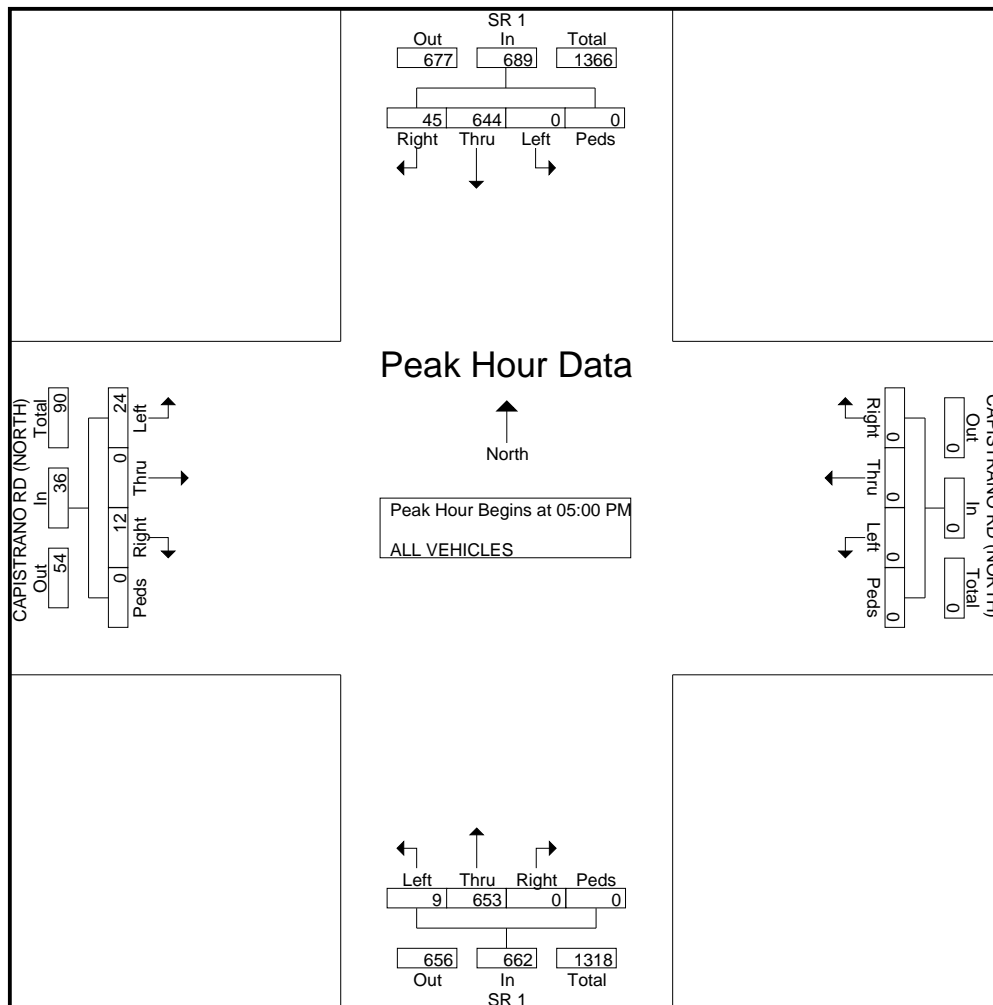


### All Traffic Data Services

2187 Kingsbury Cir  
Santa Clara, CA, 95054  
www.Alltrafficdata.net

File Name : #2 SR1&CAPISTRANONORTH  
Site Code : 2  
Start Date : 5/7/2014  
Page No : 2

Start Time	SR 1 Southbound					CAPISTRANO RD (NORTH) Westbound					SR 1 Northbound					CAPISTRANO RD (NORTH) Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	18	173	0	0	191	0	0	0	0	0	0	172	3	0	175	3	0	5	0	8	374
05:15 PM	12	170	0	0	182	0	0	0	0	0	0	164	1	0	165	4	0	8	0	12	359
05:30 PM	3	146	0	0	149	0	0	0	0	0	0	153	2	0	155	2	0	6	0	8	312
05:45 PM	12	155	0	0	167	0	0	0	0	0	0	164	3	0	167	3	0	5	0	8	342
Total Volume	45	644	0	0	689	0	0	0	0	0	0	653	9	0	662	12	0	24	0	36	1387
% App. Total	6.5	93.5	0	0		0	0	0	0		0	98.6	1.4	0		33.3	0	66.7	0		
PHF	.625	.931	.000	.000	.902	.000	.000	.000	.000	.000	.000	.949	.750	.000	.946	.750	.000	.750	.000	.750	.927



### All Traffic Data Services

2187 Kingsbury Cir  
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File Name : #3 AIRPORT&LOSBANOSAM

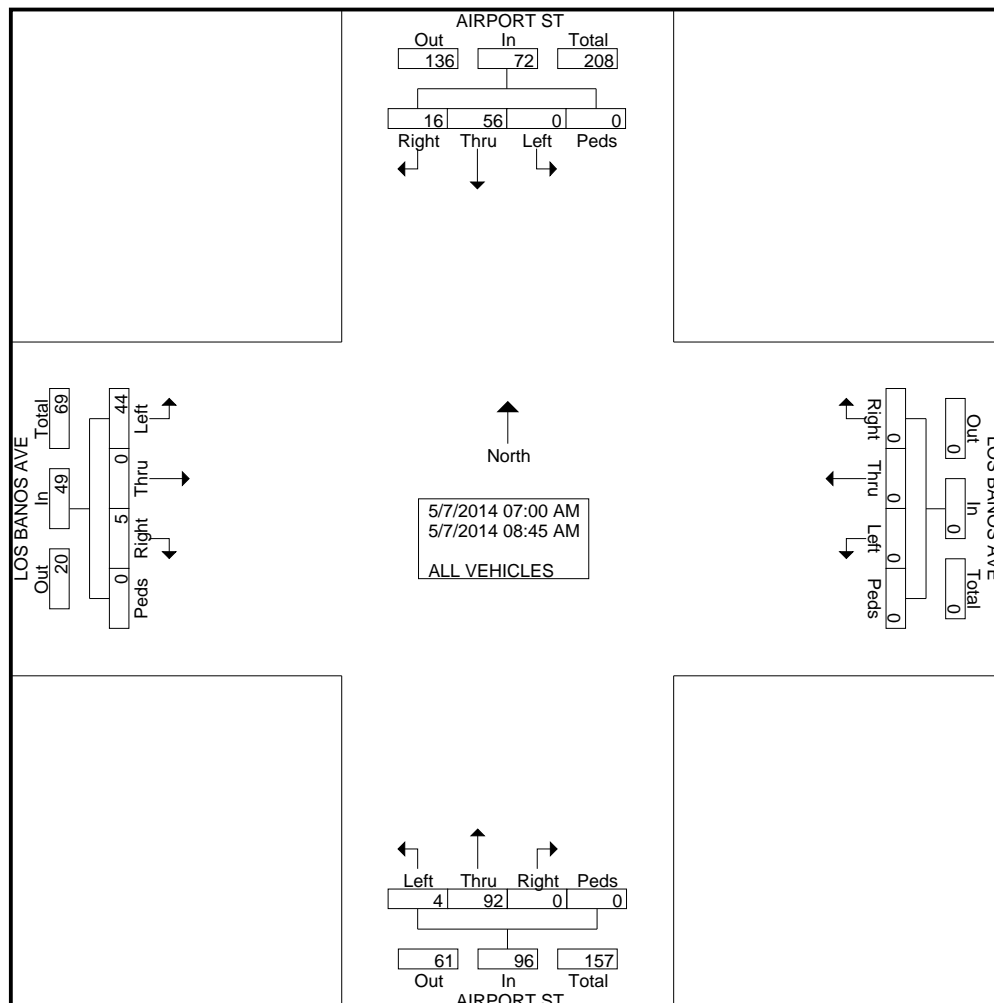
Site Code : 3

Start Date : 5/7/2014

Page No : 1

Groups Printed- ALL VEHICLES

Start Time	AIRPORT ST Southbound				LOS BANOS AVE Westbound				AIRPORT ST Northbound				LOS BANOS AVE Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	1	3	0	0	0	0	0	0	0	11	0	0	0	0	3	0	18
07:15 AM	0	6	0	0	0	0	0	0	0	10	0	0	0	0	6	0	22
07:30 AM	3	4	0	0	0	0	0	0	0	14	0	0	0	0	6	0	27
07:45 AM	4	9	0	0	0	0	0	0	0	10	1	0	3	0	5	0	32
Total	8	22	0	0	0	0	0	0	0	45	1	0	3	0	20	0	99
08:00 AM	1	6	0	0	0	0	0	0	0	11	1	0	1	0	4	0	24
08:15 AM	2	5	0	0	0	0	0	0	0	12	0	0	0	0	8	0	27
08:30 AM	3	10	0	0	0	0	0	0	0	15	2	0	0	0	5	0	35
08:45 AM	2	13	0	0	0	0	0	0	0	9	0	0	1	0	7	0	32
Total	8	34	0	0	0	0	0	0	0	47	3	0	2	0	24	0	118
Grand Total	16	56	0	0	0	0	0	0	0	92	4	0	5	0	44	0	217
Apprch %	22.2	77.8	0	0	0	0	0	0	0	95.8	4.2	0	10.2	0	89.8	0	
Total %	7.4	25.8	0	0	0	0	0	0	0	42.4	1.8	0	2.3	0	20.3	0	

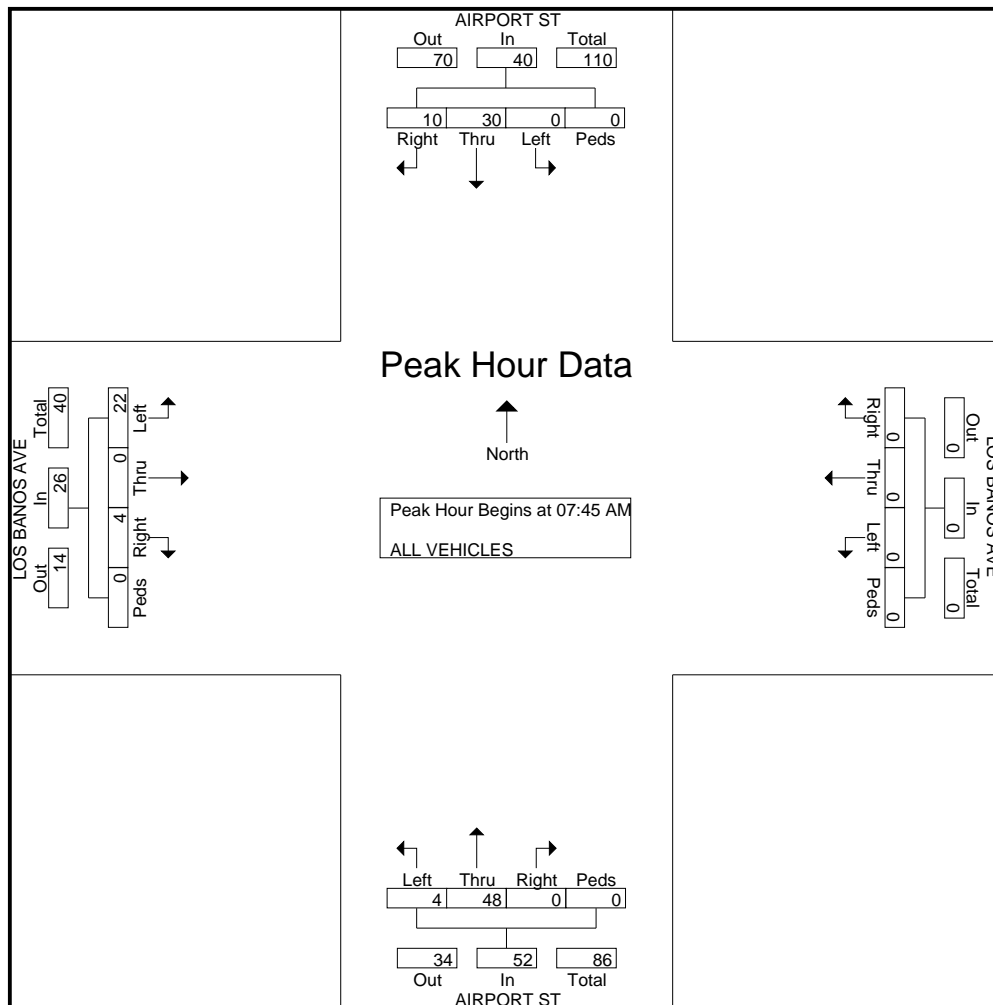


### All Traffic Data Services

2187 Kingsbury Cir  
Santa Clara, CA, 95054  
www.Alltrafficdata.net

File Name : #3 AIRPORT&LOSBANOSAM  
Site Code : 3  
Start Date : 5/7/2014  
Page No : 2

Start Time	AIRPORT ST Southbound					LOS BANOS AVE Westbound					AIRPORT ST Northbound					LOS BANOS AVE Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	4	9	0	0	13	0	0	0	0	0	0	10	1	0	11	3	0	5	0	8	32
08:00 AM	1	6	0	0	7	0	0	0	0	0	0	11	1	0	12	1	0	4	0	5	24
08:15 AM	2	5	0	0	7	0	0	0	0	0	0	12	0	0	12	0	0	8	0	8	27
08:30 AM	3	10	0	0	13	0	0	0	0	0	0	15	2	0	17	0	0	5	0	5	35
Total Volume	10	30	0	0	40	0	0	0	0	0	0	48	4	0	52	4	0	22	0	26	118
% App. Total	25	75	0	0		0	0	0	0		0	92.3	7.7	0		15.4	0	84.6	0		
PHF	.625	.750	.000	.000	.769	.000	.000	.000	.000	.000	.000	.800	.500	.000	.765	.333	.000	.688	.000	.813	.843



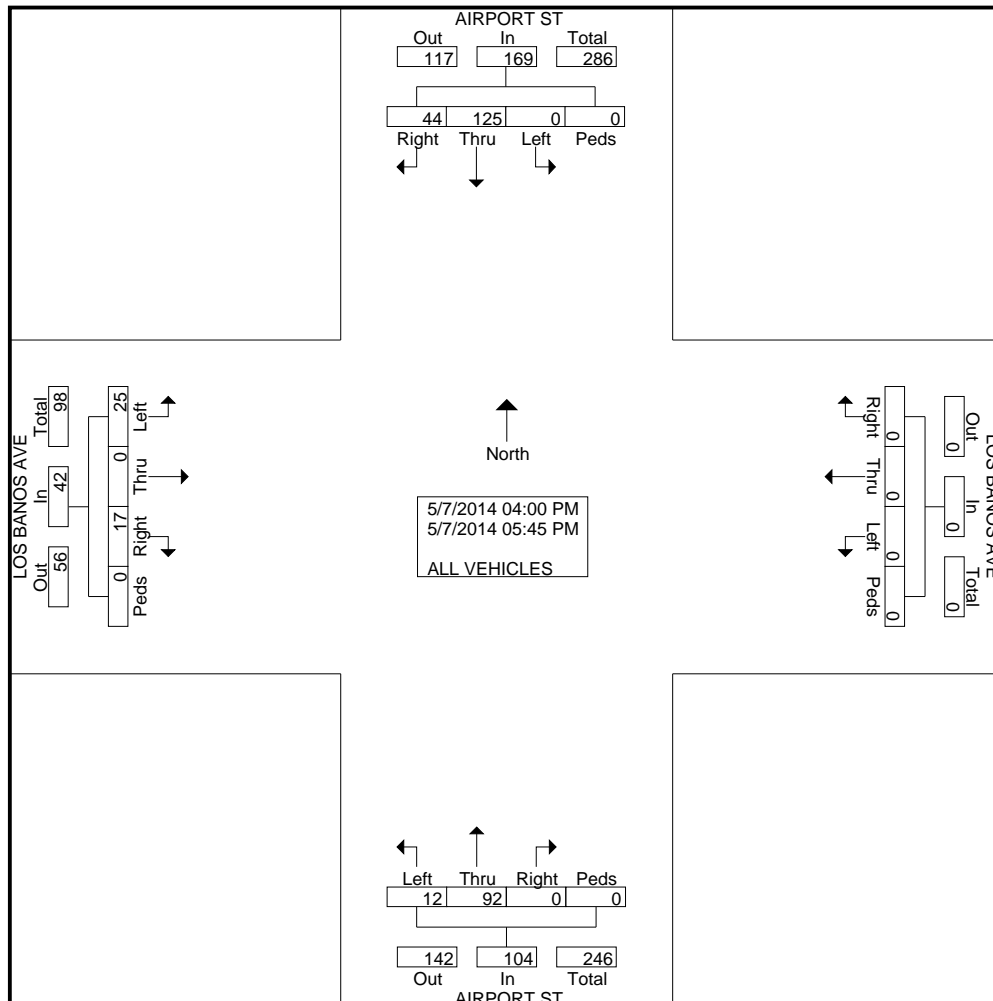
### All Traffic Data Services

2187 Kingsbury Cir  
Santa Clara, CA, 95054  
www.Alltrafficdata.net

File Name : #3 AIRPORT&LOSBANOSPM  
Site Code : 3  
Start Date : 5/7/2014  
Page No : 1

Groups Printed- ALL VEHICLES

Start Time	AIRPORT ST Southbound				LOS BANOS AVE Westbound				AIRPORT ST Northbound				LOS BANOS AVE Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	5	13	0	0	0	0	0	0	0	13	4	0	2	0	2	0	39
04:15 PM	7	9	0	0	0	0	0	0	0	8	0	0	1	0	5	0	30
04:30 PM	4	19	0	0	0	0	0	0	0	14	0	0	3	0	3	0	43
04:45 PM	6	20	0	0	0	0	0	0	0	8	3	0	2	0	0	0	39
Total	22	61	0	0	0	0	0	0	0	43	7	0	8	0	10	0	151
05:00 PM	6	19	0	0	0	0	0	0	0	13	0	0	5	0	6	0	49
05:15 PM	4	12	0	0	0	0	0	0	0	15	3	0	0	0	5	0	39
05:30 PM	8	18	0	0	0	0	0	0	0	13	1	0	1	0	1	0	42
05:45 PM	4	15	0	0	0	0	0	0	0	8	1	0	3	0	3	0	34
Total	22	64	0	0	0	0	0	0	0	49	5	0	9	0	15	0	164
Grand Total	44	125	0	0	0	0	0	0	0	92	12	0	17	0	25	0	315
Apprch %	26	74	0	0	0	0	0	0	0	88.5	11.5	0	40.5	0	59.5	0	
Total %	14	39.7	0	0	0	0	0	0	0	29.2	3.8	0	5.4	0	7.9	0	

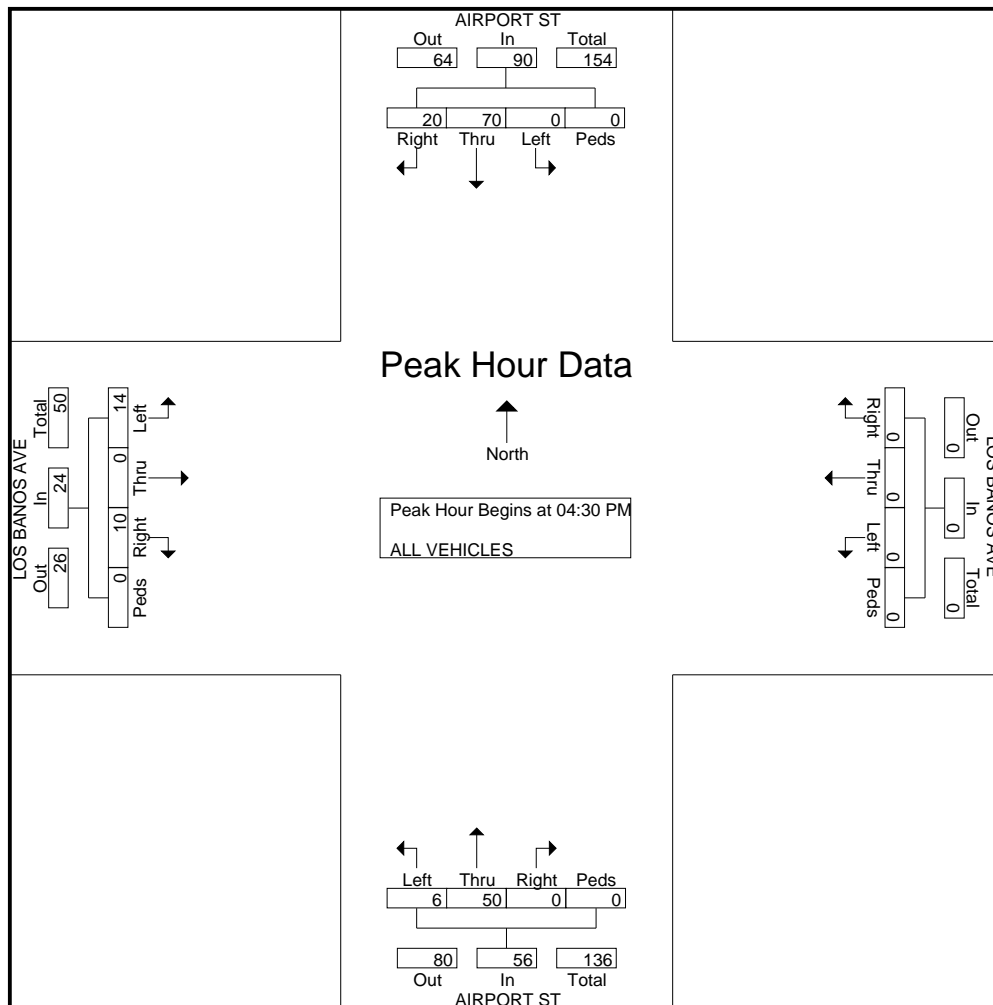


### All Traffic Data Services

2187 Kingsbury Cir  
Santa Clara, CA, 95054  
www.Alltrafficdata.net

File Name : #3 AIRPORT&LOSBANOSPM  
Site Code : 3  
Start Date : 5/7/2014  
Page No : 2

Start Time	AIRPORT ST Southbound					LOS BANOS AVE Westbound					AIRPORT ST Northbound					LOS BANOS AVE Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	4	19	0	0	23	0	0	0	0	0	0	14	0	0	14	3	0	3	0	6	43
04:45 PM	6	20	0	0	26	0	0	0	0	0	0	8	3	0	11	2	0	0	0	2	39
05:00 PM	6	19	0	0	25	0	0	0	0	0	0	13	0	0	13	5	0	6	0	11	49
05:15 PM	4	12	0	0	16	0	0	0	0	0	0	15	3	0	18	0	0	5	0	5	39
Total Volume	20	70	0	0	90	0	0	0	0	0	0	50	6	0	56	10	0	14	0	24	170
% App. Total	22.2	77.8	0	0		0	0	0	0		0	89.3	10.7	0		41.7	0	58.3	0		
PHF	.833	.875	.000	.000	.865	.000	.000	.000	.000	.000	.000	.833	.500	.000	.778	.500	.000	.583	.000	.545	.867



### All Traffic Data Services

2187 Kingsbury Cir  
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File Name : #4 AIRPORT&LAGRANADAAM

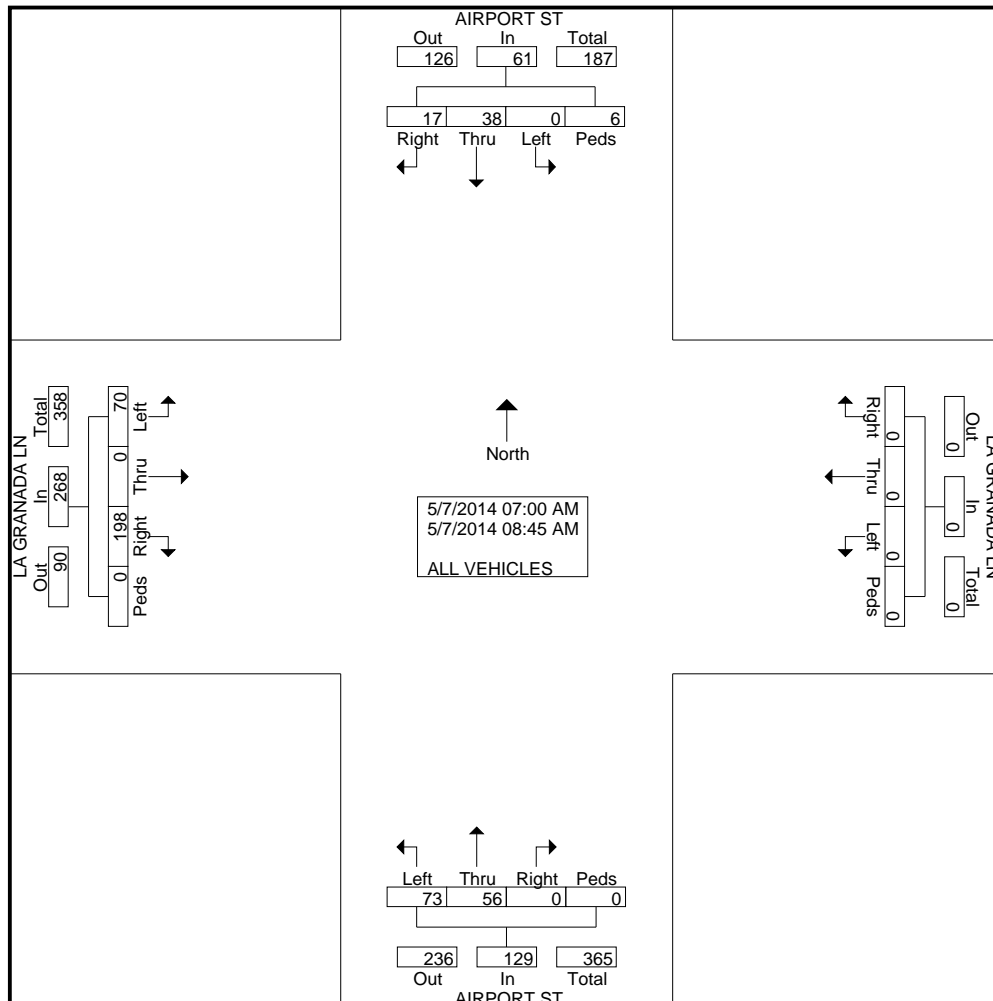
Site Code : 4

Start Date : 5/7/2014

Page No : 1

Groups Printed- ALL VEHICLES

Start Time	AIRPORT ST Southbound				LA GRANADA LN Westbound				AIRPORT ST Northbound				LA GRANADA LN Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	0	3	0	0	0	0	0	0	0	3	5	0	37	0	9	0	57
07:15 AM	2	3	0	1	0	0	0	0	0	3	6	0	22	0	11	0	48
07:30 AM	3	3	0	2	0	0	0	0	0	5	8	0	30	0	9	0	60
07:45 AM	2	5	0	0	0	0	0	0	0	10	12	0	49	0	5	0	83
Total	7	14	0	3	0	0	0	0	0	21	31	0	138	0	34	0	248
08:00 AM	4	5	0	0	0	0	0	0	0	4	19	0	23	0	12	0	67
08:15 AM	3	2	0	1	0	0	0	0	0	10	7	0	11	0	8	0	42
08:30 AM	3	10	0	2	0	0	0	0	0	9	4	0	7	0	10	0	45
08:45 AM	0	7	0	0	0	0	0	0	0	12	12	0	19	0	6	0	56
Total	10	24	0	3	0	0	0	0	0	35	42	0	60	0	36	0	210
Grand Total	17	38	0	6	0	0	0	0	0	56	73	0	198	0	70	0	458
Apprch %	27.9	62.3	0	9.8	0	0	0	0	0	43.4	56.6	0	73.9	0	26.1	0	
Total %	3.7	8.3	0	1.3	0	0	0	0	0	12.2	15.9	0	43.2	0	15.3	0	



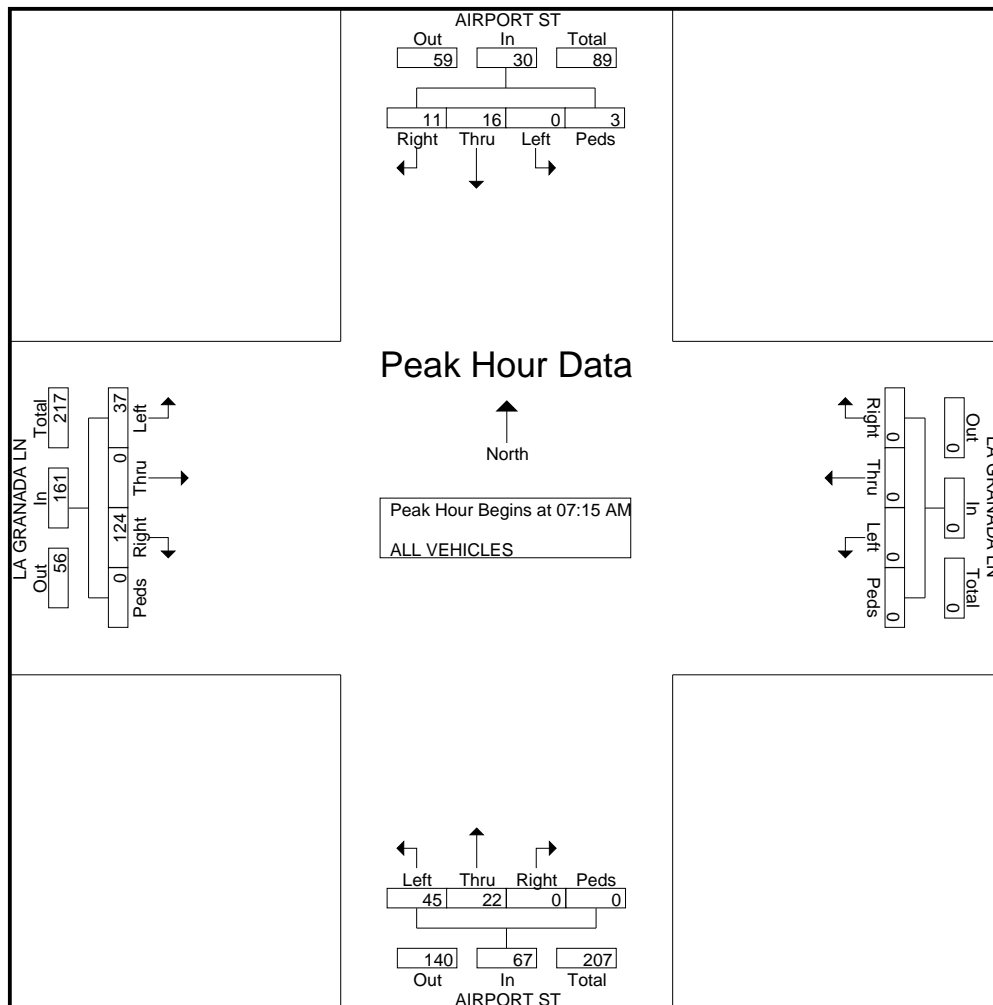


### All Traffic Data Services

2187 Kingsbury Cir  
Santa Clara, CA, 95054  
www.Alltrafficdata.net

File Name : #4 AIRPORT&LAGRANADAAM  
Site Code : 4  
Start Date : 5/7/2014  
Page No : 2

Start Time	AIRPORT ST Southbound					LA GRANADA LN Westbound					AIRPORT ST Northbound					LA GRANADA LN Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	2	3	0	1	6	0	0	0	0	0	0	3	6	0	9	22	0	11	0	33	48
07:30 AM	3	3	0	2	8	0	0	0	0	0	0	5	8	0	13	30	0	9	0	39	60
07:45 AM	2	5	0	0	7	0	0	0	0	0	0	10	12	0	22	49	0	5	0	54	83
08:00 AM	4	5	0	0	9	0	0	0	0	0	0	4	19	0	23	23	0	12	0	35	67
Total Volume	11	16	0	3	30	0	0	0	0	0	0	22	45	0	67	124	0	37	0	161	258
% App. Total	36.7	53.3	0	10		0	0	0	0		0	32.8	67.2	0		77	0	23	0		
PHF	.688	.800	.000	.375	.833	.000	.000	.000	.000	.000	.000	.550	.592	.000	.728	.633	.000	.771	.000	.745	.777



### All Traffic Data Services

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File Name : #4 AIRPORT&LAGRANADAPM

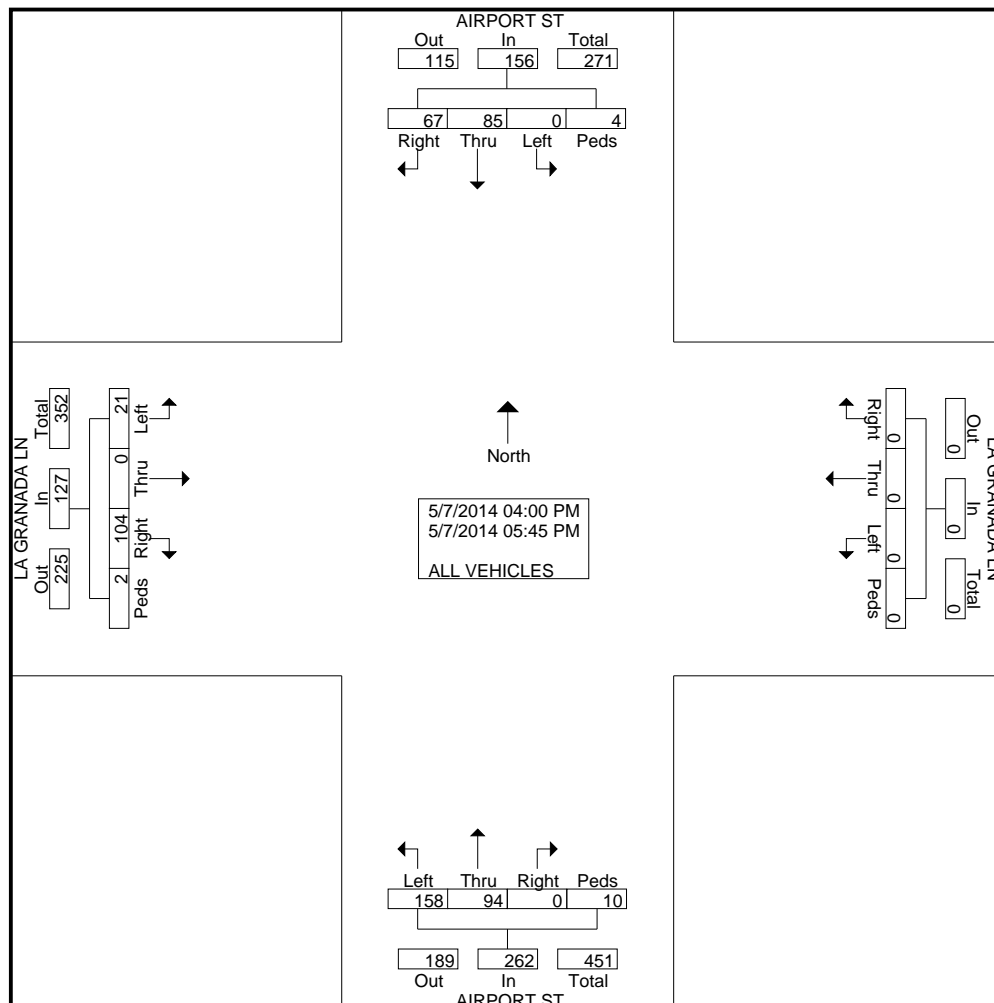
Site Code : 4

Start Date : 5/7/2014

Page No : 1

Groups Printed- ALL VEHICLES

Start Time	AIRPORT ST Southbound				LA GRANADA LN Westbound				AIRPORT ST Northbound				LA GRANADA LN Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	8	9	0	0	0	0	0	0	0	11	15	0	7	0	3	0	53
04:15 PM	5	9	0	0	0	0	0	0	0	10	26	0	11	0	4	0	65
04:30 PM	6	14	0	2	0	0	0	0	0	10	19	9	16	0	3	0	79
04:45 PM	19	13	0	0	0	0	0	0	0	13	20	0	14	0	0	0	79
Total	38	45	0	2	0	0	0	0	0	44	80	9	48	0	10	0	276
05:00 PM	6	11	0	0	0	0	0	0	0	14	20	0	9	0	1	1	62
05:15 PM	8	11	0	0	0	0	0	0	0	16	14	0	11	0	5	1	66
05:30 PM	9	11	0	2	0	0	0	0	0	12	19	0	21	0	4	0	78
05:45 PM	6	7	0	0	0	0	0	0	0	8	25	1	15	0	1	0	63
Total	29	40	0	2	0	0	0	0	0	50	78	1	56	0	11	2	269
Grand Total	67	85	0	4	0	0	0	0	0	94	158	10	104	0	21	2	545
Apprch %	42.9	54.5	0	2.6	0	0	0	0	0	35.9	60.3	3.8	81.9	0	16.5	1.6	
Total %	12.3	15.6	0	0.7	0	0	0	0	0	17.2	29	1.8	19.1	0	3.9	0.4	

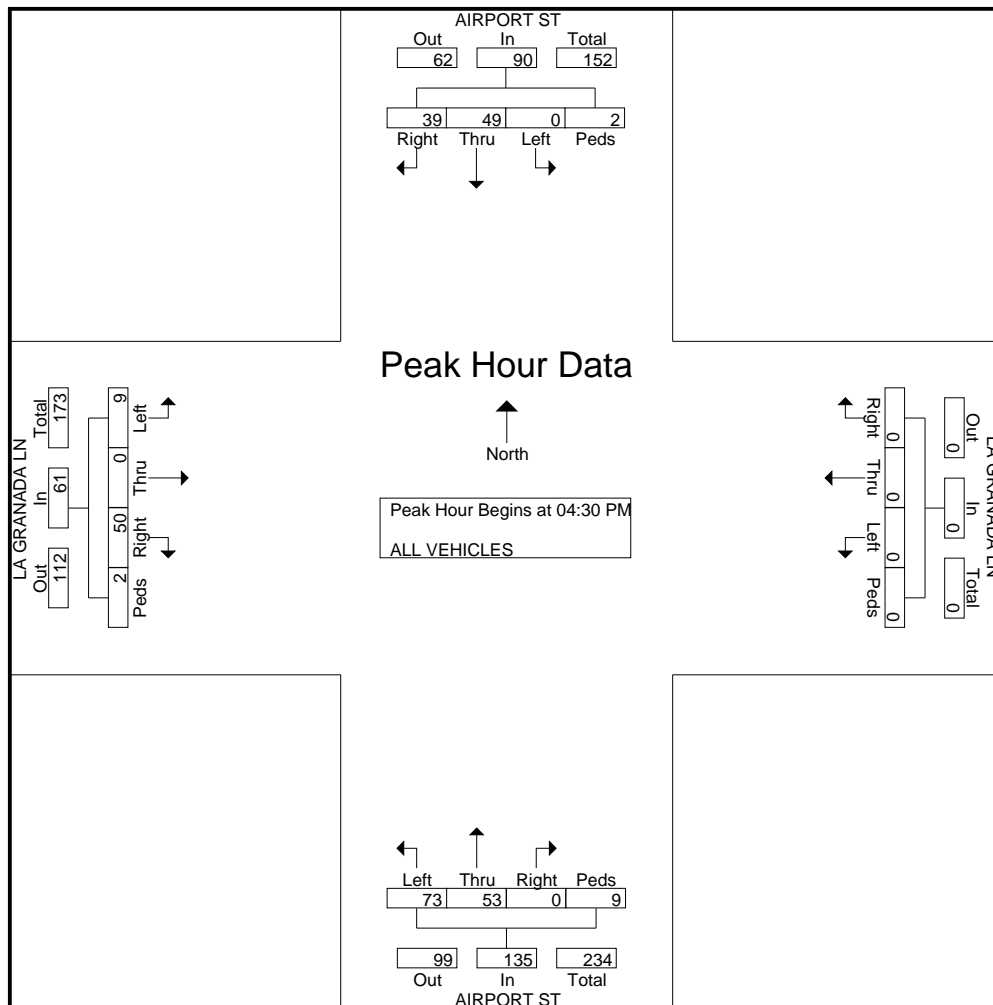


### All Traffic Data Services

2187 Kingsbury Cir  
Santa Clara, CA, 95054  
www.Alltrafficdata.net

File Name : #4 AIRPORT&LAGRANADAPM  
Site Code : 4  
Start Date : 5/7/2014  
Page No : 2

Start Time	AIRPORT ST Southbound					LA GRANADA LN Westbound					AIRPORT ST Northbound					LA GRANADA LN Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	6	14	0	2	22	0	0	0	0	0	0	10	19	9	38	16	0	3	0	19	79
04:45 PM	19	13	0	0	32	0	0	0	0	0	0	13	20	0	33	14	0	0	0	14	79
05:00 PM	6	11	0	0	17	0	0	0	0	0	0	14	20	0	34	9	0	1	1	11	62
05:15 PM	8	11	0	0	19	0	0	0	0	0	0	16	14	0	30	11	0	5	1	17	66
Total Volume	39	49	0	2	90	0	0	0	0	0	0	53	73	9	135	50	0	9	2	61	286
% App. Total	43.3	54.4	0	2.2		0	0	0	0		0	39.3	54.1	6.7		82	0	14.8	3.3		
PHF	.513	.875	.000	.250	.703	.000	.000	.000	.000	.000	.000	.828	.913	.250	.888	.781	.000	.450	.500	.803	.905



### All Traffic Data Services

2187 Kingsbury Cir  
Santa Clara, CA, 95054  
www.Alltrafficdata.net

File Name : #5 AIRPORT&STANFORDAM

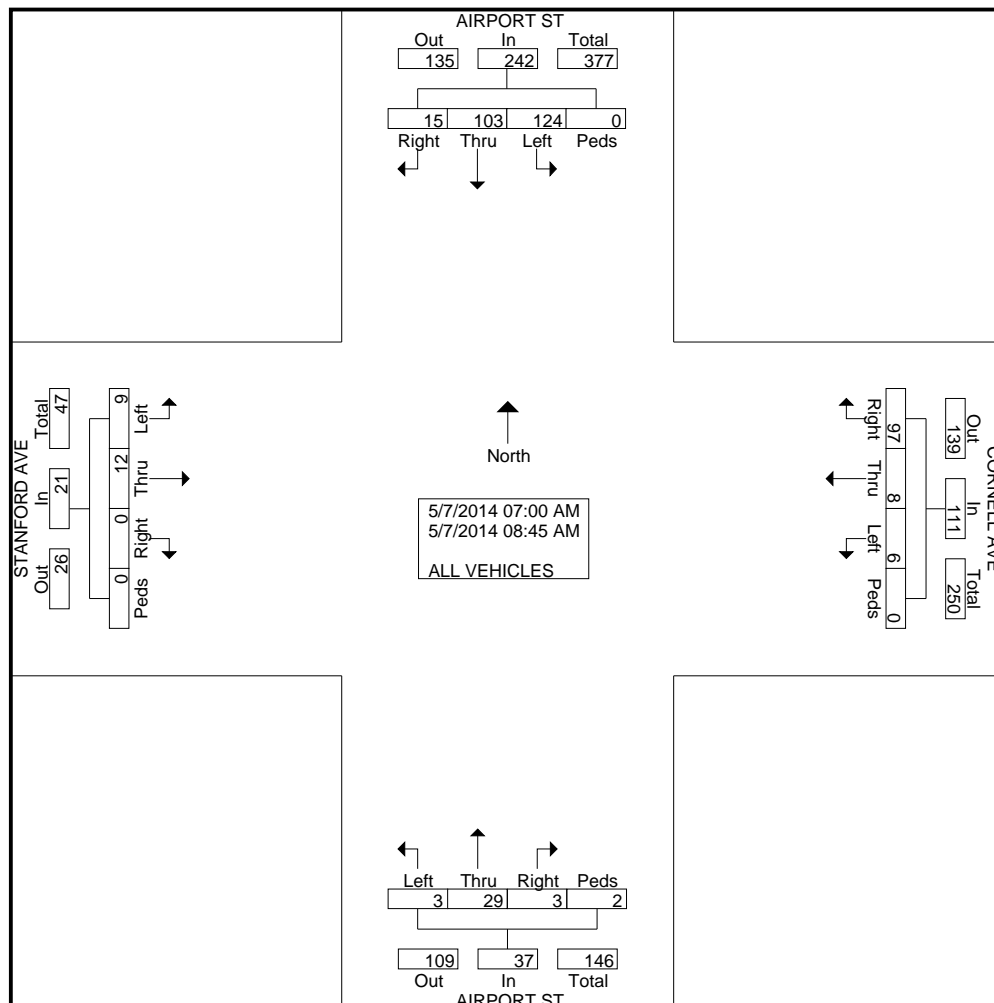
Site Code : 5

Start Date : 5/7/2014

Page No : 1

Groups Printed- ALL VEHICLES

Start Time	AIRPORT ST Southbound				CORNELL AVE Westbound				AIRPORT ST Northbound				STANFORD AVE Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	2	19	23	0	8	0	4	0	0	5	0	0	0	2	0	0	63
07:15 AM	1	12	11	0	3	1	0	0	0	2	0	0	0	1	1	0	32
07:30 AM	0	15	21	0	10	2	0	0	0	2	1	0	0	2	2	0	55
07:45 AM	3	22	30	0	16	2	0	0	1	2	1	0	0	0	5	0	82
Total	6	68	85	0	37	5	4	0	1	11	2	0	0	5	8	0	232
08:00 AM	0	14	11	0	20	0	0	0	1	3	0	0	0	0	0	0	49
08:15 AM	1	9	5	0	13	0	1	0	0	5	0	1	0	0	0	0	35
08:30 AM	2	7	7	0	4	1	1	0	1	9	1	0	0	4	0	0	37
08:45 AM	6	5	16	0	23	2	0	0	0	1	0	1	0	3	1	0	58
Total	9	35	39	0	60	3	2	0	2	18	1	2	0	7	1	0	179
Grand Total	15	103	124	0	97	8	6	0	3	29	3	2	0	12	9	0	411
Apprch %	6.2	42.6	51.2	0	87.4	7.2	5.4	0	8.1	78.4	8.1	5.4	0	57.1	42.9	0	
Total %	3.6	25.1	30.2	0	23.6	1.9	1.5	0	0.7	7.1	0.7	0.5	0	2.9	2.2	0	

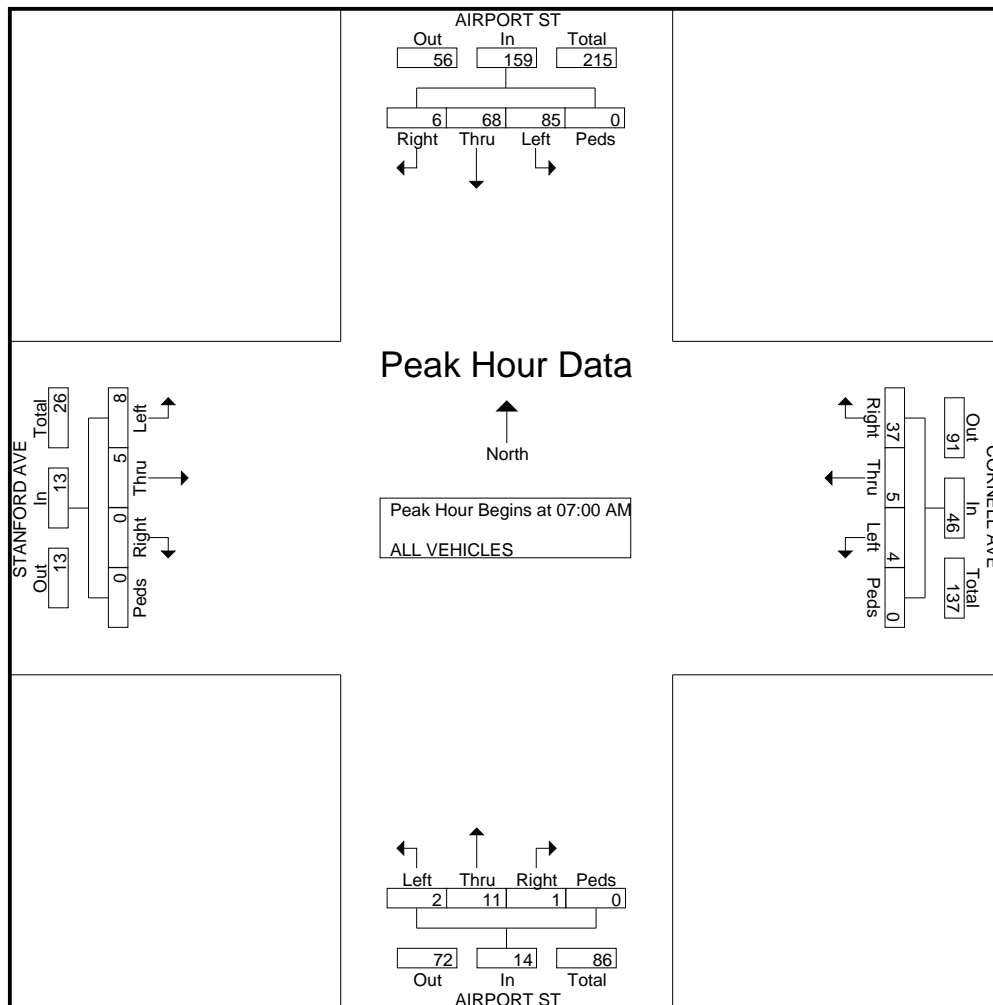


### All Traffic Data Services

2187 Kingsbury Cir  
Santa Clara, CA, 95054  
www.Alltrafficdata.net

File Name : #5 AIRPORT&STANFORDAM  
Site Code : 5  
Start Date : 5/7/2014  
Page No : 2

Start Time	AIRPORT ST Southbound					CORNELL AVE Westbound					AIRPORT ST Northbound					STANFORD AVE Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	2	19	23	0	44	8	0	4	0	12	0	5	0	0	5	0	2	0	0	2	63
07:15 AM	1	12	11	0	24	3	1	0	0	4	0	2	0	0	2	0	1	1	0	2	32
07:30 AM	0	15	21	0	36	10	2	0	0	12	0	2	1	0	3	0	2	2	0	4	55
07:45 AM	3	22	30	0	55	16	2	0	0	18	1	2	1	0	4	0	0	5	0	5	82
Total Volume	6	68	85	0	159	37	5	4	0	46	1	11	2	0	14	0	5	8	0	13	232
% App. Total	3.8	42.8	53.5	0		80.4	10.9	8.7	0		7.1	78.6	14.3	0		0	38.5	61.5	0		
PHF	.500	.773	.708	.000	.723	.578	.625	.250	.000	.639	.250	.550	.500	.000	.700	.000	.625	.400	.000	.650	.707



### All Traffic Data Services

2187 Kingsbury Cir  
Santa Clara, CA, 95054  
www.Alltrafficdata.net

File Name : #5 AIRPORT&STANFORDPM

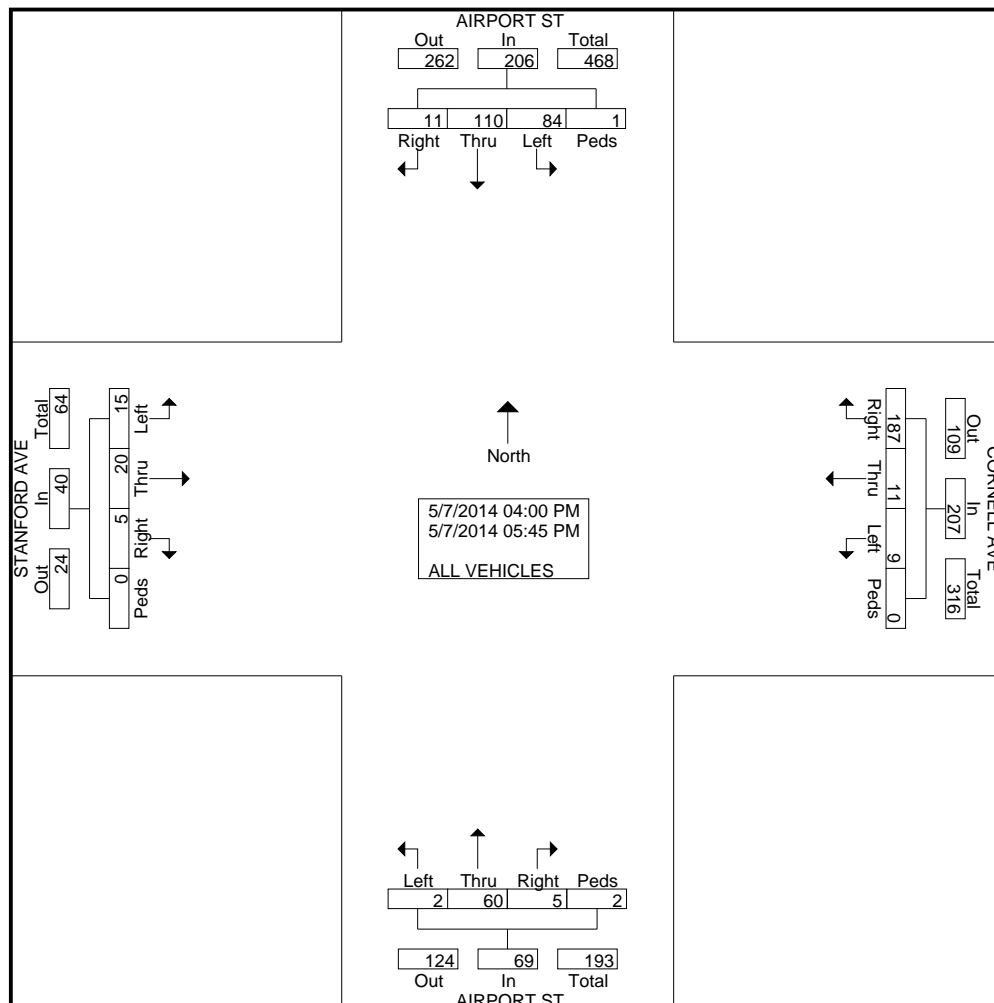
Site Code : 5

Start Date : 5/7/2014

Page No : 1

Groups Printed- ALL VEHICLES

Start Time	AIRPORT ST Southbound				CORNELL AVE Westbound				AIRPORT ST Northbound				STANFORD AVE Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	2	11	5	0	19	3	1	0	0	8	0	0	1	2	1	0	53
04:15 PM	2	13	5	1	24	2	1	0	0	12	0	0	0	1	1	0	62
04:30 PM	2	14	15	0	22	3	2	0	1	7	1	0	0	3	2	0	72
04:45 PM	2	13	13	0	21	0	2	0	0	9	0	1	0	1	1	0	63
<b>Total</b>	<b>8</b>	<b>51</b>	<b>38</b>	<b>1</b>	<b>86</b>	<b>8</b>	<b>6</b>	<b>0</b>	<b>1</b>	<b>36</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>7</b>	<b>5</b>	<b>0</b>	<b>250</b>
05:00 PM	0	13	11	0	26	1	1	0	0	5	0	1	0	3	4	0	65
05:15 PM	0	13	13	0	19	1	1	0	1	9	1	0	2	4	4	0	68
05:30 PM	2	21	13	0	24	0	1	0	1	6	0	0	1	4	1	0	74
05:45 PM	1	12	9	0	32	1	0	0	2	4	0	0	1	2	1	0	65
<b>Total</b>	<b>3</b>	<b>59</b>	<b>46</b>	<b>0</b>	<b>101</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>4</b>	<b>24</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>13</b>	<b>10</b>	<b>0</b>	<b>272</b>
<b>Grand Total</b>	<b>11</b>	<b>110</b>	<b>84</b>	<b>1</b>	<b>187</b>	<b>11</b>	<b>9</b>	<b>0</b>	<b>5</b>	<b>60</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>20</b>	<b>15</b>	<b>0</b>	<b>522</b>
Apprch %	5.3	53.4	40.8	0.5	90.3	5.3	4.3	0	7.2	87	2.9	2.9	12.5	50	37.5	0	
Total %	2.1	21.1	16.1	0.2	35.8	2.1	1.7	0	1	11.5	0.4	0.4	1	3.8	2.9	0	

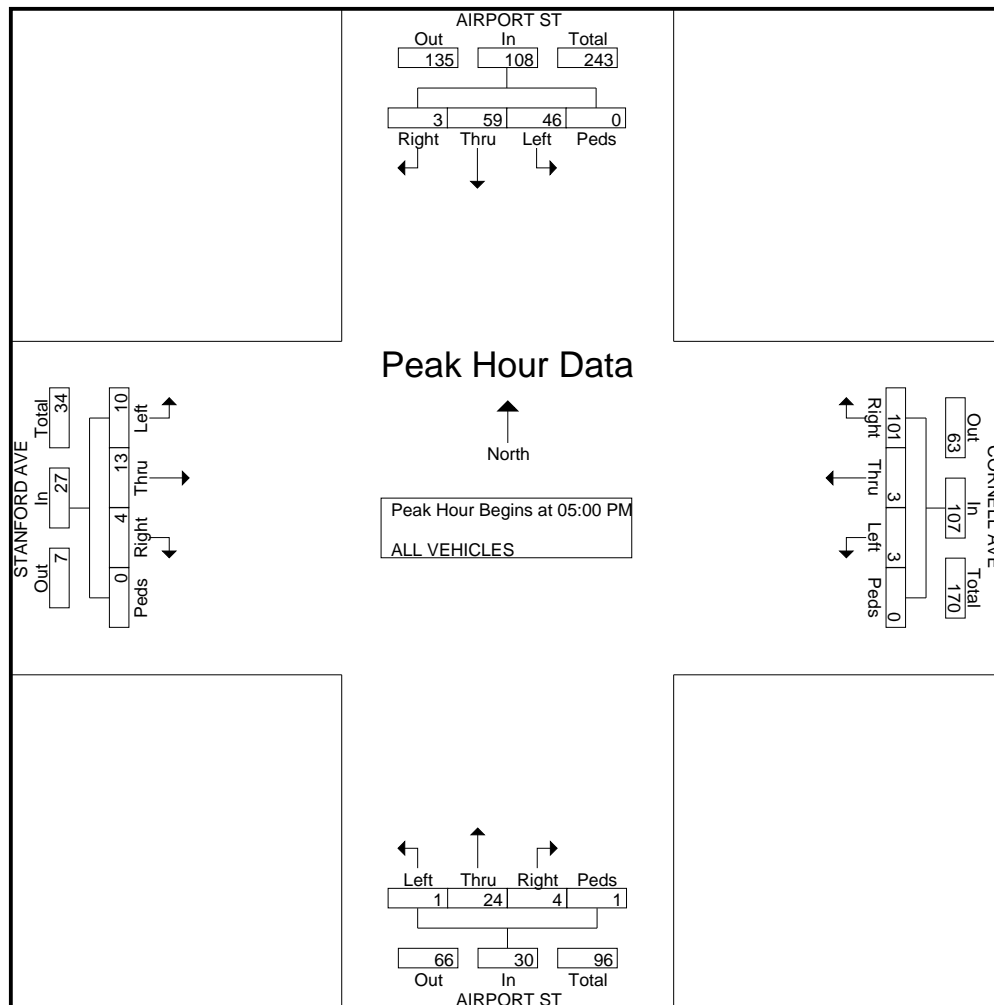


### All Traffic Data Services

2187 Kingsbury Cir  
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File Name : #5 AIRPORT&STANFORDPM  
Site Code : 5  
Start Date : 5/7/2014  
Page No : 2

Start Time	AIRPORT ST Southbound					CORNELL AVE Westbound					AIRPORT ST Northbound					STANFORD AVE Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	13	11	0	24	26	1	1	0	28	0	5	0	1	6	0	3	4	0	7	65
05:15 PM	0	13	13	0	26	19	1	1	0	21	1	9	1	0	11	2	4	4	0	10	68
05:30 PM	2	21	13	0	36	24	0	1	0	25	1	6	0	0	7	1	4	1	0	6	74
05:45 PM	1	12	9	0	22	32	1	0	0	33	2	4	0	0	6	1	2	1	0	4	65
Total Volume	3	59	46	0	108	101	3	3	0	107	4	24	1	1	30	4	13	10	0	27	272
% App. Total	2.8	54.6	42.6	0		94.4	2.8	2.8	0		13.3	80	3.3	3.3		14.8	48.1	37	0		
PHF	.375	.702	.885	.000	.750	.789	.750	.750	.000	.811	.500	.667	.250	.250	.682	.500	.813	.625	.000	.675	.919



### All Traffic Data Services

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File Name : #6 BROADWAY&PROSPECTAM

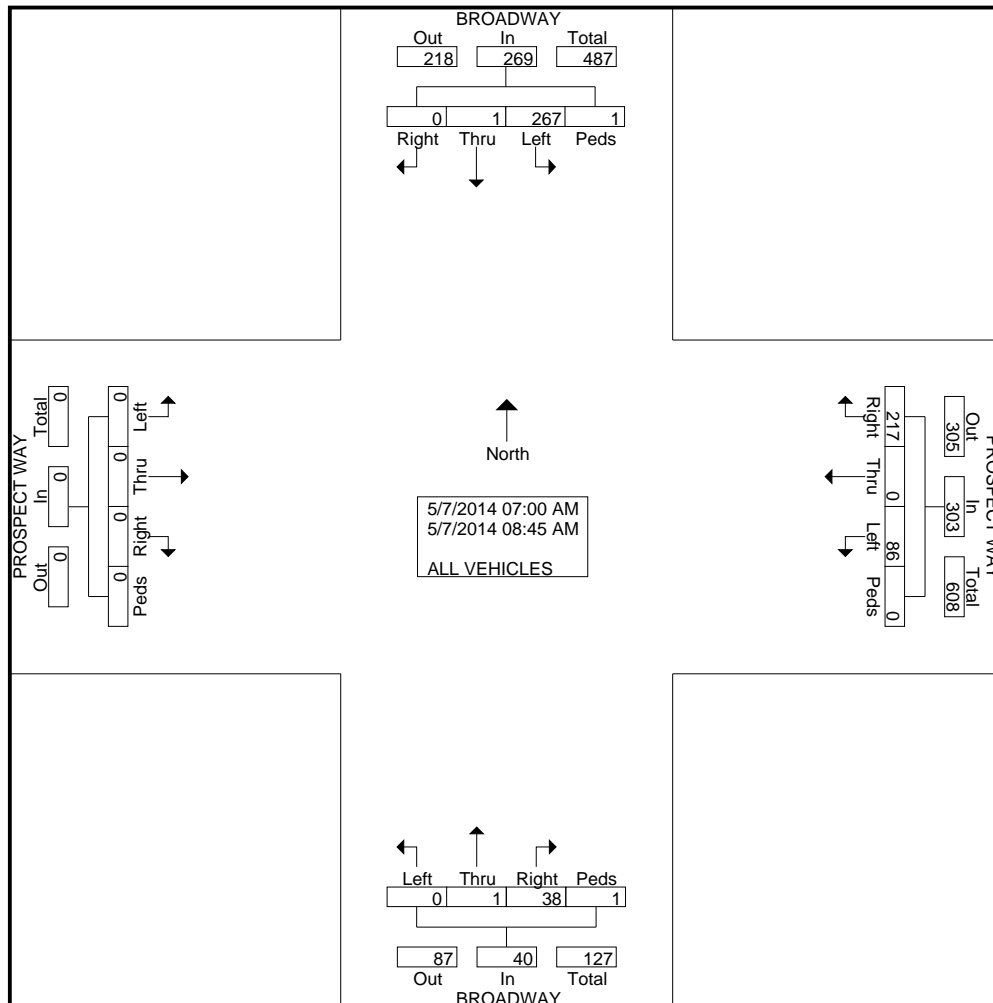
Site Code : 6

Start Date : 5/7/2014

Page No : 1

Groups Printed- ALL VEHICLES

Start Time	BROADWAY Southbound				PROSPECT WAY Westbound				BROADWAY Northbound				PROSPECT WAY Eastbound				Int. Total	
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds		
07:00 AM	0	0	49	0	19	0	4	0	4	0	0	0	0	0	0	0	0	76
07:15 AM	0	0	26	0	15	0	3	0	2	0	0	0	0	0	0	0	0	46
07:30 AM	0	1	37	0	18	0	8	0	4	0	0	0	0	0	0	0	0	68
07:45 AM	0	0	59	0	38	0	14	0	6	0	0	0	0	0	0	0	0	117
Total	0	1	171	0	90	0	29	0	16	0	0	0	0	0	0	0	0	307
08:00 AM	0	0	32	0	39	0	14	0	3	0	0	1	0	0	0	0	0	89
08:15 AM	0	0	16	1	29	0	11	0	5	0	0	0	0	0	0	0	0	62
08:30 AM	0	0	23	0	21	0	17	0	6	0	0	0	0	0	0	0	0	67
08:45 AM	0	0	25	0	38	0	15	0	8	1	0	0	0	0	0	0	0	87
Total	0	0	96	1	127	0	57	0	22	1	0	1	0	0	0	0	0	305
Grand Total	0	1	267	1	217	0	86	0	38	1	0	1	0	0	0	0	0	612
Apprch %	0	0.4	99.3	0.4	71.6	0	28.4	0	95	2.5	0	2.5	0	0	0	0	0	
Total %	0	0.2	43.6	0.2	35.5	0	14.1	0	6.2	0.2	0	0.2	0	0	0	0	0	



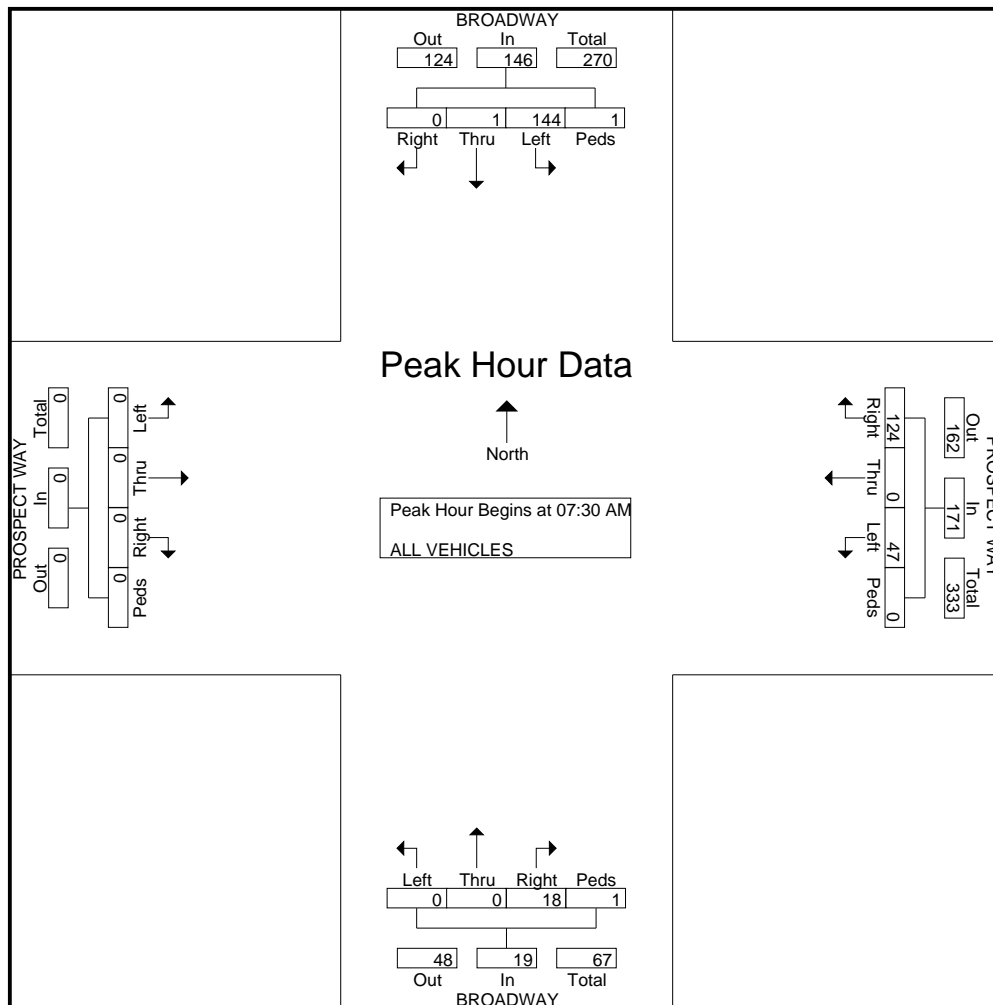


### All Traffic Data Services

2187 Kingsbury Cir  
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File Name : #6 BROADWAY&PROSPECTAM  
Site Code : 6  
Start Date : 5/7/2014  
Page No : 2

Start Time	BROADWAY Southbound					PROSPECT WAY Westbound					BROADWAY Northbound					PROSPECT WAY Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	1	37	0	38	18	0	8	0	26	4	0	0	0	4	0	0	0	0	0	68
07:45 AM	0	0	59	0	59	38	0	14	0	52	6	0	0	0	6	0	0	0	0	0	117
08:00 AM	0	0	32	0	32	39	0	14	0	53	3	0	0	1	4	0	0	0	0	0	89
08:15 AM	0	0	16	1	17	29	0	11	0	40	5	0	0	0	5	0	0	0	0	0	62
Total Volume	0	1	144	1	146	124	0	47	0	171	18	0	0	1	19	0	0	0	0	0	336
% App. Total	0	0.7	98.6	0.7		72.5	0	27.5	0		94.7	0	0	5.3		0	0	0	0		
PHF	.000	.250	.610	.250	.619	.795	.000	.839	.000	.807	.750	.000	.000	.250	.792	.000	.000	.000	.000	.000	.718



### All Traffic Data Services

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File Name : #6 BROADWAY&PROSPECTPM

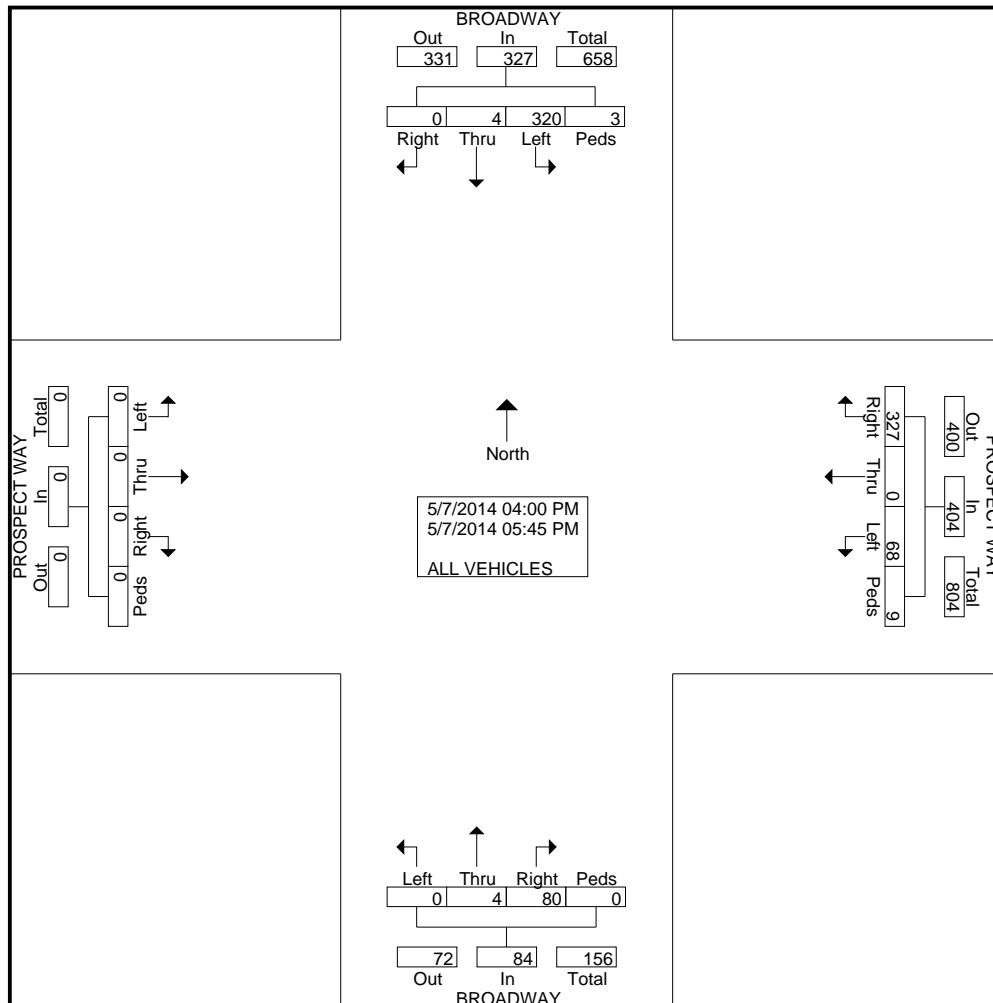
Site Code : 6

Start Date : 5/7/2014

Page No : 1

Groups Printed- ALL VEHICLES

Start Time	BROADWAY Southbound				PROSPECT WAY Westbound				BROADWAY Northbound				PROSPECT WAY Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	0	0	27	0	36	0	8	2	7	1	0	0	0	0	0	0	81
04:15 PM	0	0	35	0	52	0	6	0	12	0	0	0	0	0	0	0	105
04:30 PM	0	0	52	1	39	0	7	0	14	0	0	0	0	0	0	0	113
04:45 PM	0	0	33	0	41	0	13	6	7	0	0	0	0	0	0	0	100
Total	0	0	147	1	168	0	34	8	40	1	0	0	0	0	0	0	399
05:00 PM	0	1	27	0	44	0	7	0	16	2	0	0	0	0	0	0	97
05:15 PM	0	1	50	0	41	0	14	1	10	0	0	0	0	0	0	0	117
05:30 PM	0	0	55	2	33	0	5	0	9	0	0	0	0	0	0	0	104
05:45 PM	0	2	41	0	41	0	8	0	5	1	0	0	0	0	0	0	98
Total	0	4	173	2	159	0	34	1	40	3	0	0	0	0	0	0	416
Grand Total	0	4	320	3	327	0	68	9	80	4	0	0	0	0	0	0	815
Apprch %	0	1.2	97.9	0.9	80.9	0	16.8	2.2	95.2	4.8	0	0	0	0	0	0	
Total %	0	0.5	39.3	0.4	40.1	0	8.3	1.1	9.8	0.5	0	0	0	0	0	0	



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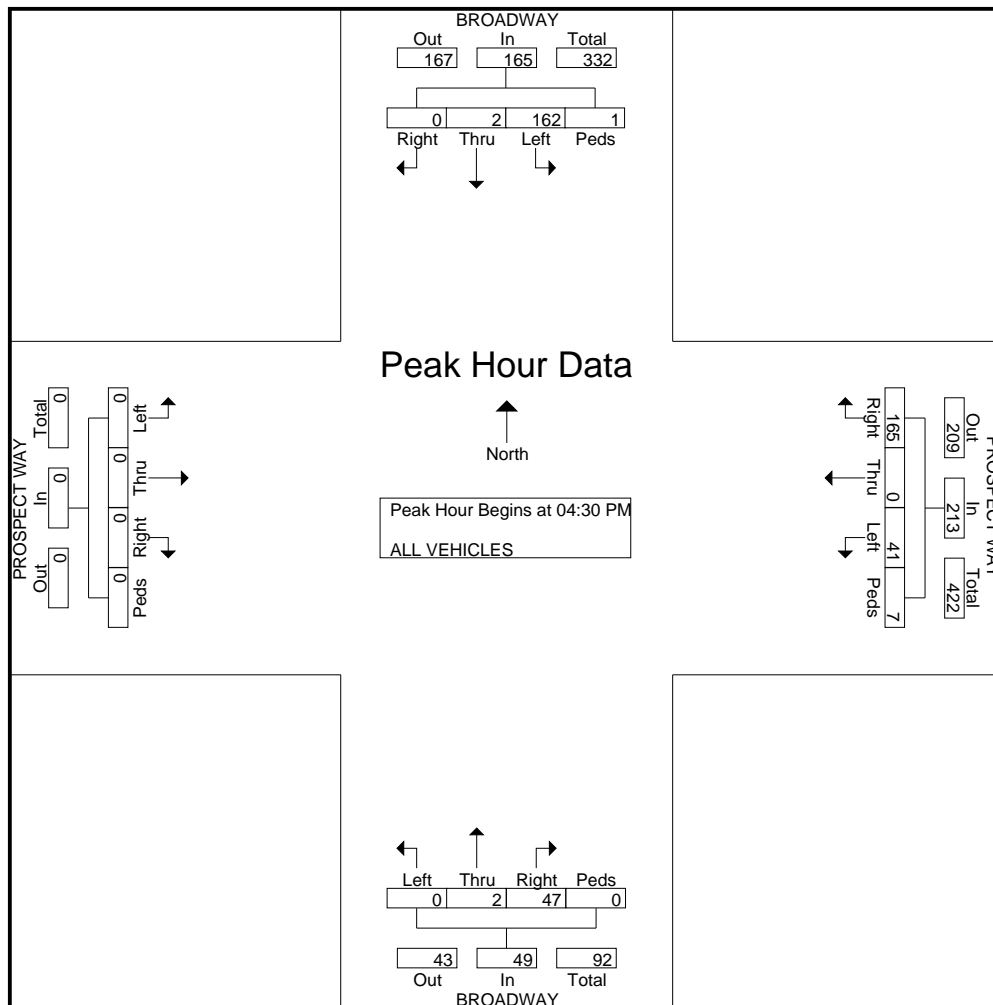
File Name : #6 BROADWAY&PROSPECTPM

Site Code : 6

Start Date : 5/7/2014

Page No : 2

Start Time	BROADWAY Southbound					PROSPECT WAY Westbound					BROADWAY Northbound					PROSPECT WAY Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	52	1	53	39	0	7	0	46	14	0	0	0	14	0	0	0	0	0	113
04:45 PM	0	0	33	0	33	41	0	13	6	60	7	0	0	0	7	0	0	0	0	0	100
05:00 PM	0	1	27	0	28	44	0	7	0	51	16	2	0	0	18	0	0	0	0	0	97
05:15 PM	0	1	50	0	51	41	0	14	1	56	10	0	0	0	10	0	0	0	0	0	117
Total Volume	0	2	162	1	165	165	0	41	7	213	47	2	0	0	49	0	0	0	0	0	427
% App. Total	0	1.2	98.2	0.6		77.5	0	19.2	3.3		95.9	4.1	0	0		0	0	0	0		
PHF	.000	.500	.779	.250	.778	.938	.000	.732	.292	.888	.734	.250	.000	.000	.681	.000	.000	.000	.000	.000	.912



### All Traffic Data Services

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File Name : #7 CAPISTRANO&PROSPECTAM

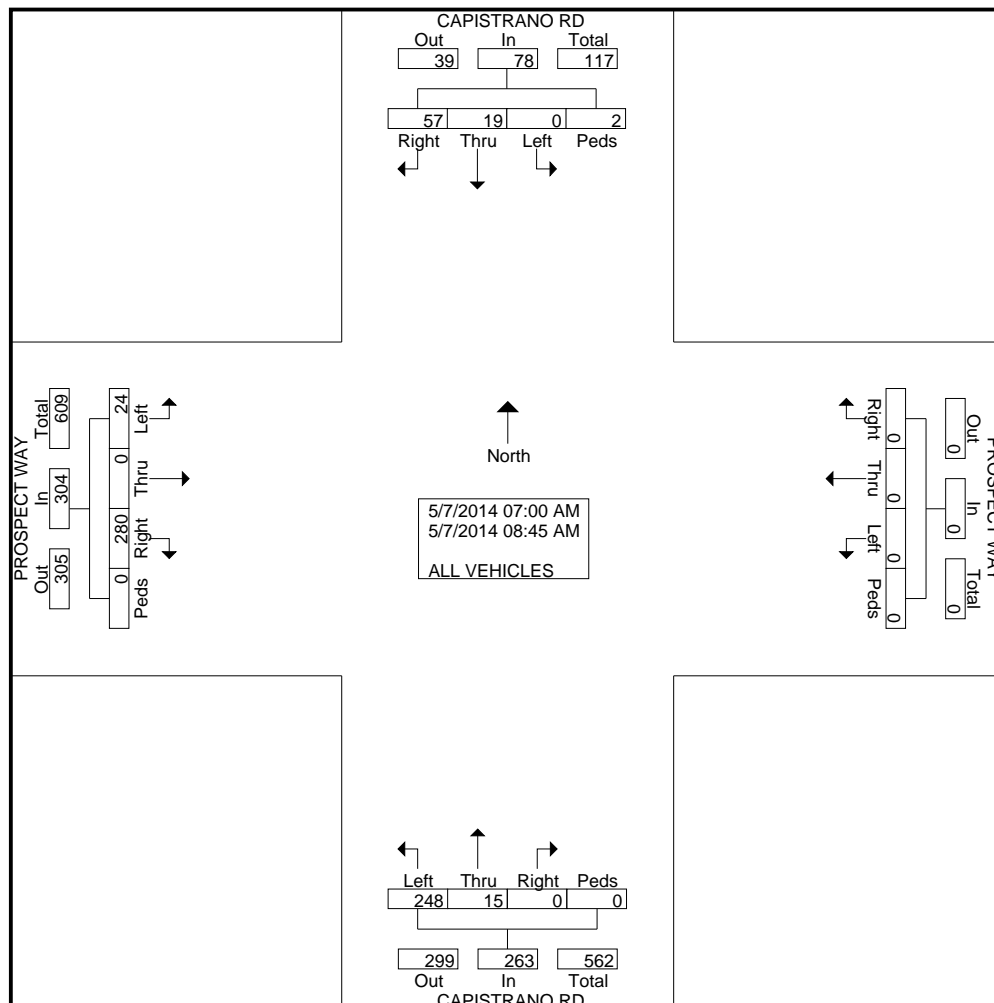
Site Code : 7

Start Date : 5/7/2014

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Groups Printed- ALL VEHICLES

Start Time	CAPISTRANO RD Southbound				PROSPECT WAY Westbound				CAPISTRANO RD Northbound				PROSPECT WAY Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	5	0	0	0	0	0	0	0	0	0	19	0	47	0	6	0	77
07:15 AM	3	1	0	1	0	0	0	0	0	1	18	0	28	0	0	0	52
07:30 AM	4	5	0	0	0	0	0	0	0	3	26	0	39	0	3	0	80
07:45 AM	12	1	0	0	0	0	0	0	0	3	36	0	61	0	5	0	118
Total	24	7	0	1	0	0	0	0	0	7	99	0	175	0	14	0	327
08:00 AM	8	2	0	0	0	0	0	0	0	0	43	0	30	0	3	0	86
08:15 AM	7	1	0	1	0	0	0	0	0	0	38	0	22	0	1	0	70
08:30 AM	9	5	0	0	0	0	0	0	0	4	25	0	25	0	3	0	71
08:45 AM	9	4	0	0	0	0	0	0	0	4	43	0	28	0	3	0	91
Total	33	12	0	1	0	0	0	0	0	8	149	0	105	0	10	0	318
Grand Total	57	19	0	2	0	0	0	0	0	15	248	0	280	0	24	0	645
Apprch %	73.1	24.4	0	2.6	0	0	0	0	0	5.7	94.3	0	92.1	0	7.9	0	
Total %	8.8	2.9	0	0.3	0	0	0	0	0	2.3	38.4	0	43.4	0	3.7	0	

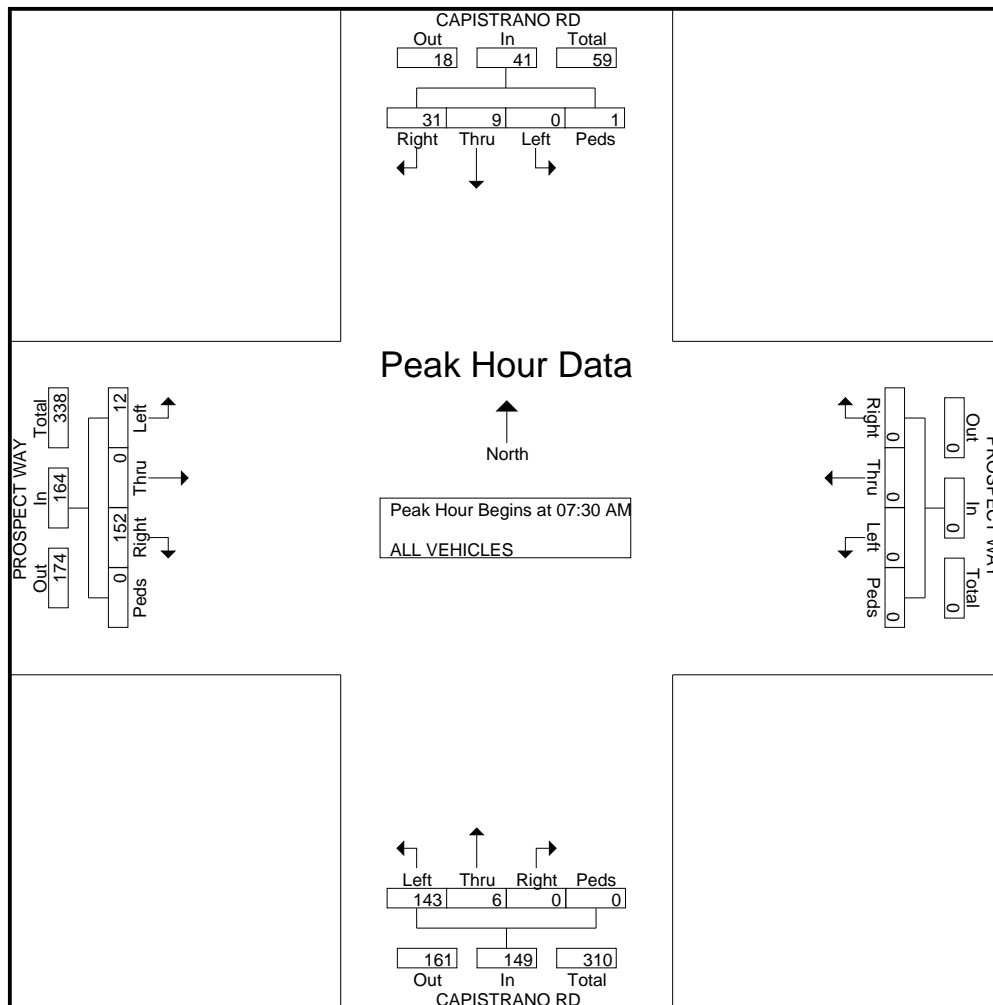


### All Traffic Data Services

2187 Kingsbury Cir  
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File Name : #7 CAPISTRANO&PROSPECTAM  
Site Code : 7  
Start Date : 5/7/2014  
Page No : 2

Start Time	CAPISTRANO RD Southbound					PROSPECT WAY Westbound					CAPISTRANO RD Northbound					PROSPECT WAY Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	4	5	0	0	9	0	0	0	0	0	0	3	26	0	29	39	0	3	0	42	80
07:45 AM	12	1	0	0	13	0	0	0	0	0	0	3	36	0	39	61	0	5	0	66	118
08:00 AM	8	2	0	0	10	0	0	0	0	0	0	0	43	0	43	30	0	3	0	33	86
08:15 AM	7	1	0	1	9	0	0	0	0	0	0	0	38	0	38	22	0	1	0	23	70
Total Volume	31	9	0	1	41	0	0	0	0	0	0	6	143	0	149	152	0	12	0	164	354
% App. Total	75.6	22	0	2.4		0	0	0	0		0	4	96	0		92.7	0	7.3	0		
PHF	.646	.450	.000	.250	.788	.000	.000	.000	.000	.000	.000	.500	.831	.000	.866	.623	.000	.600	.000	.621	.750



### All Traffic Data Services

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File Name : #7 CAPISTRANO&PROSPECTPM

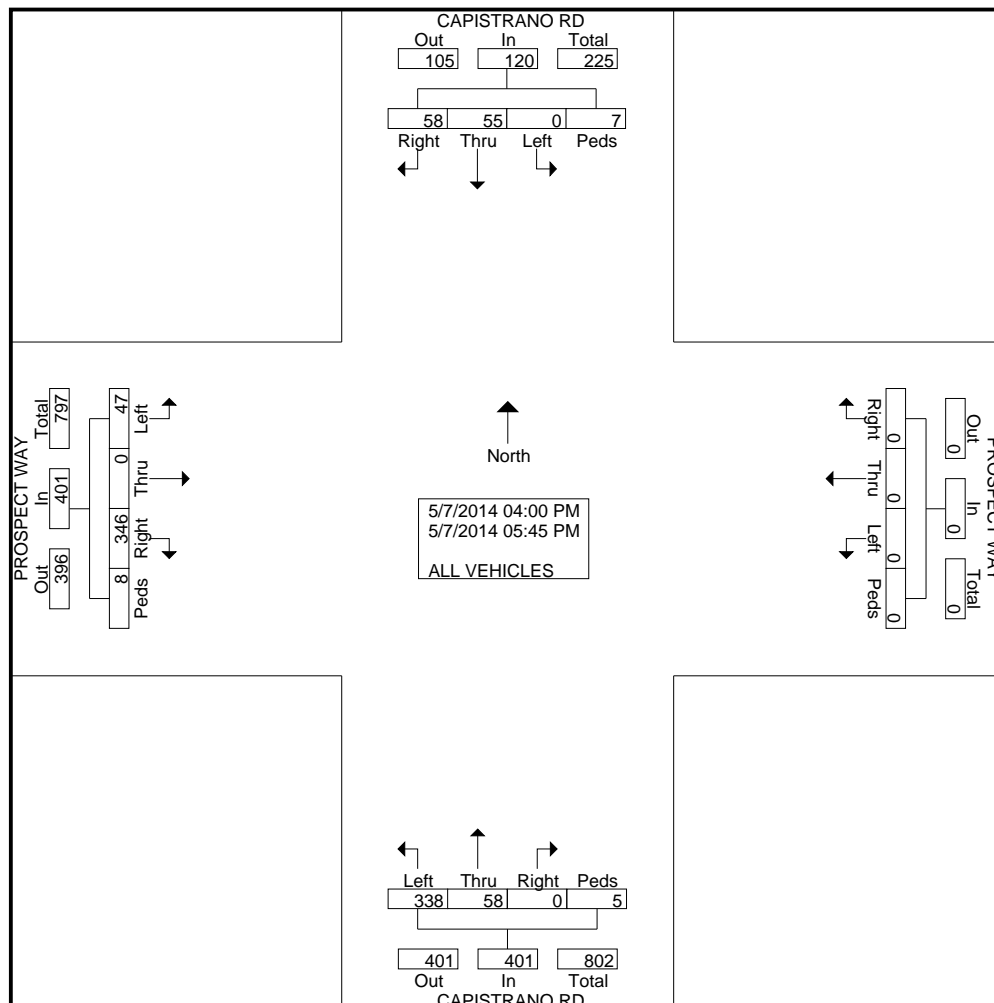
Site Code : 7

Start Date : 5/7/2014

Page No : 1

Groups Printed- ALL VEHICLES

Start Time	CAPISTRANO RD Southbound				PROSPECT WAY Westbound				CAPISTRANO RD Northbound				PROSPECT WAY Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	5	11	0	2	0	0	0	0	0	6	36	0	31	0	2	0	93
04:15 PM	5	2	0	1	0	0	0	0	0	3	54	0	35	0	9	2	111
04:30 PM	5	9	0	2	0	0	0	0	0	6	38	2	57	0	8	0	127
04:45 PM	11	11	0	0	0	0	0	0	0	8	51	1	37	0	4	0	123
Total	26	33	0	5	0	0	0	0	0	23	179	3	160	0	23	2	454
05:00 PM	14	7	0	2	0	0	0	0	0	12	35	2	38	0	5	2	117
05:15 PM	10	5	0	0	0	0	0	0	0	10	44	0	53	0	8	0	130
05:30 PM	2	3	0	0	0	0	0	0	0	2	36	0	51	0	9	2	105
05:45 PM	6	7	0	0	0	0	0	0	0	11	44	0	44	0	2	2	116
Total	32	22	0	2	0	0	0	0	0	35	159	2	186	0	24	6	468
Grand Total	58	55	0	7	0	0	0	0	0	58	338	5	346	0	47	8	922
Apprch %	48.3	45.8	0	5.8	0	0	0	0	0	14.5	84.3	1.2	86.3	0	11.7	2	
Total %	6.3	6	0	0.8	0	0	0	0	0	6.3	36.7	0.5	37.5	0	5.1	0.9	

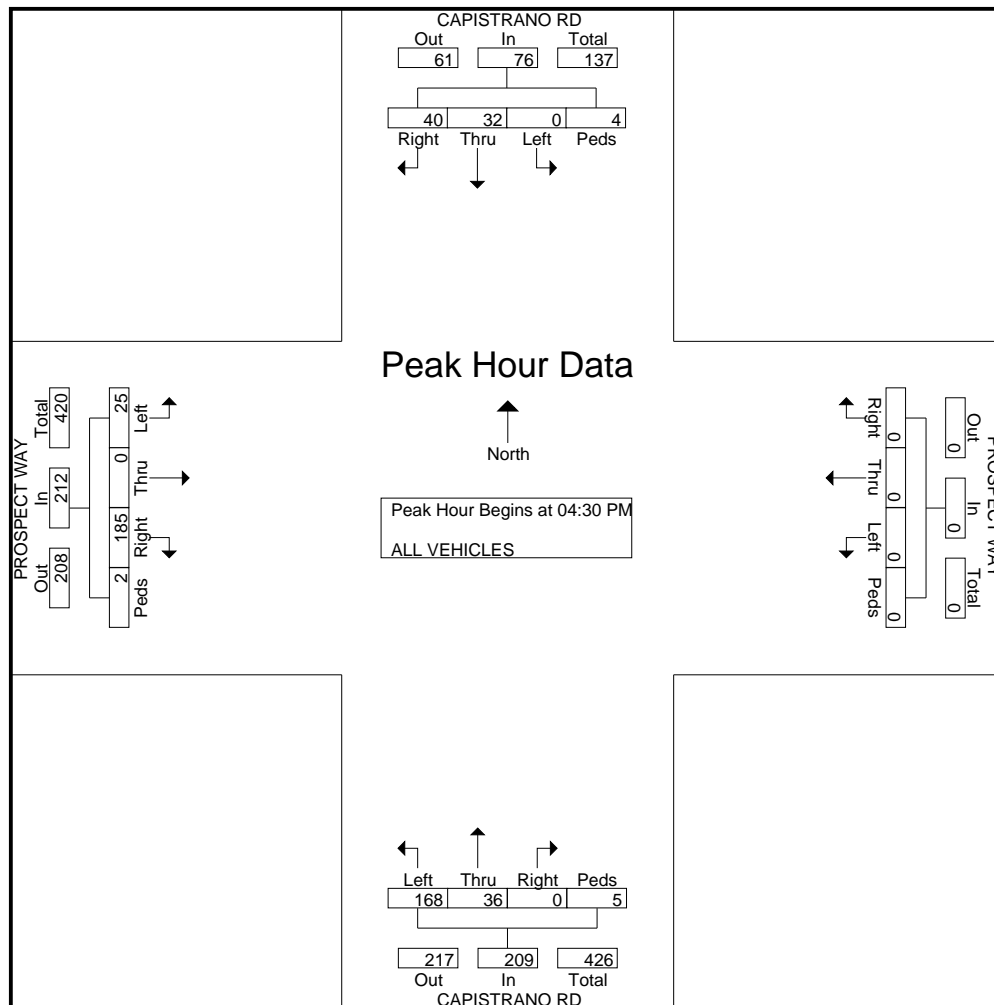


### All Traffic Data Services

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File Name : #7 CAPISTRANO&PROSPECTPM  
Site Code : 7  
Start Date : 5/7/2014  
Page No : 2

Start Time	CAPISTRANO RD Southbound					PROSPECT WAY Westbound					CAPISTRANO RD Northbound					PROSPECT WAY Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	5	9	0	2	16	0	0	0	0	0	0	6	38	2	46	57	0	8	0	65	127
04:45 PM	11	11	0	0	22	0	0	0	0	0	0	8	51	1	60	37	0	4	0	41	123
05:00 PM	14	7	0	2	23	0	0	0	0	0	0	12	35	2	49	38	0	5	2	45	117
05:15 PM	10	5	0	0	15	0	0	0	0	0	0	10	44	0	54	53	0	8	0	61	130
Total Volume	40	32	0	4	76	0	0	0	0	0	0	36	168	5	209	185	0	25	2	212	497
% App. Total	52.6	42.1	0	5.3		0	0	0	0		0	17.2	80.4	2.4		87.3	0	11.8	0.9		
PHF	.714	.727	.000	.500	.826	.000	.000	.000	.000	.000	.000	.750	.824	.625	.871	.811	.000	.781	.250	.815	.956



### All Traffic Data Services

2187 Kingsbury Cir  
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File Name : #8 SR1&CAPISTRANOSOUTHAM

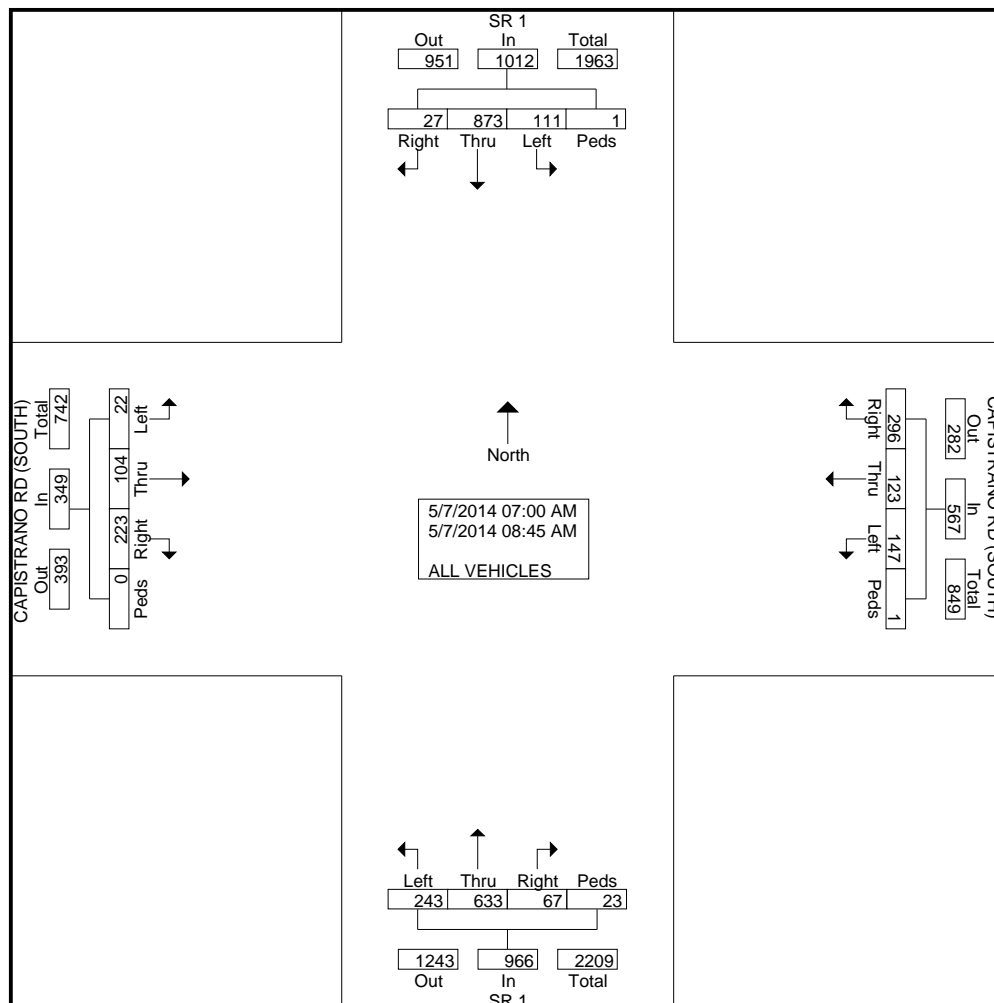
Site Code : 8

Start Date : 5/7/2014

Page No : 1

Groups Printed- ALL VEHICLES

Start Time	SR 1 Southbound				CAPISTRANO RD (SOUTH) Westbound				SR 1 Northbound				CAPISTRANO RD (SOUTH) Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	1	136	21	0	43	9	18	0	6	78	31	3	43	13	2	0	404
07:15 AM	2	102	16	1	41	6	18	0	4	84	18	4	23	8	2	0	329
07:30 AM	3	86	15	0	44	9	19	1	9	71	32	3	37	14	0	0	343
07:45 AM	2	135	8	0	38	25	25	0	6	89	34	4	34	31	4	0	435
Total	8	459	60	1	166	49	80	1	25	322	115	14	137	66	8	0	1511
08:00 AM	3	103	12	0	33	31	31	0	15	73	27	1	24	12	6	0	371
08:15 AM	4	106	15	0	37	18	12	0	7	97	36	4	19	6	2	0	363
08:30 AM	5	94	13	0	33	9	11	0	11	69	23	2	20	10	2	0	302
08:45 AM	7	111	11	0	27	16	13	0	9	72	42	2	23	10	4	0	347
Total	19	414	51	0	130	74	67	0	42	311	128	9	86	38	14	0	1383
Grand Total	27	873	111	1	296	123	147	1	67	633	243	23	223	104	22	0	2894
Apprch %	2.7	86.3	11	0.1	52.2	21.7	25.9	0.2	6.9	65.5	25.2	2.4	63.9	29.8	6.3	0	0
Total %	0.9	30.2	3.8	0	10.2	4.3	5.1	0	2.3	21.9	8.4	0.8	7.7	3.6	0.8	0	0



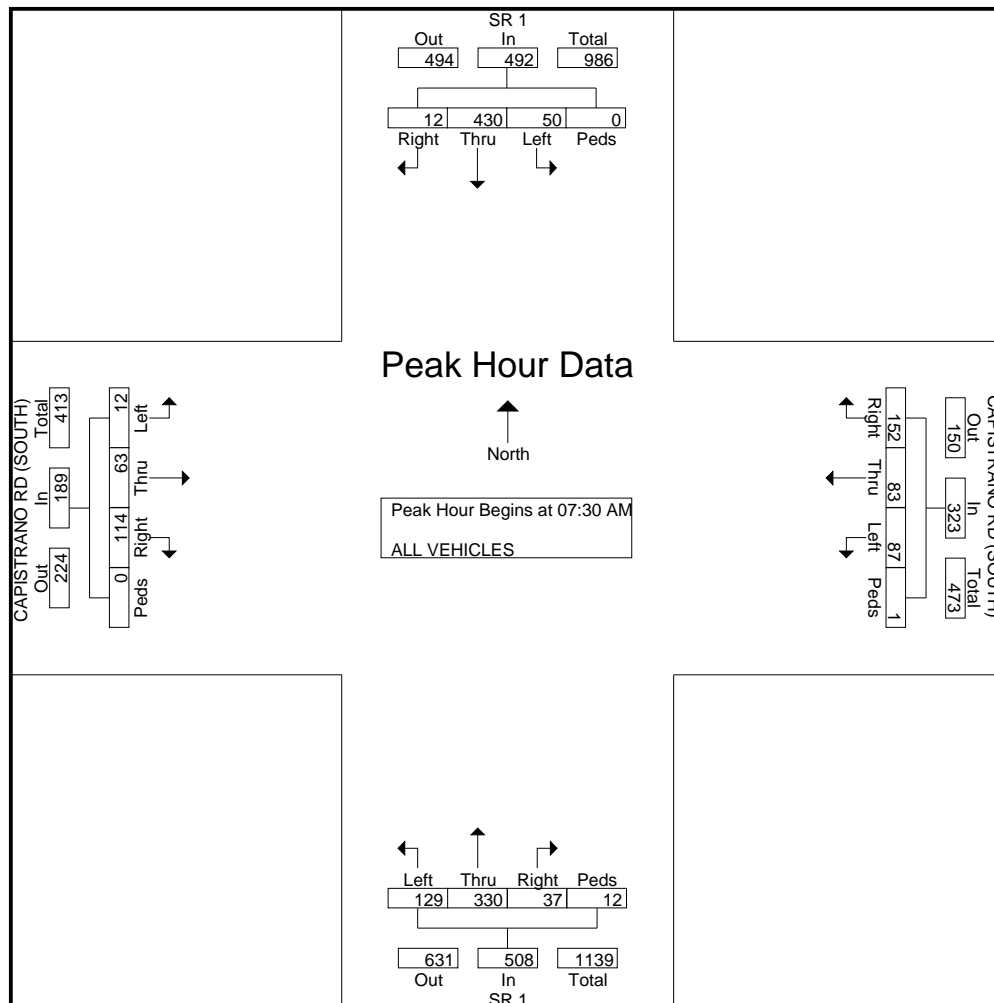


### All Traffic Data Services

2187 Kingsbury Cir  
Santa Clara, CA, 95054  
www.Alltrafficdata.net

File Name : #8 SR1&CAPISTRANOSOUTHAM  
Site Code : 8  
Start Date : 5/7/2014  
Page No : 2

Start Time	SR 1 Southbound					CAPISTRANO RD (SOUTH) Westbound					SR 1 Northbound					CAPISTRANO RD (SOUTH) Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	3	86	15	0	104	44	9	19	1	73	9	71	32	3	115	37	14	0	0	51	343
07:45 AM	2	135	8	0	145	38	25	25	0	88	6	89	34	4	133	34	31	4	0	69	435
08:00 AM	3	103	12	0	118	33	31	31	0	95	15	73	27	1	116	24	12	6	0	42	371
08:15 AM	4	106	15	0	125	37	18	12	0	67	7	97	36	4	144	19	6	2	0	27	363
Total Volume	12	430	50	0	492	152	83	87	1	323	37	330	129	12	508	114	63	12	0	189	1512
% App. Total	2.4	87.4	10.2	0		47.1	25.7	26.9	0.3		7.3	65	25.4	2.4		60.3	33.3	6.3	0		
PHF	.750	.796	.833	.000	.848	.864	.669	.702	.250	.850	.617	.851	.896	.750	.882	.770	.508	.500	.000	.685	.869



### All Traffic Data Services

2187 Kingsbury Cir  
Santa Clara, CA, 95054  
www.Alltrafficdata.net

File Name : #8 SR1&CAPISTRANOSOUTH

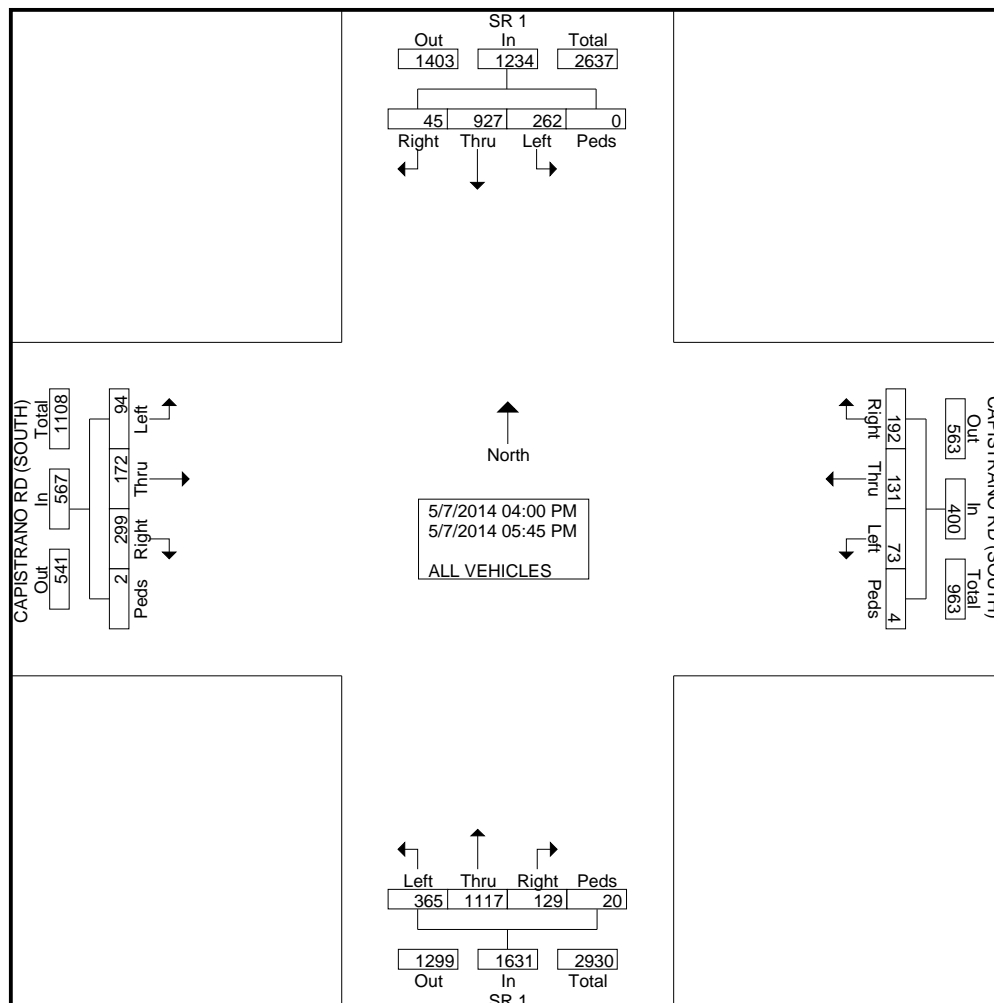
Site Code : 8

Start Date : 5/7/2014

Page No : 1

Groups Printed- ALL VEHICLES

Start Time	SR 1 Southbound				CAPISTRANO RD (SOUTH) Westbound				SR 1 Northbound				CAPISTRANO RD (SOUTH) Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	6	152	23	0	29	12	7	1	18	155	43	1	17	24	7	0	495
04:15 PM	5	120	31	0	22	13	11	0	20	149	52	2	32	19	15	0	491
04:30 PM	5	117	37	0	23	21	10	0	12	137	46	0	38	15	13	0	474
04:45 PM	7	109	37	0	21	15	6	0	15	127	53	3	29	17	11	0	450
Total	23	498	128	0	95	61	34	1	65	568	194	6	116	75	46	0	1910
05:00 PM	4	114	35	0	33	16	10	2	13	162	46	6	51	24	16	2	534
05:15 PM	8	105	34	0	18	15	5	0	21	141	54	1	47	27	10	0	486
05:30 PM	6	109	33	0	14	16	11	1	17	118	40	2	44	20	10	0	441
05:45 PM	4	101	32	0	32	23	13	0	13	128	31	5	41	26	12	0	461
Total	22	429	134	0	97	70	39	3	64	549	171	14	183	97	48	2	1922
Grand Total	45	927	262	0	192	131	73	4	129	1117	365	20	299	172	94	2	3832
Apprch %	3.6	75.1	21.2	0	48	32.8	18.2	1	7.9	68.5	22.4	1.2	52.7	30.3	16.6	0.4	
Total %	1.2	24.2	6.8	0	5	3.4	1.9	0.1	3.4	29.1	9.5	0.5	7.8	4.5	2.5	0.1	

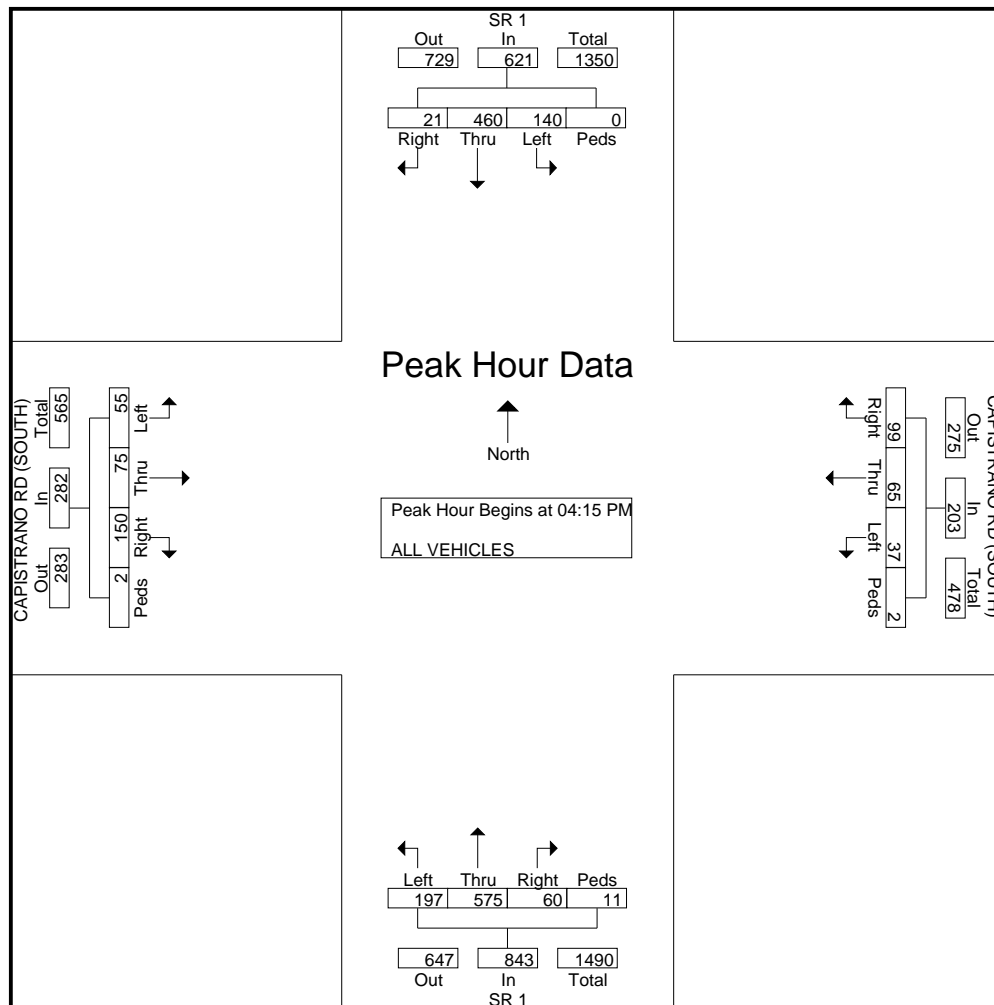


### All Traffic Data Services

2187 Kingsbury Cir  
Santa Clara, CA, 95054  
www.Alltrafficdata.net

File Name : #8 SR1&CAPISTRANOSOUTH  
Site Code : 8  
Start Date : 5/7/2014  
Page No : 2

Start Time	SR 1 Southbound					CAPISTRANO RD (SOUTH) Westbound					SR 1 Northbound					CAPISTRANO RD (SOUTH) Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	5	120	31	0	156	22	13	11	0	46	20	149	52	2	223	32	19	15	0	66	491
04:30 PM	5	117	37	0	159	23	21	10	0	54	12	137	46	0	195	38	15	13	0	66	474
04:45 PM	7	109	37	0	153	21	15	6	0	42	15	127	53	3	198	29	17	11	0	57	450
05:00 PM	4	114	35	0	153	33	16	10	2	61	13	162	46	6	227	51	24	16	2	93	534
Total Volume	21	460	140	0	621	99	65	37	2	203	60	575	197	11	843	150	75	55	2	282	1949
% App. Total	3.4	74.1	22.5	0		48.8	32	18.2	1		7.1	68.2	23.4	1.3		53.2	26.6	19.5	0.7		
PHF	.750	.958	.946	.000	.976	.750	.774	.841	.250	.832	.750	.887	.929	.458	.928	.735	.781	.859	.250	.758	.912



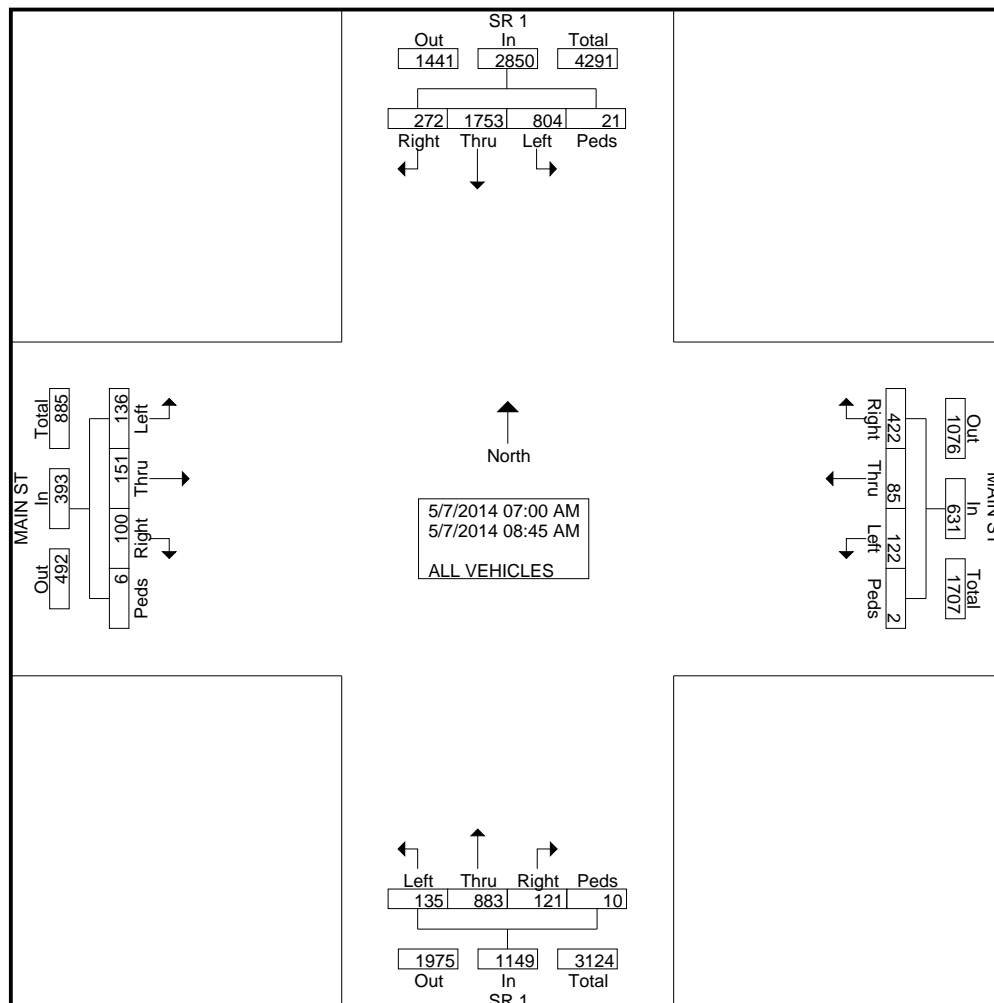
### All Traffic Data Services

2187 Kingsbury Cir  
Santa Clara, CA, 95054  
www.Alltrafficdata.net

File Name : #9 SR1&MAINAM  
Site Code : 9  
Start Date : 5/7/2014  
Page No : 1

Groups Printed- ALL VEHICLES

Start Time	SR 1 Southbound				MAIN ST Westbound				SR 1 Northbound				MAIN ST Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	40	202	129	4	49	6	8	0	15	77	10	1	13	20	12	0	586
07:15 AM	47	211	118	7	53	16	31	0	26	94	16	0	13	44	16	0	692
07:30 AM	21	313	81	5	60	14	35	0	33	133	16	2	13	20	20	0	766
07:45 AM	27	238	109	1	69	11	26	0	11	130	19	3	13	13	15	3	688
Total	135	964	437	17	231	47	100	0	85	434	61	6	52	97	63	3	2732
08:00 AM	38	242	92	1	50	7	3	0	9	128	14	3	24	9	18	0	638
08:15 AM	39	215	76	1	54	8	8	2	10	139	25	0	8	13	20	1	619
08:30 AM	34	158	93	1	40	10	4	0	10	100	21	1	11	17	23	1	524
08:45 AM	26	174	106	1	47	13	7	0	7	82	14	0	5	15	12	1	510
Total	137	789	367	4	191	38	22	2	36	449	74	4	48	54	73	3	2291
Grand Total	272	1753	804	21	422	85	122	2	121	883	135	10	100	151	136	6	5023
Apprch %	9.5	61.5	28.2	0.7	66.9	13.5	19.3	0.3	10.5	76.8	11.7	0.9	25.4	38.4	34.6	1.5	
Total %	5.4	34.9	16	0.4	8.4	1.7	2.4	0	2.4	17.6	2.7	0.2	2	3	2.7	0.1	

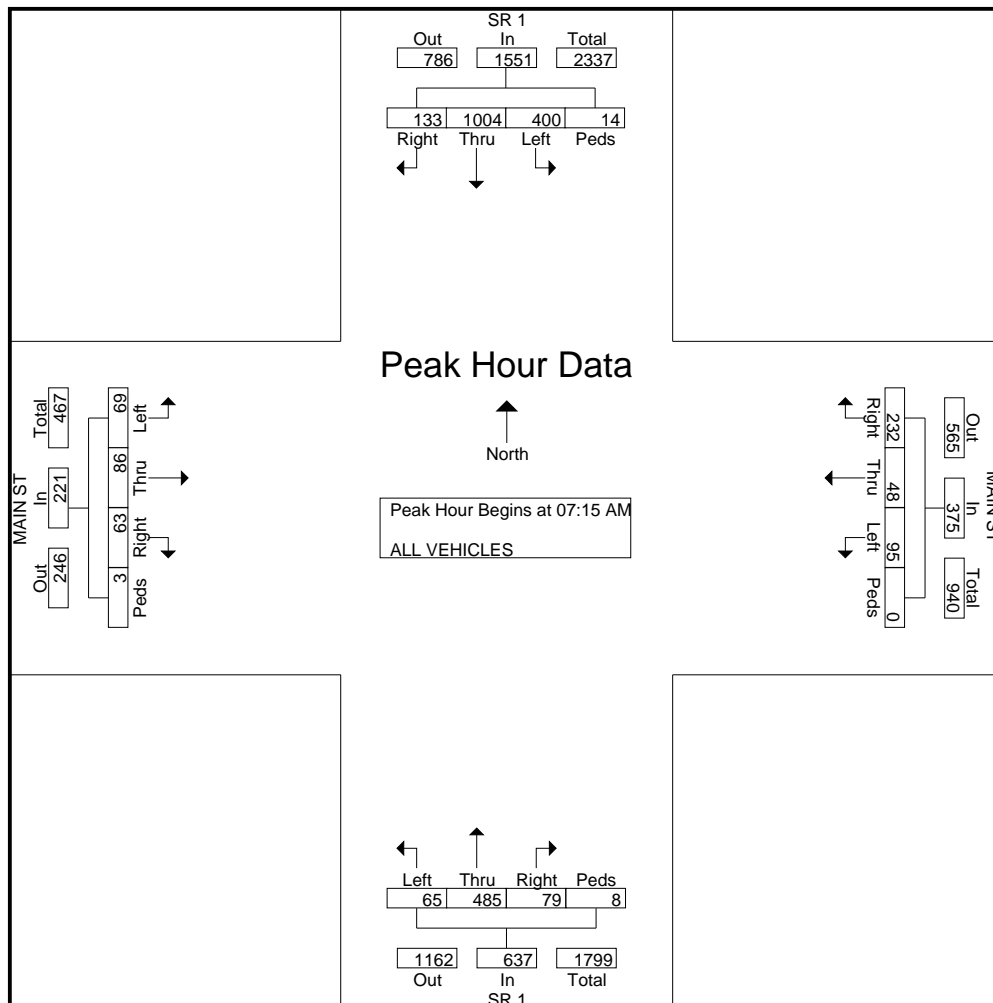


### All Traffic Data Services

2187 Kingsbury Cir  
Santa Clara, CA, 95054  
www.Alltrafficdata.net

File Name : #9 SR1&MAINAM  
Site Code : 9  
Start Date : 5/7/2014  
Page No : 2

Start Time	SR 1 Southbound					MAIN ST Westbound					SR 1 Northbound					MAIN ST Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	47	211	118	7	383	53	16	31	0	100	26	94	16	0	136	13	44	16	0	73	692
07:30 AM	21	313	81	5	420	60	14	35	0	109	33	133	16	2	184	13	20	20	0	53	766
07:45 AM	27	238	109	1	375	69	11	26	0	106	11	130	19	3	163	13	13	15	3	44	688
08:00 AM	38	242	92	1	373	50	7	3	0	60	9	128	14	3	154	24	9	18	0	51	638
Total Volume	133	1004	400	14	1551	232	48	95	0	375	79	485	65	8	637	63	86	69	3	221	2784
% App. Total	8.6	64.7	25.8	0.9		61.9	12.8	25.3	0		12.4	76.1	10.2	1.3		28.5	38.9	31.2	1.4		
PHF	.707	.802	.847	.500	.923	.841	.750	.679	.000	.860	.598	.912	.855	.667	.865	.656	.489	.863	.250	.757	.909



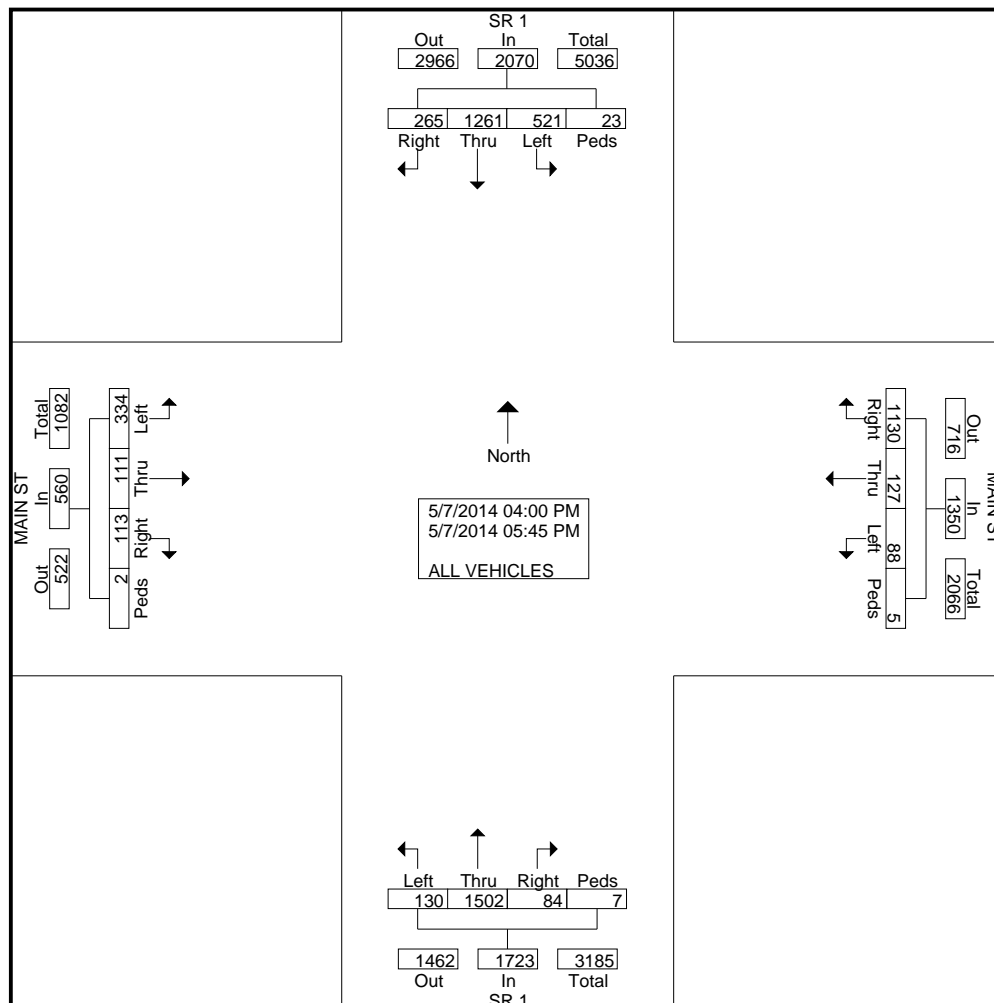
### All Traffic Data Services

2187 Kingsbury Cir  
Santa Clara, CA, 95054  
www.Alltrafficdata.net

File Name : #9 SR1&MAINPM  
Site Code : 9  
Start Date : 5/7/2014  
Page No : 1

Groups Printed- ALL VEHICLES

Start Time	SR 1 Southbound				MAIN ST Westbound				SR 1 Northbound				MAIN ST Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	37	188	67	2	124	17	13	0	8	158	23	0	13	12	39	0	701
04:15 PM	47	187	71	5	118	20	12	0	8	176	18	0	15	16	42	0	735
04:30 PM	37	149	61	5	150	28	12	0	9	161	14	2	16	17	53	1	715
04:45 PM	24	164	72	2	143	13	13	1	13	226	17	3	11	13	40	0	755
Total	145	688	271	14	535	78	50	1	38	721	72	5	55	58	174	1	2906
05:00 PM	23	141	54	2	164	15	11	0	15	186	12	0	14	14	46	0	697
05:15 PM	44	172	63	4	147	12	6	1	12	191	20	0	15	9	38	0	734
05:30 PM	25	135	73	0	134	14	11	0	6	187	12	2	11	13	38	1	662
05:45 PM	28	125	60	3	150	8	10	3	13	217	14	0	18	17	38	0	704
Total	120	573	250	9	595	49	38	4	46	781	58	2	58	53	160	1	2797
Grand Total	265	1261	521	23	1130	127	88	5	84	1502	130	7	113	111	334	2	5703
Apprch %	12.8	60.9	25.2	1.1	83.7	9.4	6.5	0.4	4.9	87.2	7.5	0.4	20.2	19.8	59.6	0.4	
Total %	4.6	22.1	9.1	0.4	19.8	2.2	1.5	0.1	1.5	26.3	2.3	0.1	2	1.9	5.9	0	

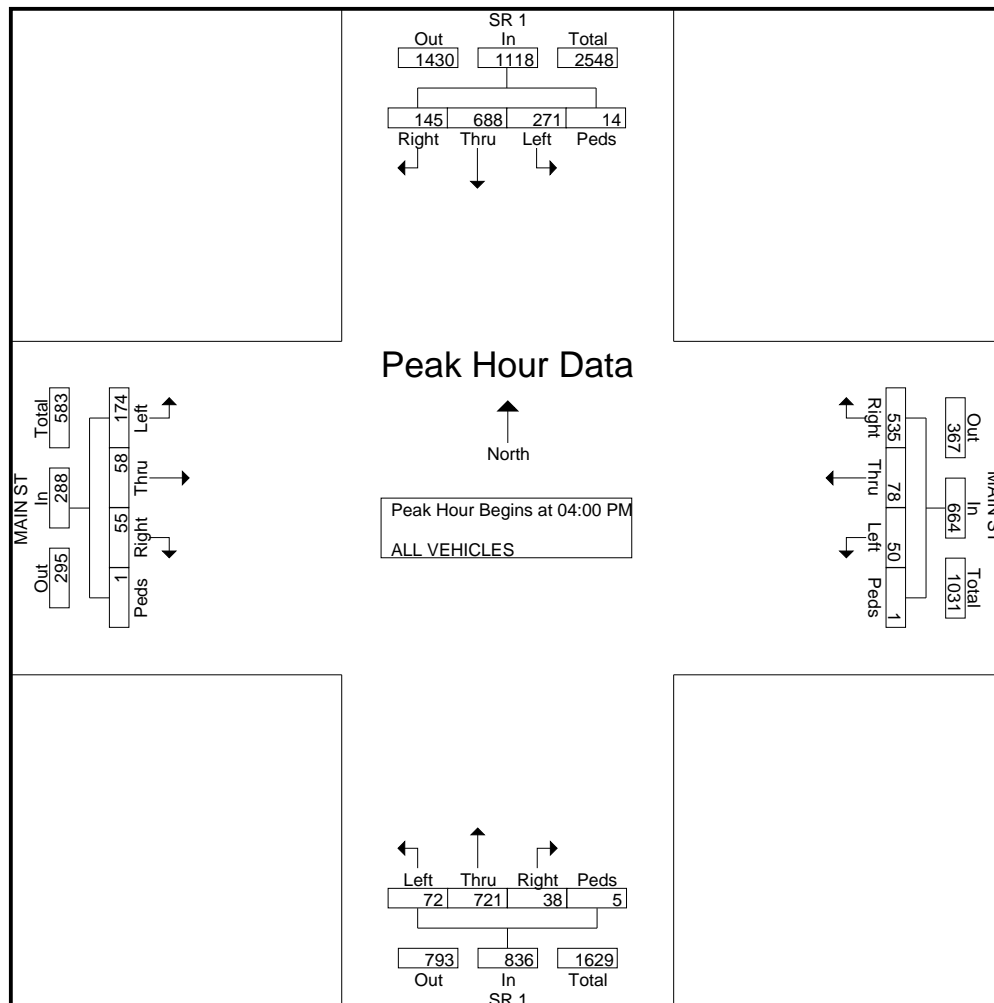


### All Traffic Data Services

2187 Kingsbury Cir  
Santa Clara, CA, 95054  
www.Alltrafficdata.net

File Name : #9 SR1&MAINPM  
Site Code : 9  
Start Date : 5/7/2014  
Page No : 2

Start Time	SR 1 Southbound					MAIN ST Westbound					SR 1 Northbound					MAIN ST Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	37	188	67	2	294	124	17	13	0	154	8	158	23	0	189	13	12	39	0	64	701
04:15 PM	47	187	71	5	310	118	20	12	0	150	8	176	18	0	202	15	16	42	0	73	735
04:30 PM	37	149	61	5	252	150	28	12	0	190	9	161	14	2	186	16	17	53	1	87	715
04:45 PM	24	164	72	2	262	143	13	13	1	170	13	226	17	3	259	11	13	40	0	64	755
Total Volume	145	688	271	14	1118	535	78	50	1	664	38	721	72	5	836	55	58	174	1	288	2906
% App. Total	13	61.5	24.2	1.3		80.6	11.7	7.5	0.2		4.5	86.2	8.6	0.6		19.1	20.1	60.4	0.3		
PHF	.771	.915	.941	.700	.902	.892	.696	.962	.250	.874	.731	.798	.783	.417	.807	.859	.853	.821	.250	.828	.962



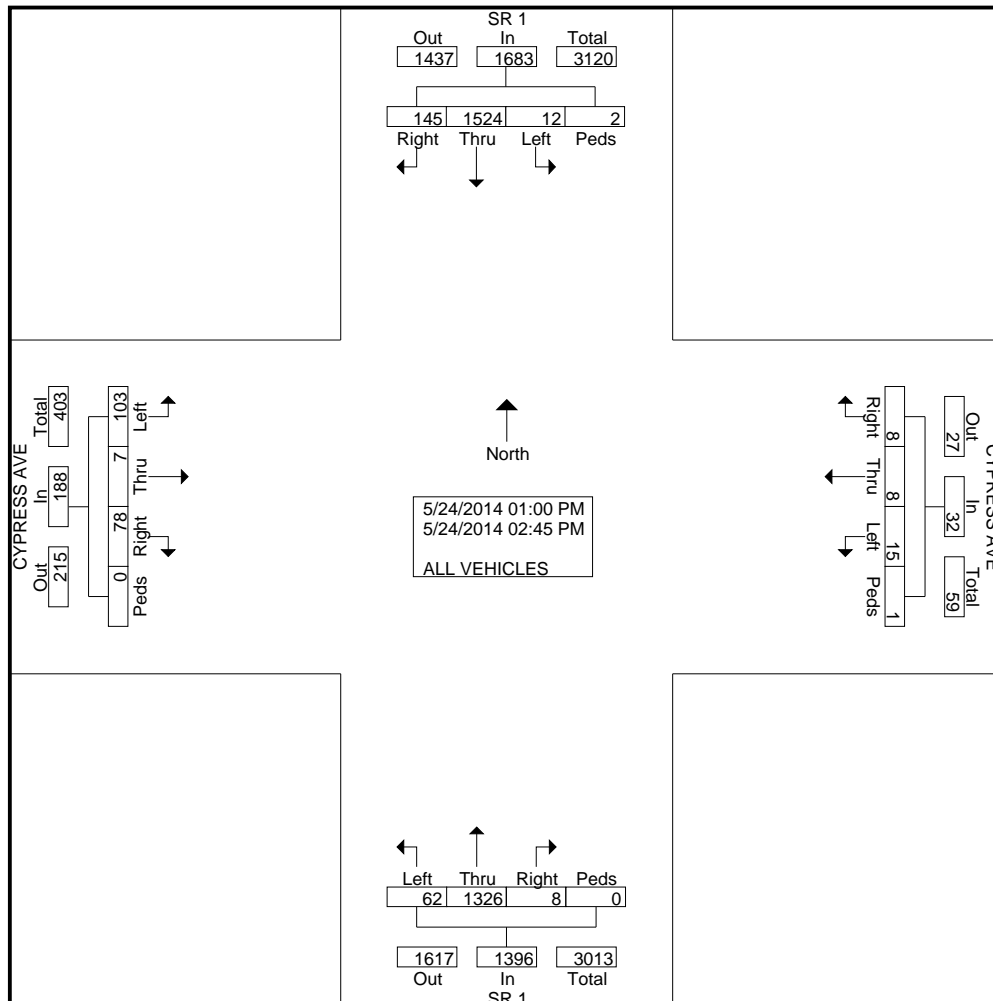
### All Traffic Data Services

2187 Kingsbury Cir  
Santa Clara, CA, 95054  
www.Alltrafficdata.net

File Name : #1 SR1&CYPRESSWE  
Site Code : 1  
Start Date : 5/24/2014  
Page No : 1

Groups Printed- ALL VEHICLES

Start Time	SR 1 Southbound				CYPRESS AVE Westbound				SR 1 Northbound				CYPRESS AVE Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
01:00 PM	21	228	0	0	2	1	3	0	2	197	9	0	9	1	7	0	480
01:15 PM	12	206	2	2	1	3	3	1	1	158	12	0	9	0	7	0	417
01:30 PM	14	219	1	0	1	1	1	0	0	178	12	0	7	3	12	0	449
01:45 PM	14	186	0	0	0	0	3	0	1	161	3	0	9	0	9	0	386
Total	61	839	3	2	4	5	10	1	4	694	36	0	34	4	35	0	1732
02:00 PM	24	166	2	0	1	0	1	0	0	159	10	0	11	1	22	0	397
02:15 PM	23	172	2	0	2	1	2	0	2	171	5	0	13	1	23	0	417
02:30 PM	16	164	3	0	0	1	1	0	0	167	9	0	14	0	11	0	386
02:45 PM	21	183	2	0	1	1	1	0	2	135	2	0	6	1	12	0	367
Total	84	685	9	0	4	3	5	0	4	632	26	0	44	3	68	0	1567
Grand Total	145	1524	12	2	8	8	15	1	8	1326	62	0	78	7	103	0	3299
Apprch %	8.6	90.6	0.7	0.1	25	25	46.9	3.1	0.6	95	4.4	0	41.5	3.7	54.8	0	
Total %	4.4	46.2	0.4	0.1	0.2	0.2	0.5	0	0.2	40.2	1.9	0	2.4	0.2	3.1	0	



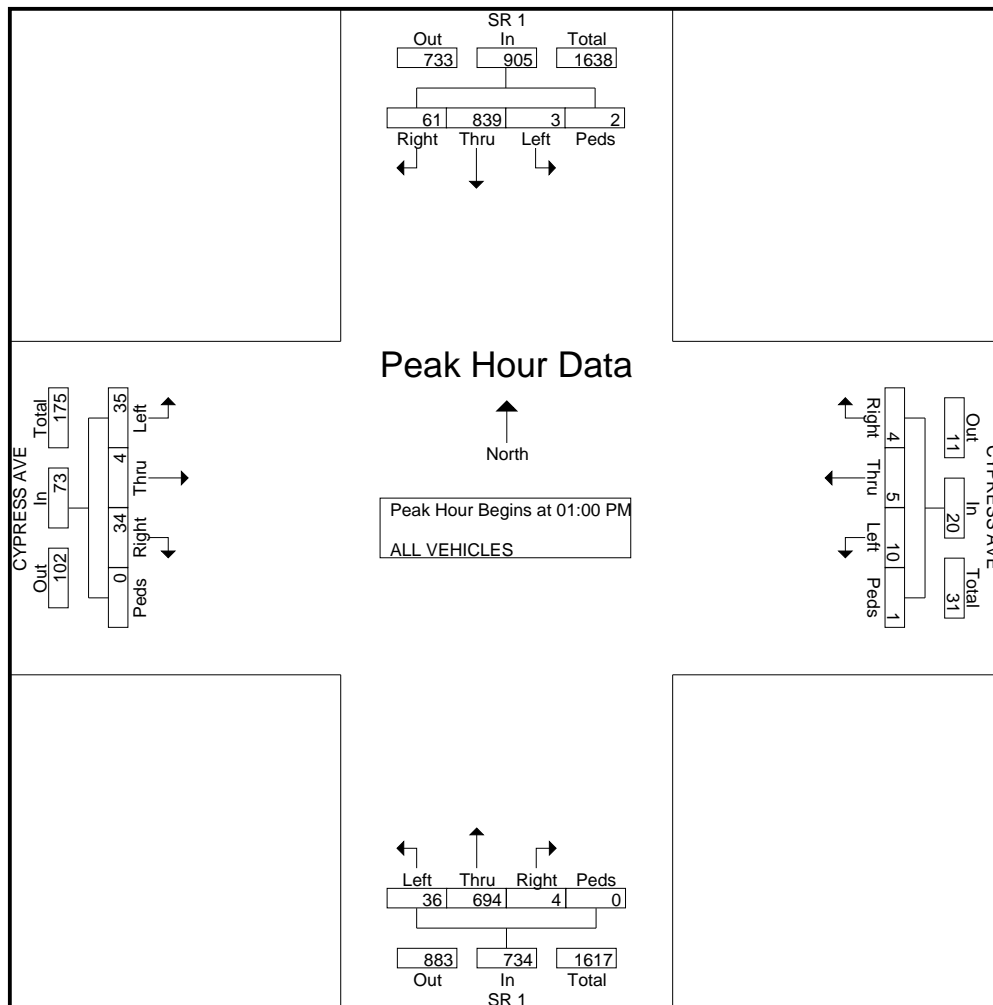


### All Traffic Data Services

2187 Kingsbury Cir  
Santa Clara, CA, 95054  
www.Alltrafficdata.net

File Name : #1 SR1&CYPRESSWE  
Site Code : 1  
Start Date : 5/24/2014  
Page No : 2

Start Time	SR 1 Southbound					CYPRESS AVE Westbound					SR 1 Northbound					CYPRESS AVE Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 01:00 PM to 02:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 01:00 PM																					
01:00 PM	21	228	0	0	249	2	1	3	0	6	2	197	9	0	208	9	1	7	0	17	480
01:15 PM	12	206	2	2	222	1	3	3	1	8	1	158	12	0	171	9	0	7	0	16	417
01:30 PM	14	219	1	0	234	1	1	1	0	3	0	178	12	0	190	7	3	12	0	22	449
01:45 PM	14	186	0	0	200	0	0	3	0	3	1	161	3	0	165	9	0	9	0	18	386
Total Volume	61	839	3	2	905	4	5	10	1	20	4	694	36	0	734	34	4	35	0	73	1732
% App. Total	6.7	92.7	0.3	0.2		20	25	50	5		0.5	94.6	4.9	0		46.6	5.5	47.9	0		
PHF	.726	.920	.375	.250	.909	.500	.417	.833	.250	.625	.500	.881	.750	.000	.882	.944	.333	.729	.000	.830	.902



### All Traffic Data Services

2187 Kingsbury Cir  
Santa Clara, CA, 95054  
www.Alltrafficdata.net

File Name : #2 SR1&CAPISTRANONORTHWE

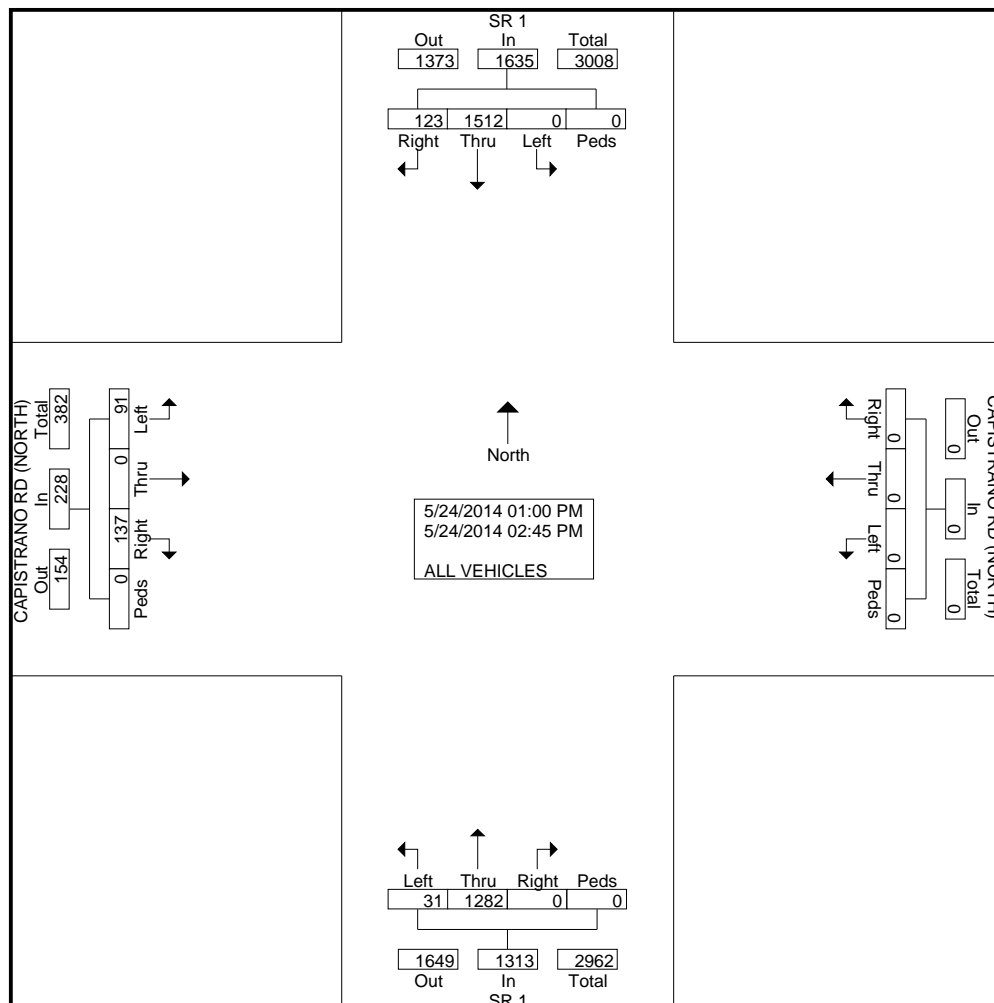
Site Code : 2

Start Date : 5/24/2014

Page No : 1

Groups Printed- ALL VEHICLES

Start Time	SR 1 Southbound				CAPISTRANO RD (NORTH) Westbound				SR 1 Northbound				CAPISTRANO RD (NORTH) Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
01:00 PM	19	236	0	0	0	0	0	0	0	194	7	0	5	0	8	0	469
01:15 PM	12	189	0	0	0	0	0	0	0	167	2	0	10	0	4	0	384
01:30 PM	14	215	0	0	0	0	0	0	0	177	4	0	10	0	11	0	431
01:45 PM	12	205	0	0	0	0	0	0	0	147	3	0	16	0	12	0	395
Total	57	845	0	0	0	0	0	0	0	685	16	0	41	0	35	0	1679
02:00 PM	16	167	0	0	0	0	0	0	0	137	8	0	49	0	29	0	406
02:15 PM	12	178	0	0	0	0	0	0	0	169	3	0	24	0	10	0	396
02:30 PM	16	159	0	0	0	0	0	0	0	158	4	0	14	0	10	0	361
02:45 PM	22	163	0	0	0	0	0	0	0	133	0	0	9	0	7	0	334
Total	66	667	0	0	0	0	0	0	0	597	15	0	96	0	56	0	1497
Grand Total	123	1512	0	0	0	0	0	0	0	1282	31	0	137	0	91	0	3176
Apprch %	7.5	92.5	0	0	0	0	0	0	0	97.6	2.4	0	60.1	0	39.9	0	
Total %	3.9	47.6	0	0	0	0	0	0	0	40.4	1	0	4.3	0	2.9	0	



### All Traffic Data Services

2187 Kingsbury Cir  
Santa Clara, CA, 95054  
www.Alltrafficdata.net

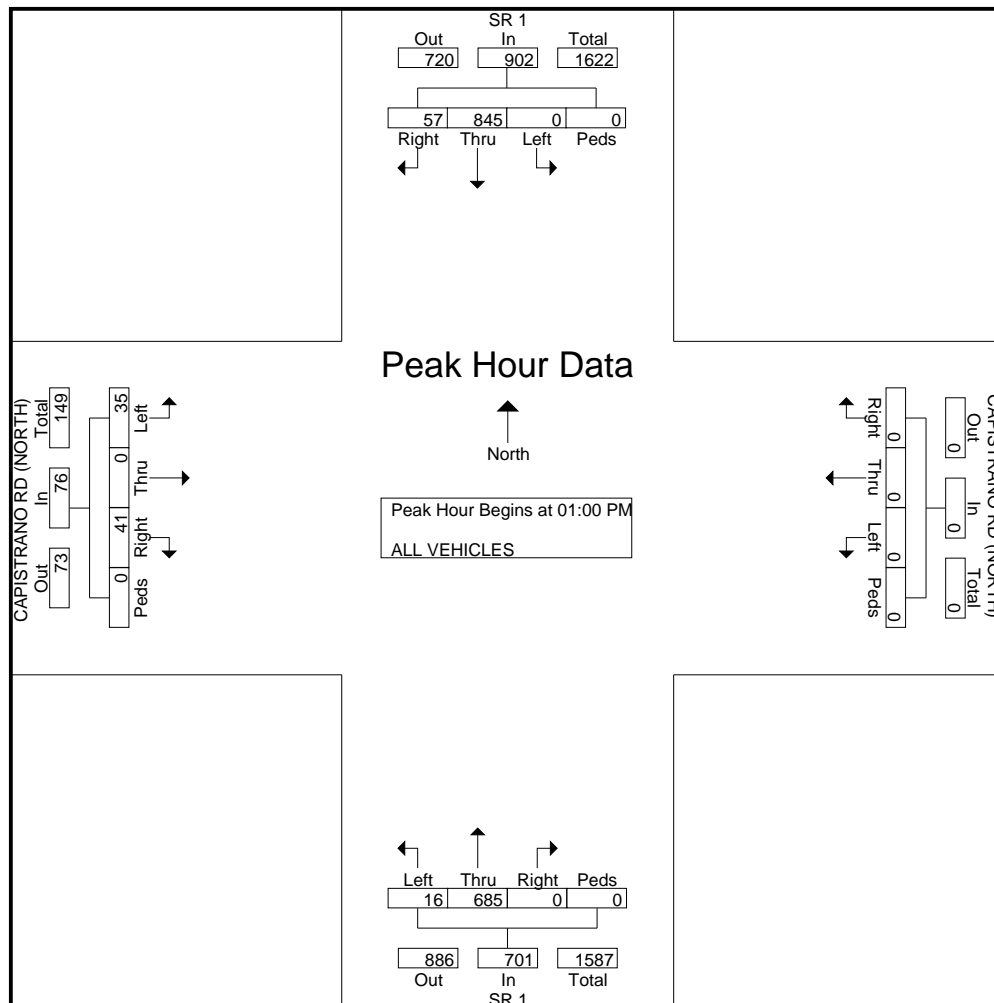
File Name : #2 SR1&CAPISTRANONORTHWE

Site Code : 2

Start Date : 5/24/2014

Page No : 2

Start Time	SR 1 Southbound					CAPISTRANO RD (NORTH) Westbound					SR 1 Northbound					CAPISTRANO RD (NORTH) Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 01:00 PM to 02:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 01:00 PM																					
01:00 PM	19	236	0	0	255	0	0	0	0	0	0	194	7	0	201	5	0	8	0	13	469
01:15 PM	12	189	0	0	201	0	0	0	0	0	0	167	2	0	169	10	0	4	0	14	384
01:30 PM	14	215	0	0	229	0	0	0	0	0	0	177	4	0	181	10	0	11	0	21	431
01:45 PM	12	205	0	0	217	0	0	0	0	0	0	147	3	0	150	16	0	12	0	28	395
Total Volume	57	845	0	0	902	0	0	0	0	0	0	685	16	0	701	41	0	35	0	76	1679
% App. Total	6.3	93.7	0	0		0	0	0	0		0	97.7	2.3	0		53.9	0	46.1	0		
PHF	.750	.895	.000	.000	.884	.000	.000	.000	.000	.000	.000	.883	.571	.000	.872	.641	.000	.729	.000	.679	.895



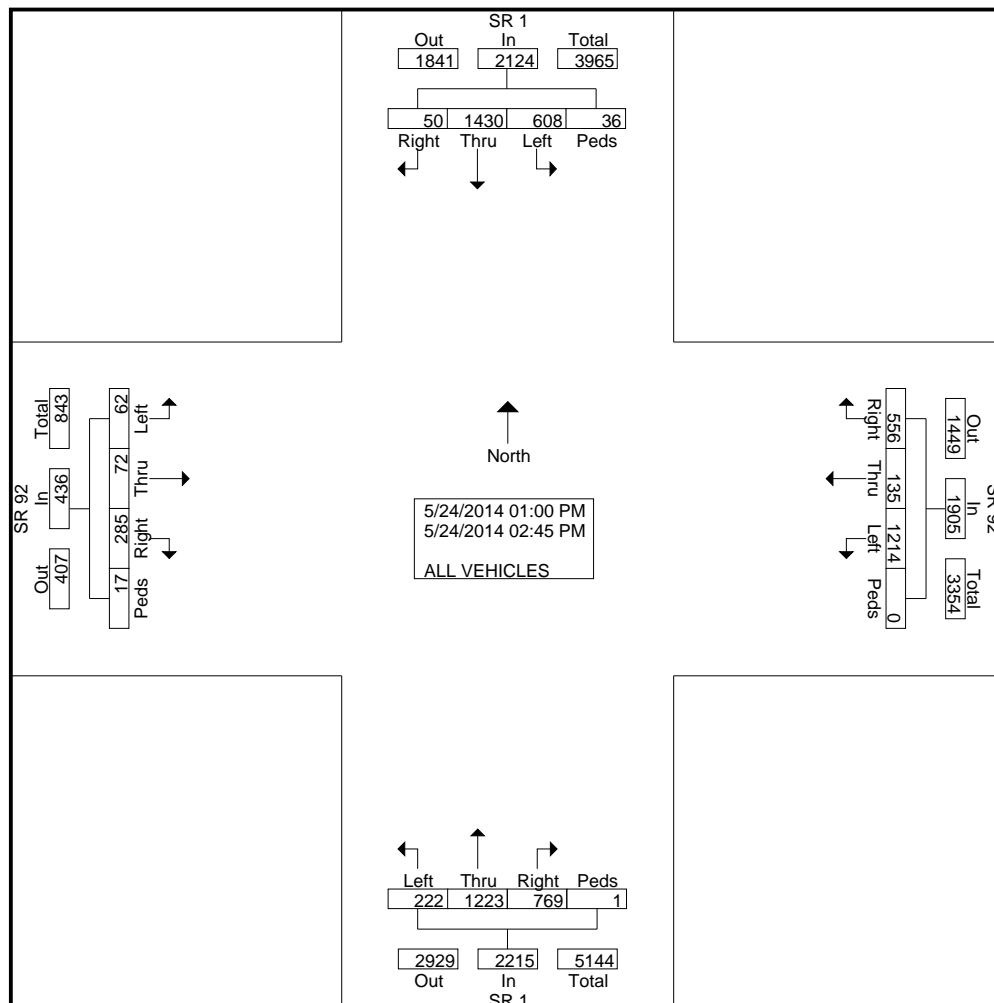
### All Traffic Data Services

2187 Kingsbury Cir  
Santa Clara, CA, 95054  
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File Name : #3 SR1&SR92WE  
Site Code : 3  
Start Date : 5/24/2014  
Page No : 1

Groups Printed- ALL VEHICLES

Start Time	SR 1 Southbound				SR 92 Westbound				SR 1 Northbound				SR 92 Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
01:00 PM	6	148	86	6	66	13	150	0	102	154	29	0	29	5	13	3	810
01:15 PM	6	201	64	7	61	17	115	0	77	178	21	0	28	8	5	7	795
01:30 PM	6	167	72	0	79	21	158	0	90	152	28	0	36	12	5	0	826
01:45 PM	7	174	82	4	81	26	164	0	85	150	29	1	38	7	8	6	862
Total	25	690	304	17	287	77	587	0	354	634	107	1	131	32	31	16	3293
02:00 PM	6	200	73	4	80	17	150	0	97	154	29	0	47	9	13	0	879
02:15 PM	7	185	56	3	78	15	158	0	111	161	22	0	36	10	11	0	853
02:30 PM	8	189	94	5	58	16	152	0	111	144	27	0	28	10	2	1	845
02:45 PM	4	166	81	7	53	10	167	0	96	130	37	0	43	11	5	0	810
Total	25	740	304	19	269	58	627	0	415	589	115	0	154	40	31	1	3387
Grand Total	50	1430	608	36	556	135	1214	0	769	1223	222	1	285	72	62	17	6680
Apprch %	2.4	67.3	28.6	1.7	29.2	7.1	63.7	0	34.7	55.2	10	0	65.4	16.5	14.2	3.9	
Total %	0.7	21.4	9.1	0.5	8.3	2	18.2	0	11.5	18.3	3.3	0	4.3	1.1	0.9	0.3	

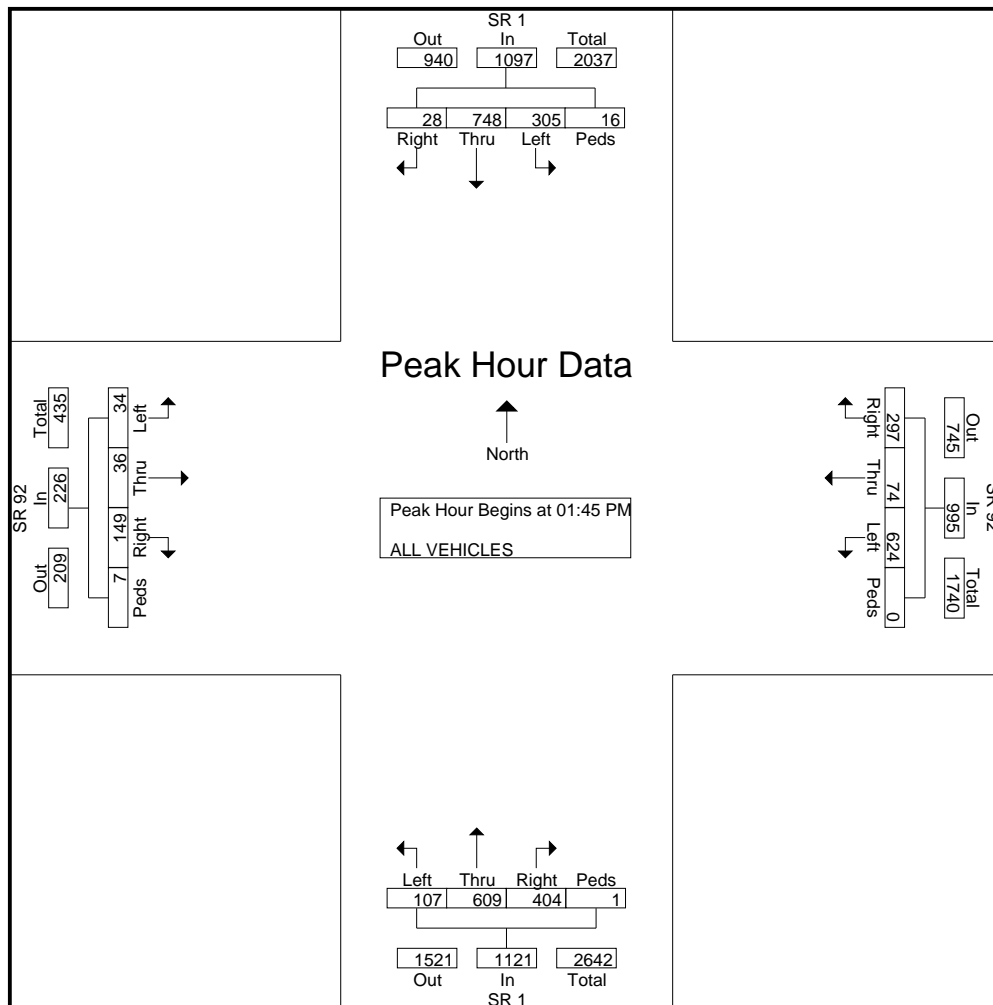


### All Traffic Data Services

2187 Kingsbury Cir  
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File Name : #3 SR1&SR92WE  
Site Code : 3  
Start Date : 5/24/2014  
Page No : 2

Start Time	SR 1 Southbound					SR 92 Westbound					SR 1 Northbound					SR 92 Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 01:00 PM to 02:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 01:45 PM																					
01:45 PM	7	174	82	4	267	81	26	164	0	271	85	150	29	1	265	38	7	8	6	59	862
02:00 PM	6	200	73	4	283	80	17	150	0	247	97	154	29	0	280	47	9	13	0	69	879
02:15 PM	7	185	56	3	251	78	15	158	0	251	111	161	22	0	294	36	10	11	0	57	853
02:30 PM	8	189	94	5	296	58	16	152	0	226	111	144	27	0	282	28	10	2	1	41	845
Total Volume	28	748	305	16	1097	297	74	624	0	995	404	609	107	1	1121	149	36	34	7	226	3439
% App. Total	2.6	68.2	27.8	1.5		29.8	7.4	62.7	0		36	54.3	9.5	0.1		65.9	15.9	15	3.1		
PHF	.875	.935	.811	.800	.927	.917	.712	.951	.000	.918	.910	.946	.922	.250	.953	.793	.900	.654	.292	.819	.978



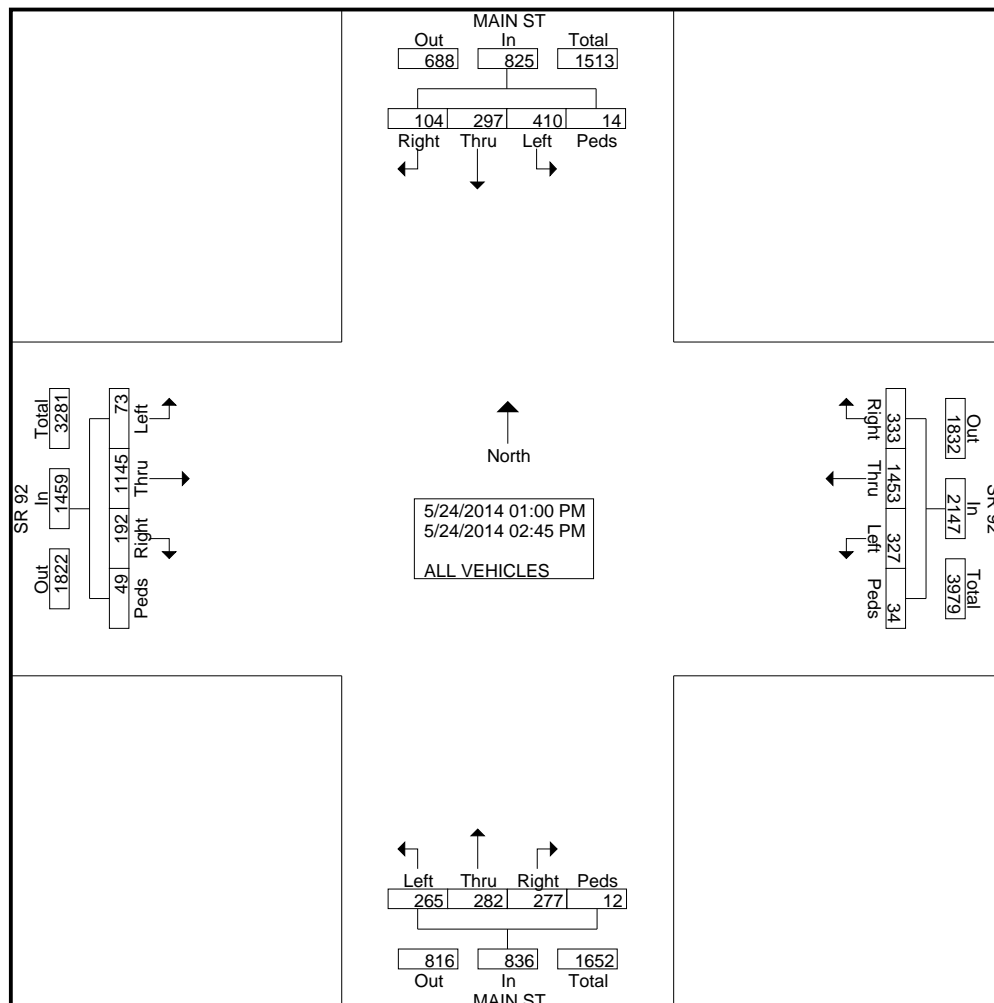
### All Traffic Data Services

2187 Kingsbury Cir  
Santa Clara, CA, 95054  
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File Name : #4 MAIN&SR92WE  
Site Code : 4  
Start Date : 5/24/2014  
Page No : 1

Groups Printed- ALL VEHICLES

Start Time	MAIN ST Southbound				SR 92 Westbound				MAIN ST Northbound				SR 92 Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
01:00 PM	11	46	57	3	44	177	37	5	38	43	32	0	23	141	13	6	676
01:15 PM	8	29	47	2	43	156	59	3	25	39	32	1	26	112	10	8	600
01:30 PM	27	39	47	3	41	209	37	9	36	32	32	5	19	146	8	11	701
01:45 PM	11	39	55	3	29	196	35	8	31	35	40	6	20	133	11	5	657
Total	57	153	206	11	157	738	168	25	130	149	136	12	88	532	42	30	2634
02:00 PM	5	37	39	1	29	186	45	0	42	34	32	0	15	141	7	8	621
02:15 PM	14	39	54	0	48	181	30	7	29	34	37	0	31	141	6	3	654
02:30 PM	15	41	51	0	41	188	41	1	38	33	32	0	30	173	7	2	693
02:45 PM	13	27	60	2	58	160	43	1	38	32	28	0	28	158	11	6	665
Total	47	144	204	3	176	715	159	9	147	133	129	0	104	613	31	19	2633
Grand Total	104	297	410	14	333	1453	327	34	277	282	265	12	192	1145	73	49	5267
Apprch %	12.6	36	49.7	1.7	15.5	67.7	15.2	1.6	33.1	33.7	31.7	1.4	13.2	78.5	5	3.4	
Total %	2	5.6	7.8	0.3	6.3	27.6	6.2	0.6	5.3	5.4	5	0.2	3.6	21.7	1.4	0.9	



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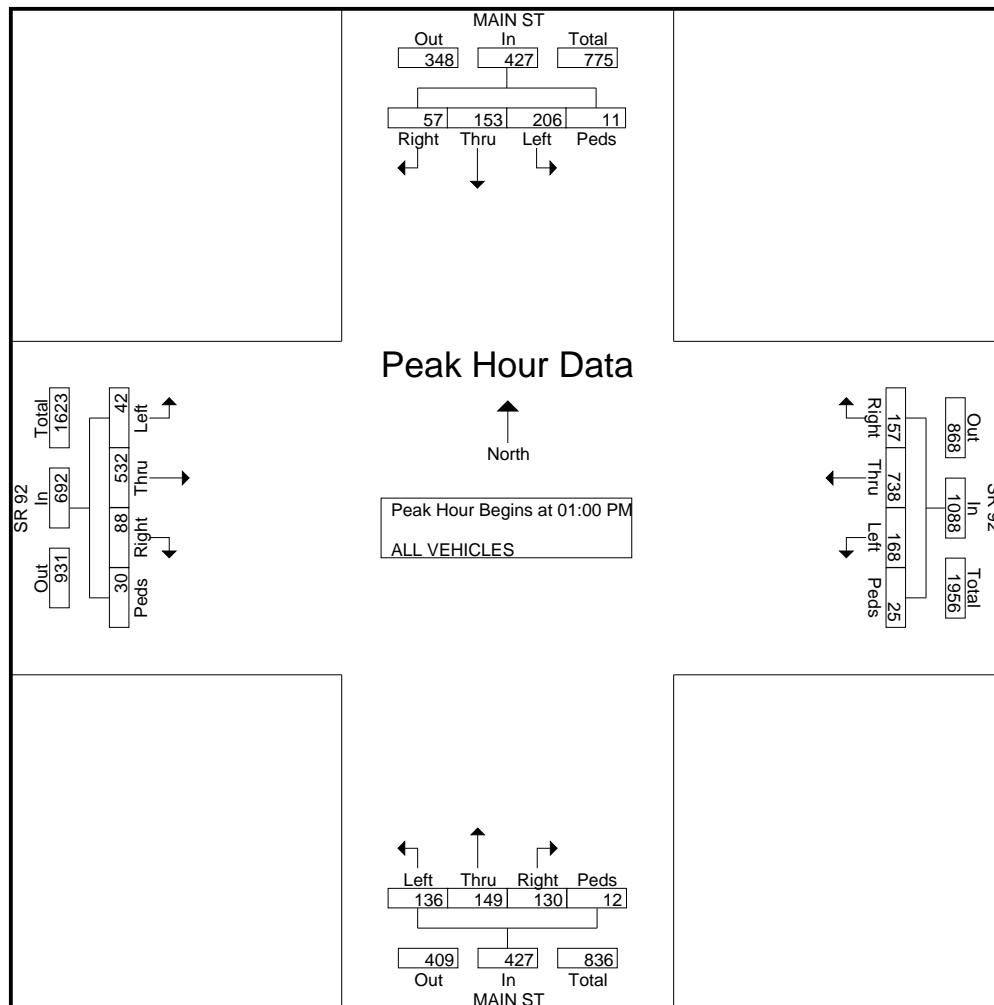
File Name : #4 MAIN&SR92WE

Site Code : 4

Start Date : 5/24/2014

Page No : 2

Start Time	MAIN ST Southbound					SR 92 Westbound					MAIN ST Northbound					SR 92 Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 01:00 PM to 02:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 01:00 PM																					
01:00 PM	11	46	57	3	117	44	177	37	5	263	38	43	32	0	113	23	141	13	6	183	676
01:15 PM	8	29	47	2	86	43	156	59	3	261	25	39	32	1	97	26	112	10	8	156	600
01:30 PM	27	39	47	3	116	41	209	37	9	296	36	32	32	5	105	19	146	8	11	184	701
01:45 PM	11	39	55	3	108	29	196	35	8	268	31	35	40	6	112	20	133	11	5	169	657
Total Volume	57	153	206	11	427	157	738	168	25	1088	130	149	136	12	427	88	532	42	30	692	2634
% App. Total	13.3	35.8	48.2	2.6		14.4	67.8	15.4	2.3		30.4	34.9	31.9	2.8		12.7	76.9	6.1	4.3		
PHF	.528	.832	.904	.917	.912	.892	.883	.712	.694	.919	.855	.866	.850	.500	.945	.846	.911	.808	.682	.940	.939



### All Traffic Data Services

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File Name : #5 SR1&CAPISTRANOSOUTHWE

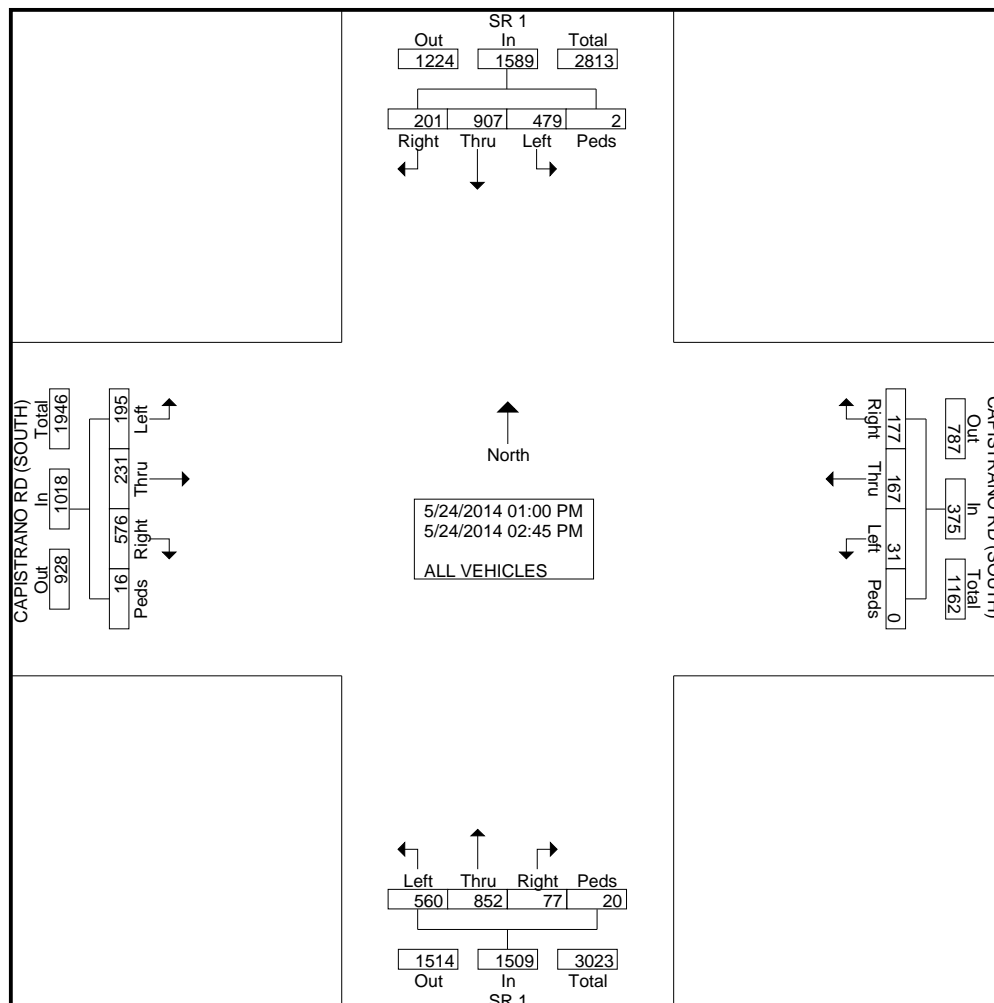
Site Code : 5

Start Date : 5/24/2014

Page No : 1

Groups Printed- ALL VEHICLES

Start Time	SR 1 Southbound				CAPISTRANO RD (SOUTH) Westbound				SR 1 Northbound				CAPISTRANO RD (SOUTH) Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
01:00 PM	40	143	55	0	14	28	3	0	9	133	59	0	60	41	35	12	632
01:15 PM	27	115	50	2	23	26	0	0	9	106	83	0	64	42	26	4	577
01:30 PM	33	108	69	0	21	24	3	0	10	108	67	0	74	29	23	0	569
01:45 PM	26	115	71	0	25	16	3	0	7	100	67	0	93	23	24	0	570
Total	126	481	245	2	83	94	9	0	35	447	276	0	291	135	108	16	2348
02:00 PM	19	97	69	0	24	15	7	0	10	96	66	5	92	14	18	0	532
02:15 PM	23	105	95	0	26	15	6	0	7	106	64	3	73	49	34	0	606
02:30 PM	14	95	46	0	26	23	4	0	12	107	90	5	56	16	19	0	513
02:45 PM	19	129	24	0	18	20	5	0	13	96	64	7	64	17	16	0	492
Total	75	426	234	0	94	73	22	0	42	405	284	20	285	96	87	0	2143
Grand Total	201	907	479	2	177	167	31	0	77	852	560	20	576	231	195	16	4491
Apprch %	12.6	57.1	30.1	0.1	47.2	44.5	8.3	0	5.1	56.5	37.1	1.3	56.6	22.7	19.2	1.6	
Total %	4.5	20.2	10.7	0	3.9	3.7	0.7	0	1.7	19	12.5	0.4	12.8	5.1	4.3	0.4	





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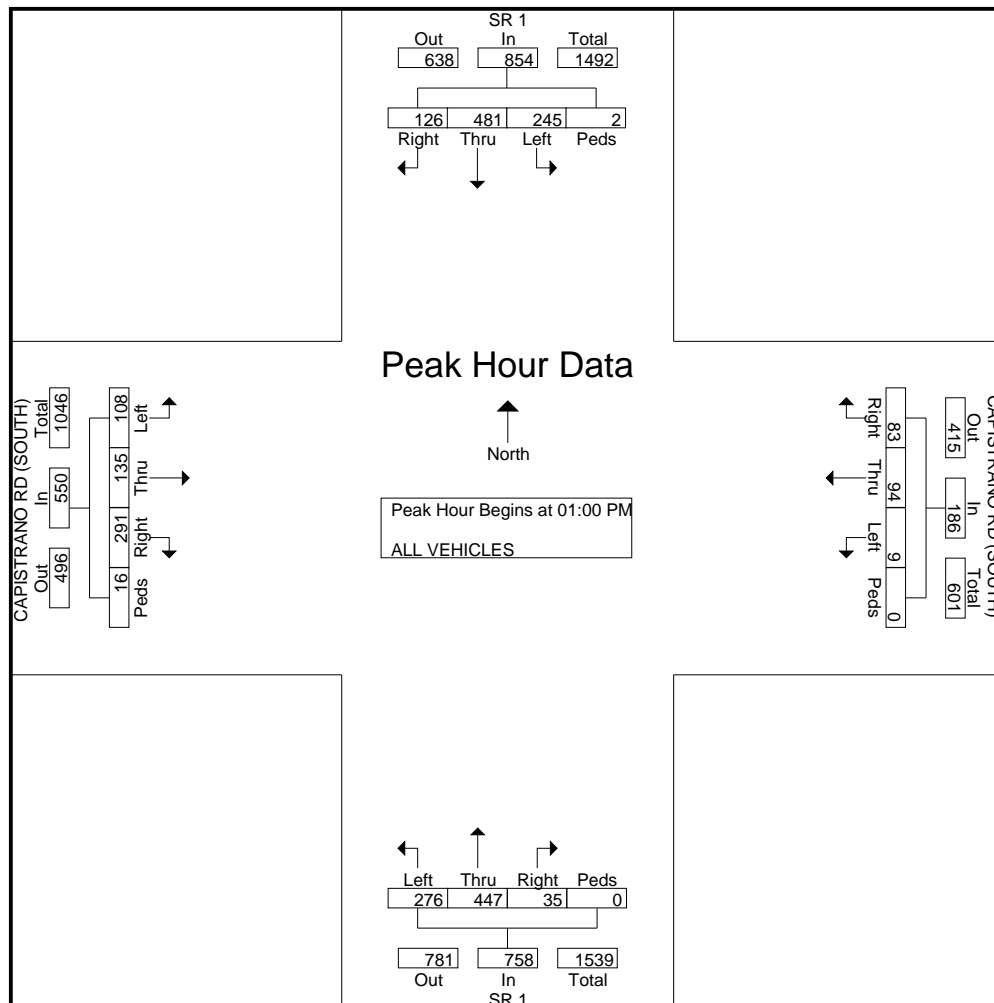
File Name : #5 SR1&CAPISTRANOSOUTHWE

Site Code : 5

Start Date : 5/24/2014

Page No : 2

Start Time	SR 1 Southbound					CAPISTRANO RD (SOUTH) Westbound					SR 1 Northbound					CAPISTRANO RD (SOUTH) Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 01:00 PM to 02:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 01:00 PM																					
01:00 PM	40	143	55	0	238	14	28	3	0	45	9	133	59	0	201	60	41	35	12	148	632
01:15 PM	27	115	50	2	194	23	26	0	0	49	9	106	83	0	198	64	42	26	4	136	577
01:30 PM	33	108	69	0	210	21	24	3	0	48	10	108	67	0	185	74	29	23	0	126	569
01:45 PM	26	115	71	0	212	25	16	3	0	44	7	100	67	0	174	93	23	24	0	140	570
Total Volume	126	481	245	2	854	83	94	9	0	186	35	447	276	0	758	291	135	108	16	550	2348
% App. Total	14.8	56.3	28.7	0.2		44.6	50.5	4.8	0		4.6	59	36.4	0		52.9	24.5	19.6	2.9		
PHF	.788	.841	.863	.250	.897	.830	.839	.750	.000	.949	.875	.840	.831	.000	.943	.782	.804	.771	.333	.929	.929



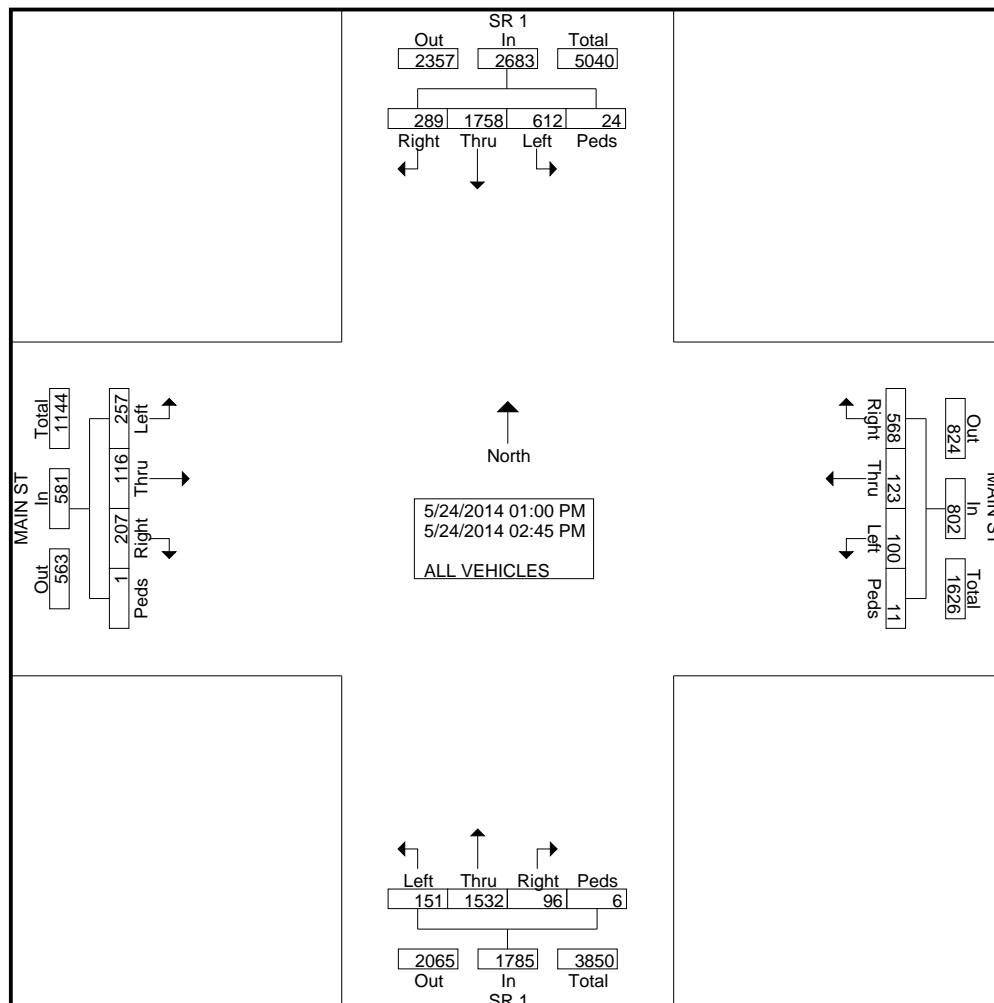
### All Traffic Data Services

2187 Kingsbury Cir  
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File Name : #6 SR1&MAINWE  
Site Code : 6  
Start Date : 5/24/2014  
Page No : 1

Groups Printed- ALL VEHICLES

Start Time	SR 1 Southbound				MAIN ST Westbound				SR 1 Northbound				MAIN ST Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
01:00 PM	30	190	87	2	76	13	15	0	8	196	15	3	20	15	39	1	710
01:15 PM	37	220	73	3	80	14	10	4	8	186	17	1	29	11	26	0	719
01:30 PM	43	206	85	3	63	20	10	4	15	203	26	2	29	11	29	0	749
01:45 PM	48	220	74	4	62	14	12	0	12	186	16	0	28	18	43	0	737
Total	158	836	319	12	281	61	47	8	43	771	74	6	106	55	137	1	2915
02:00 PM	24	255	76	3	67	17	14	3	18	206	20	0	20	4	26	0	753
02:15 PM	37	228	68	4	68	12	15	0	9	222	17	0	27	25	35	0	767
02:30 PM	31	229	77	1	85	14	13	0	16	160	22	0	27	11	29	0	715
02:45 PM	39	210	72	4	67	19	11	0	10	173	18	0	27	21	30	0	701
Total	131	922	293	12	287	62	53	3	53	761	77	0	101	61	120	0	2936
Grand Total	289	1758	612	24	568	123	100	11	96	1532	151	6	207	116	257	1	5851
Apprch %	10.8	65.5	22.8	0.9	70.8	15.3	12.5	1.4	5.4	85.8	8.5	0.3	35.6	20	44.2	0.2	
Total %	4.9	30	10.5	0.4	9.7	2.1	1.7	0.2	1.6	26.2	2.6	0.1	3.5	2	4.4	0	

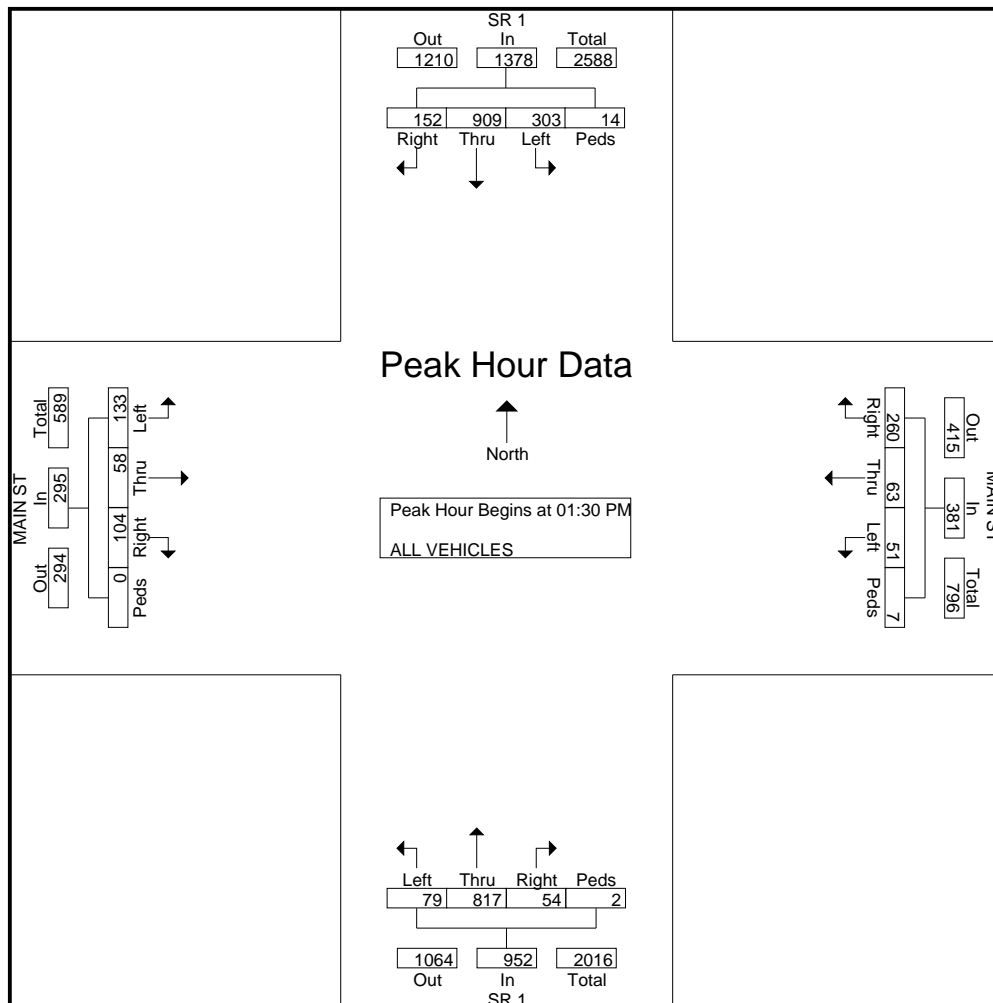


### All Traffic Data Services

2187 Kingsbury Cir  
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File Name : #6 SR1&MAINWE  
Site Code : 6  
Start Date : 5/24/2014  
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Start Time	SR 1 Southbound					MAIN ST Westbound					SR 1 Northbound					MAIN ST Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 01:00 PM to 02:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 01:30 PM																					
01:30 PM	43	206	85	3	337	63	20	10	4	97	15	203	26	2	246	29	11	29	0	69	749
01:45 PM	48	220	74	4	346	62	14	12	0	88	12	186	16	0	214	28	18	43	0	89	737
02:00 PM	24	255	76	3	358	67	17	14	3	101	18	206	20	0	244	20	4	26	0	50	753
02:15 PM	37	228	68	4	337	68	12	15	0	95	9	222	17	0	248	27	25	35	0	87	767
Total Volume	152	909	303	14	1378	260	63	51	7	381	54	817	79	2	952	104	58	133	0	295	3006
% App. Total	11	66	22	1		68.2	16.5	13.4	1.8		5.7	85.8	8.3	0.2		35.3	19.7	45.1	0		
PHF	.792	.891	.891	.875	.962	.956	.788	.850	.438	.943	.750	.920	.760	.250	.960	.897	.580	.773	.000	.829	.980



## **Appendix B**

### **Hourly Counts along Highway 1**

**Traffic Volumes Counts**

					24 hour Period Hourly Counts																	
Dist	Cnty	Rte	Prefix	PM	Leg	Dir	Description	Date	Day	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13
4 SM	1	29.036	B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/28/2013	TUE	42 A	21 A	27 A	41 A	59 A	219 A	586 A	1,089 A	1,072 A	756 A	773 A	727 A	895 C
4 SM	1	29.036	B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/27/2013	MON	87 A	48 A	31 A	27 A	52 A	103 A	172 A	305 A	449 A	637 A	845 A	982 A	1156 A
4 SM	1	29.036	B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/26/2013	SUN	114 A	61 A	22 A	21 A	33 A	74 A	157 A	307 A	412 A	699 A	847 A	998 A	1,050 A
4 SM	1	29.036	B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/25/2013	SAT	73 A	40 A	36 A	29 A	37 A	107 A	269 A	446 A	649 A	914 A	1,006 A	1,098 A	1,095 A
4 SM	1	29.036	B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/24/2013	FRI	54 A	33 A	27 A	28 A	68 A	221 A	591 A	1,102 A	982 A	847 A	772 A	878 A	902 A
4 SM	1	29.036	B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/23/2013	THU	50 A	24 A	20 A	37 A	83 A	214 A	673 A	1,142 A	1,037 A	799 A	766 A	822 A	892 A
4 SM	1	29.036	B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/22/2013	WED	37 A	20 A	30 A	32 A	80 A	233 A	695 A	1,138 A	1,044 A	803 A	714 A	765 A	847 A
4 SM	1	29.036	B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/21/2013	TUE	46 A	26 A	30 A	36 A	58 A	222 A	646 A	1,071 A	1,051 A	785 A	741 A	765 A	895 A
4 SM	1	29.036	B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/20/2013	MON	52 A	20 A	26 A	33 A	70 A	225 A	683 A	1,146 A	1,039 A	766 A	788 A	845 A	922 A
4 SM	1	29.036	B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/19/2013	SUN	145 A	68 A	31 A	23 A	35 A	87 A	177 A	304 A	499 A	847 A	1,128 A	1,260 A	1,363 A
4 SM	1	29.036	B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/18/2013	SAT	83 A	58 A	36 A	20 A	38 A	104 A	249 A	495 A	706 A	868 A	1,077 A	1,166 A	1,255 A
4 SM	1	29.036	B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/17/2013	FRI	41 A	26 A	17 A	40 A	78 A	202 A	605 A	1,051 A	915 A	780 A	856 A	850 A	856 A
4 SM	1	29.036	B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/16/2013	THU	38 A	27 A	24 A	41 A	60 A	217 A	636 A	1,137 A	979 A	782 A	735 A	809 A	853 A
<b>Total</b>										<b>862</b>	<b>472</b>	<b>357</b>	<b>408</b>	<b>751</b>	<b>2,228</b>	<b>6,139</b>	<b>10,733</b>	<b>10,834</b>	<b>10,283</b>	<b>11,048</b>	<b>11,965</b>	<b>12,981</b>
4 SM	1	29.036	B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/28/2013	TUE	60 A	35 A	13 A	13 A	24 A	100 A	345 A	795 A	979 A	795 A	780 A	874 A	965 C
4 SM	1	29.036	B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/27/2013	MON	85 A	43 A	30 A	19 A	30 A	81 A	212 A	381 A	522 A	802 A	1,017 A	1,140 A	1,136 A
4 SM	1	29.036	B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/26/2013	SUN	122 A	61 A	40 A	34 A	27 A	68 A	180 A	374 A	564 A	901 A	1,174 A	1,309 A	1,424 A
4 SM	1	29.036	B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/25/2013	SAT	106 A	80 A	59 A	23 A	20 A	110 A	241 A	472 A	773 A	1,111 A	1,289 A	1,685 A	1,596 A
4 SM	1	29.036	B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/24/2013	FRI	68 A	33 A	28 A	23 A	30 A	121 A	409 A	927 A	864 A	810 A	894 A	997 A	1,077 A
4 SM	1	29.036	B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/23/2013	THU	72 A	24 A	14 A	19 A	25 A	113 A	383 A	917 A	911 A	756 A	779 A	903 A	1,004 A
4 SM	1	29.036	B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/22/2013	WED	58 A	22 A	17 A	9 A	27 A	121 A	400 A	940 A	826 A	734 A	736 A	871 A	947 A
4 SM	1	29.036	B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/21/2013	TUE	43 A	32 A	18 A	12 A	30 A	127 A	351 A	790 A	983 A	751 A	767 A	931 A	965 A
4 SM	1	29.036	B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/20/2013	MON	48 A	31 A	24 A	21 A	22 A	122 A	384 A	899 A	883 A	805 A	927 A	1,044 A	1,072 A
4 SM	1	29.036	B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/19/2013	SUN	170 A	70 A	45 A	24 A	28 A	78 A	159 A	354 A	590 A	982 A	1,266 A	1,359 A	1,334 A
4 SM	1	29.036	B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/18/2013	SAT	96 A	52 A	44 A	22 A	27 A	80 A	207 A	459 A	779 A	1,075 A	1,314 A	1,391 A	1,369 A
4 SM	1	29.036	B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/17/2013	FRI	74 A	32 A	17 A	23 A	33 A	108 A	389 A	925 A	841 A	732 A	864 A	980 A	1,027 A
4 SM	1	29.036	B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/16/2013	THU	55 A	34 A	13 A	22 A	38 A	126 A	376 A	841 A	935 A	754 A	767 A	826 A	920 A
<b>Total</b>										<b>1,057</b>	<b>549</b>	<b>362</b>	<b>264</b>	<b>361</b>	<b>1,355</b>	<b>4,036</b>	<b>9,074</b>	<b>10,450</b>	<b>11,008</b>	<b>12,574</b>	<b>14,310</b>	<b>14,836</b>
4 SM	1	29.12	A	N			HALF MOON BAY- MAIN STREET	5/28/2013	TUE	51 A	16 A	21 A	29 A	69 A	123 A	311 A	639 A	846 A	684 A	733 A	790 A	888 A
4 SM	1	29.12	A	N			HALF MOON BAY- MAIN STREET	5/27/2013	MON	111 A	59 A	26 A	24 A	105 A	163 A	221 A	289 A	443 A	668 A	867 A	1,153 A	1,235 A
4 SM	1	29.12	A	N			HALF MOON BAY- MAIN STREET	5/26/2013	SUN	140 A	69 A	34 A	40 A	49 A	101 A	140 A	255 A	379 A	668 A	936 A	1,143 A	1,311 A
4 SM	1	29.12	A	N			HALF MOON BAY- MAIN STREET	5/25/2013	SAT	108 A	46 A	42 A	22 A	31 A	86 A	199 A	333 A	532 A	802 A	1,028 A	1,108 A	1,283 A
4 SM	1	29.12	A	N			HALF MOON BAY- MAIN STREET	5/24/2013	FRI	77 A	27 A	28 A	14 A	30 A	112 A	293 A	736 A	771 A	693 A	785 A	919 A	1,107 A
4 SM	1	29.12	A	N			HALF MOON BAY- MAIN STREET	5/23/2013	THU	76 A	25 A	22 A	12 A	42 A	108 A	308 A	678 A	701 A	629 A	652 A	828 A	1,013 A
4 SM	1	29.12	A	N			HALF MOON BAY- MAIN STREET	5/22/2013	WED	74 A	19 A	30 A	12 A	29 A	107 A	344 A	747 A	725 A	651 A	658 A	830 A	900 A
4 SM	1	29.12	A	N			HALF MOON BAY- MAIN STREET	5/21/2013	TUE	40 A	20 A	29 A	21 A	29 A	95 A	287 A	634 A	770 A	645 A	740 A	796 A	1,004 A
4 SM	1	29.12	A	N			HALF MOON BAY- MAIN STREET	5/20/2013	MON	57 A	22 A	17 A	16 A	42 A	99 A	294 A	706 A	704 A	642 A	747 A	959 A	1,074 A
4 SM	1	29.12	A	N			HALF MOON BAY- MAIN STREET	5/19/2013	SUN	135 A	70 A	32 A	14 A	24 A	53 A	141 A	246 A	461 A	747 A	973 A	1,228 A	1,332 A
4 SM	1	29.12	A	N			HALF MOON BAY- MAIN STREET	5/18/2013	SAT	104 A	80 A	34 A	21 A	29 A	65 A	170 A	355 A	574 A	762 A	1,053 A	1,316 A	1,383 A
4 SM	1	29.12	A	N			HALF MOON BAY- MAIN STREET	5/17/2013	FRI	65 A	25 A	16 A	21 A	51 A	126 A	300 A	677 A	671 A	634 A	839 A	934 A	1,020 A
4 SM	1	29.12	A	N			HALF MOON BAY- MAIN STREET	5/16/2013	THU	57 A	31 A	24 A	30 A	42 A	112 A	308 A	698 A	715 A	660 A	679 A	801 A	878 A
<b>Total</b>										<b>1,095</b>	<b>509</b>	<b>355</b>	<b>276</b>	<b>572</b>	<b>1,350</b>	<b>3,316</b>	<b>6,993</b>	<b>8,292</b>	<b>8,885</b>	<b>10,690</b>	<b>12,805</b>	<b>14,428</b>
4 SM	1	29.12	A	S			HALF MOON BAY- MAIN STREET	5/22/2013	WED	30 A	13 A	16 A	28 A	96 A	329 A	855 A	1,502 A	1,336 A	996 A	932 A	924 A	913 A
4 SM	1	29.12	A	S			HALF MOON BAY- MAIN STREET	5/21/2013	TUE	36 A	10 A	14 A	30 A	88 A	312 A	810 A	1,343 A	1,419 A	1,022 A	969 A	970 A	980 A
4 SM	1	29.12	A	S			HALF MOON BAY- MAIN STREET	5/20/2013	MON	22 A	20 A	17 A	37 A	78 A	293 A	858 A	1,496 A	1,288 A	1,063 A	1,018 A	1,024 A	1,039 A
4 SM	1	29.12	A	S			HALF MOON BAY- MAIN STREET	5/19/2013	SUN	116 A	55 A	32 A	22 A	31 A	96 A	207 A	401 A	700 A	1,097 A	1,220 A	1,226 A	1,285 A
4 SM	1	29.12	A	S			HALF MOON BAY- MAIN STREET	5/18/2013	SAT	62 A	39 A	39 A	29 A	34 A	97 A	300 A	515 A	972 A	1,209 A	1,368 A	1,340 A	1,343 A
4 SM	1	29.12	A	S			HALF MOON BAY- MAIN STREET	5/17/2013	FRI	45 A	12 A	16 A	31 A	75 A	270 A	843 A	1,438 A	1,215 A	1,018 A	994 A	1,077 A	1,054 A
4 SM	1	29.12	A	S			HALF MOON BAY- MAIN STREET	5/16/2013	THU	35 A	24 A	16 A	36 A	86 A	295 A	849 A	1,417 A	1,332 A	990 A	914 A	924 A	951 A
<b>Total</b>										<b>346</b>	<b>173</b>	<b>150</b>	<b>213</b>	<b>488</b>	<b>1,692</b>	<b>4,722</b>	<b>8,112</b>	<b>8,262</b>	<b>7,395</b>	<b>7,415</b>	<b>7,485</b>	<b>7,565</b>
4 SM	1	30.225	A	N			FRENCHMANS CREEK ROAD	5/28/2013	TUE	41 A	15 A	19 A	30 A	59 A	114 A	277 A	613 A	763 A	618 A	668 A	712 A	791 A
4 SM	1	30.225	A	N			FRENCHMANS CREEK ROAD	5/27/2013	MON	85 A	64 A	29 A	21 A	83 A	148 A	202 A	268 A	376 A	581 A	799 A	1,012 A	1,120 A
4 SM	1	30.225	A	N			FRENCHMANS CREEK ROAD	5/26/2013	SUN	126 A	63 A	31 A	35 A	45 A	87 A	136 A	216 A	339 A	598 A	854 A	1,032 A	1,162 A
4 SM	1	30.225	A	N			FRENCHMANS CREEK ROAD	5/25/2013														

### Traffic Volumes Counts

Dist	Cnty	Rte	Prefix	PM	Leg	Dir	Description	Date	Day	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24hr total
4	SM	1	29.036 B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/28/2013	TUE	863 C	865 C	1,159 C	1,125 C	1,048 C	808 C	698 C	510 C	336 C	167 C	74 C	13,960
4	SM	1	29.036 B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/27/2013	MON	1179 A	1,144 A	1,124 A	1,018 A	1,003 A	797 A	649 A	483 A	292 A	144 A	74 A	12,801
4	SM	1	29.036 B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/26/2013	SUN	1,074 A	1,107 A	1,142 A	1,234 A	1,216 A	1,088 A	917 A	647 A	477 A	306 A	168 A	14,171
4	SM	1	29.036 B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/25/2013	SAT	1,146 A	1,119 A	1,066 A	1,203 A	1,163 A	1,080 A	789 A	642 A	502 A	353 A	186 A	15,048
4	SM	1	29.036 B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/24/2013	FRI	956 A	1,128 A	1,163 A	1,188 A	1,213 A	943 A	709 A	567 A	398 A	231 A	132 A	15,133
4	SM	1	29.036 B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/23/2013	THU	890 A	959 A	1,056 A	1,061 A	1,031 A	845 A	626 A	510 A	356 A	230 A	112 A	14,235
4	SM	1	29.036 B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/22/2013	WED	842 A	924 A	1,045 A	1,083 A	981 A	804 A	652 A	468 A	347 A	143 A	82 A	13,809
4	SM	1	29.036 B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/21/2013	TUE	863 A	865 A	1,159 A	1,125 A	1,048 A	808 A	698 A	510 A	336 A	167 A	74 A	14,025
4	SM	1	29.036 B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/20/2013	MON	961 A	1,003 A	1,232 A	1,172 A	1,053 A	819 A	699 A	489 A	321 A	155 A	69 A	14,588
4	SM	1	29.036 B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/19/2013	SUN	1,309 A	1,231 A	1,356 A	1,311 A	1,199 A	1,119 A	846 A	664 A	376 A	187 A	104 A	15,669
4	SM	1	29.036 B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/18/2013	SAT	1,153 A	1,195 A	1,063 A	1,216 A	1,144 A	1,152 A	903 A	843 A	557 A	397 A	244 A	16,022
4	SM	1	29.036 B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/17/2013	FRI	905 A	997 A	1,186 A	1,115 A	1,068 A	895 A	714 A	548 A	468 A	281 A	164 A	14,658
4	SM	1	29.036 B	N			HALF MOON BAY- JCT. RTE. 92 EA	5/16/2013	THU	925 A	962 A	1,083 A	1,040 A	958 A	774 A	656 A	502 A	319 A	177 A	92 A	13,826
<b>Total</b>										<b>13,066</b>	<b>13,499</b>	<b>14,834</b>	<b>14,891</b>	<b>14,125</b>	<b>11,932</b>	<b>9,556</b>	<b>7,383</b>	<b>5,085</b>	<b>2,938</b>	<b>1,575</b>	<b>187,945</b>
4	SM	1	29.036 B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/28/2013	TUE	974 C	1,057 C	1,160 C	1,277 C	1,290 C	1,114 C	806 C	584 C	489 C	267 C	121 C	14,917
4	SM	1	29.036 B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/27/2013	MON	1,062 A	1,025 A	983 A	814 A	743 A	628 A	523 A	385 A	328 A	179 A	109 A	12,277
4	SM	1	29.036 B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/26/2013	SUN	1,360 A	1,189 A	1,244 A	1,091 A	999 A	725 A	558 A	472 A	376 A	294 A	144 A	14,730
4	SM	1	29.036 B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/25/2013	SAT	1,315 A	1,274 A	1,273 A	1,184 A	1,038 A	761 A	595 A	496 A	448 A	356 A	197 A	16,502
4	SM	1	29.036 B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/24/2013	FRI	1,168 A	1,248 A	1,301 A	1,359 A	1,322 A	1,075 A	784 A	585 A	513 A	356 A	229 A	16,221
4	SM	1	29.036 B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/23/2013	THU	953 A	1,065 A	1,217 A	1,283 A	1,270 A	1,101 A	734 A	708 A	545 A	281 A	134 A	15,121
4	SM	1	29.036 B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/22/2013	WED	967 A	1,007 A	1,212 A	1,231 A	1,340 A	1,080 A	773 A	615 A	452 A	241 A	120 A	14,746
4	SM	1	29.036 B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/21/2013	TUE	974 A	1,057 A	1,160 A	1,277 A	1,290 A	1,114 A	806 A	584 A	489 A	267 A	121 A	14,939
4	SM	1	29.036 B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/20/2013	MON	1,022 A	1,075 A	1,193 A	1,278 A	1,294 A	1,087 A	719 A	575 A	420 A	257 A	102 A	15,304
4	SM	1	29.036 B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/19/2013	SUN	1,292 A	1,163 A	1,180 A	1,198 A	923 A	794 A	623 A	511 A	420 A	242 A	109 A	14,914
4	SM	1	29.036 B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/18/2013	SAT	1,281 A	1,260 A	1,284 A	1,192 A	1,136 A	954 A	682 A	563 A	490 A	374 A	259 A	16,390
4	SM	1	29.036 B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/17/2013	FRI	1,046 A	1,204 A	1,337 A	1,348 A	1,309 A	1,163 A	836 A	611 A	600 A	383 A	206 A	16,088
4	SM	1	29.036 B	S			HALF MOON BAY- JCT. RTE. 92 EA	5/16/2013	THU	887 A	1,019 A	1,095 A	1,225 A	1,198 A	1,084 A	813 A	539 A	390 A	289 A	136 A	14,382
<b>Total</b>										<b>14,301</b>	<b>14,643</b>	<b>15,639</b>	<b>15,757</b>	<b>15,152</b>	<b>12,680</b>	<b>9,252</b>	<b>7,228</b>	<b>5,870</b>	<b>3,786</b>	<b>1,987</b>	<b>196,531</b>
4	SM	1	29.12 A	N			HALF MOON BAY- MAIN STREET	5/28/2013	TUE	970 C	960 C	1,418 C	1,428 C	1,455 C	1,202 C	1,043 C	772 C	508 C	244 C	88 C	15,288
4	SM	1	29.12 A	N			HALF MOON BAY- MAIN STREET	5/27/2013	MON	1,220 A	1,223 A	1,143 A	1,056 A	1,019 A	785 A	676 A	498 A	362 A	195 A	108 A	13,649
4	SM	1	29.12 A	N			HALF MOON BAY- MAIN STREET	5/26/2013	SUN	1,207 A	1,194 A	1,246 A	1,371 A	1,193 A	958 A	771 A	653 A	455 A	320 A	172 A	14,805
4	SM	1	29.12 A	N			HALF MOON BAY- MAIN STREET	5/25/2013	SAT	1,298 A	1,273 A	1,229 A	1,249 A	1,176 A	1,018 A	828 A	617 A	509 A	391 A	217 A	15,425
4	SM	1	29.12 A	N			HALF MOON BAY- MAIN STREET	5/24/2013	FRI	1,137 A	1,258 A	1,456 A	1,384 A	1,451 A	1,368 A	946 A	741 A	489 A	365 A	211 A	16,398
4	SM	1	29.12 A	N			HALF MOON BAY- MAIN STREET	5/23/2013	THU	984 A	1,102 A	1,415 A	1,385 A	1,514 A	1,270 A	1,017 A	850 A	523 A	320 A	133 A	15,607
4	SM	1	29.12 A	N			HALF MOON BAY- MAIN STREET	5/22/2013	WED	917 A	1,038 A	1,378 A	1,395 A	1,446 A	1,244 A	951 A	813 A	519 A	268 A	129 A	15,224
4	SM	1	29.12 A	N			HALF MOON BAY- MAIN STREET	5/21/2013	TUE	970 A	960 A	1,418 A	1,428 A	1,455 A	1,202 A	1,043 A	772 A	508 A	244 A	88 A	15,198
4	SM	1	29.12 A	N			HALF MOON BAY- MAIN STREET	5/20/2013	MON	1,113 A	1,174 A	1,402 A	1,432 A	1,492 A	1,242 A	997 A	657 A	433 A	237 A	100 A	15,658
4	SM	1	29.12 A	N			HALF MOON BAY- MAIN STREET	5/19/2013	SUN	1,350 A	1,319 A	1,340 A	1,374 A	1,288 A	1,136 A	800 A	631 A	388 A	209 A	112 A	15,403
4	SM	1	29.12 A	N			HALF MOON BAY- MAIN STREET	5/18/2013	SAT	1,363 A	1,343 A	1,278 A	1,282 A	1,255 A	1,209 A	949 A	833 A	621 A	423 A	242 A	16,744
4	SM	1	29.12 A	N			HALF MOON BAY- MAIN STREET	5/17/2013	FRI	1,085 A	1,075 A	1,444 A	1,450 A	1,521 A	1,362 A	986 A	662 A	492 A	362 A	186 A	16,204
4	SM	1	29.12 A	N			HALF MOON BAY- MAIN STREET	5/16/2013	THU	894 A	1,015 A	1,467 A	1,425 A	1,488 A	1,214 A	994 A	749 A	468 A	254 A	134 A	15,137
<b>Total</b>										<b>14,508</b>	<b>14,934</b>	<b>17,634</b>	<b>17,659</b>	<b>17,753</b>	<b>15,210</b>	<b>12,001</b>	<b>9,248</b>	<b>6,475</b>	<b>3,832</b>	<b>1,920</b>	<b>200,740</b>
4	SM	1	29.12 A	S			HALF MOON BAY- MAIN STREET	5/22/2013	WED	938 A	1,055 A	1,063 A	1,060 A	989 A	833 A	595 A	448 A	265 A	186 A	75 A	15,477
4	SM	1	29.12 A	S			HALF MOON BAY- MAIN STREET	5/21/2013	TUE	1,007 A	1,036 A	1,011 A	1,063 A	970 A	819 A	540 A	376 A	297 A	165 A	75 A	15,362
4	SM	1	29.12 A	S			HALF MOON BAY- MAIN STREET	5/20/2013	MON	1,061 A	1,141 A	1,064 A	1,119 A	1,007 A	745 A	577 A	408 A	257 A	169 A	74 A	15,875
4	SM	1	29.12 A	S			HALF MOON BAY- MAIN STREET	5/19/2013	SUN	1,305 A	1,229 A	1,286 A	1,206 A	947 A	890 A	670 A	578 A	360 A	191 A	85 A	15,235
4	SM	1	29.12 A	S			HALF MOON BAY- MAIN STREET	5/18/2013	SAT	1,276 A	1,197 A	1,275 A	1,273 A	1,173 A	976 A	748 A	639 A	517 A	335 A	201 A	16,957
4	SM	1	29.12 A	S			HALF MOON BAY- MAIN STREET	5/17/2013	FRI	1,067 A	1,187 A	1,128 A	1,161 A	1,024 A	926 A	670 A	551 A	444 A	315 A	148 A	16,709
4	SM	1	29.12 A	S			HALF MOON BAY- MAIN STREET	5/16/2013	THU	839 A	1,016 A	971 A	1,076 A	882 A	785 A	609 A	386 A	256 A	201 A	83 A	14,973
<b>Total</b>										<b>7,493</b>	<b>7,861</b>	<b>7,798</b>	<b>7,958</b>	<b>6,992</b>	<b>5,974</b>	<b>4,409</b>	<b>3,386</b>	<b>2,396</b>	<b>1,562</b>	<b>741</b>	<b>110,588</b>
4	SM	1	30.225 A	N			FRENCHMANS CREEK ROAD	5/28/2013	TUE	878 C	879 C	1,189 C	1,219 C	1,268 C	1,034 C	943 C	662 C	444 C	217 C	88 C	13,541
4	SM	1	30.225 A	N			FRENCHMANS CREEK ROAD	5/27/2013	MON	1,113 A	1,119 A	1,063 A	923 A	933 A	729 A	596 A	451 A	317 A	168 A	96 A	12,296
4	SM	1	30.225 A	N			FRENCHMANS CREEK ROAD	5/26/2013	SUN	1,092 A	1,083 A	1,126 A	1,251 A	1,084 A	858 A	721 A	595 A	397 A			

### Traffic Volumes Counts

						24 hour Period Hourly Counts																	
Dist	Cnty	Rte	Prefix	PM	Leg Dir	Description	Date	Day	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13		
4	SM	1	30.225	A	N	FRENCHMANS CREEK ROAD	5/19/2013	SUN	122	65	29	7	24	46	127	211	400	654	913	1,072	1,224	A	
4	SM	1	30.225	A	N	FRENCHMANS CREEK ROAD	5/18/2013	SAT	95	70	31	18	28	58	156	296	517	676	923	1,143	1,258	A	
4	SM	1	30.225	A	N	FRENCHMANS CREEK ROAD	5/17/2013	FRI	67	22	16	19	48	109	289	645	608	562	775	806	915	A	
4	SM	1	30.225	A	N	FRENCHMANS CREEK ROAD	5/16/2013	THU	53	32	21	28	35	97	282	644	652	577	632	680	785	A	
<b>Total</b>									<b>1,670</b>	<b>820</b>	<b>624</b>	<b>684</b>	<b>1,464</b>	<b>4,584</b>	<b>12,508</b>	<b>22,643</b>	<b>24,027</b>	<b>22,731</b>	<b>24,514</b>	<b>26,266</b>	<b>28,002</b>		
4	SM	1	30.225	A	S	FRENCHMANS CREEK ROAD	5/28/2013	TUE	37	20	11	19	58	222	628	1,045	1,192	897	871	861	821	A	
4	SM	1	30.225	A	S	FRENCHMANS CREEK ROAD	5/27/2013	MON	64	31	31	18	40	82	166	284	451	770	990	1,036	1,107	A	
4	SM	1	30.225	A	S	FRENCHMANS CREEK ROAD	5/26/2013	SUN	85	50	38	23	26	60	148	323	514	823	1,010	1,065	1,189	A	
4	SM	1	30.225	A	S	FRENCHMANS CREEK ROAD	5/25/2013	SAT	69	48	49	28	30	107	248	444	730	1,001	1,117	1,247	1,185	A	
4	SM	1	30.225	A	S	FRENCHMANS CREEK ROAD	5/24/2013	FRI	36	23	18	25	57	219	643	1,113	996	911	892	917	1,014	A	
4	SM	1	30.225	A	S	FRENCHMANS CREEK ROAD	5/23/2013	THU	40	10	20	20	53	209	709	1,194	1,031	819	810	816	827	A	
4	SM	1	30.225	A	S	FRENCHMANS CREEK ROAD	5/22/2013	WED	32	11	10	17	71	236	699	1,209	1,086	835	789	801	796	A	
4	SM	1	30.225	A	S	FRENCHMANS CREEK ROAD	5/21/2013	TUE	39	10	8	20	61	239	648	1,063	1,154	845	814	858	843	A	
4	SM	1	30.225	A	S	FRENCHMANS CREEK ROAD	5/20/2013	MON	22	16	15	19	59	223	703	1,183	1,062	909	884	893	902	A	
4	SM	1	30.225	A	S	FRENCHMANS CREEK ROAD	5/19/2013	SUN	121	57	34	16	26	74	155	315	584	921	1,073	1,103	1,194	A	
4	SM	1	30.225	A	S	FRENCHMANS CREEK ROAD	5/18/2013	SAT	58	43	38	28	30	74	232	443	793	1,022	1,183	1,178	1,179	A	
4	SM	1	30.225	A	S	FRENCHMANS CREEK ROAD	5/17/2013	FRI	44	15	13	21	52	212	684	1,142	975	872	844	953	928	A	
4	SM	1	30.225	A	S	FRENCHMANS CREEK ROAD	5/16/2013	THU	37	23	15	21	61	231	676	1,119	1,086	826	784	807	829	A	
<b>Total</b>									<b>684</b>	<b>357</b>	<b>300</b>	<b>275</b>	<b>624</b>	<b>2,188</b>	<b>6,339</b>	<b>10,877</b>	<b>11,654</b>	<b>11,451</b>	<b>12,061</b>	<b>12,535</b>	<b>12,814</b>		
4	SM	1	30.225	B	N	FRENCHMANS CREEK ROAD	3/2/2013	SAT	108	33	38	34	21	70	154	335	555	678	925	1,097	1,263	A	
4	SM	1	30.225	B	N	FRENCHMANS CREEK ROAD	3/1/2013	FRI	35	17	19	19	27	90	327	669	665	567	699	850	1,028	A	
4	SM	1	30.225	B	N	FRENCHMANS CREEK ROAD	2/28/2013	THU	38	21	19	21	18	89	342	683	619	573	603	696	804	A	
4	SM	1	30.225	B	N	FRENCHMANS CREEK ROAD	2/27/2013	WED	42	22	21	21	21	104	333	687	645	554	615	748	806	A	
4	SM	1	30.225	B	N	FRENCHMANS CREEK ROAD	2/26/2013	TUE	32	15	17	17	25	87	288	647	677	585	602	711	824	A	
4	SM	1	30.225	B	N	FRENCHMANS CREEK ROAD	2/25/2013	MON	46	17	16	19	26	82	300	685	614	518	607	710	824	A	
4	SM	1	30.225	B	N	FRENCHMANS CREEK ROAD	2/24/2013	SUN	100	44	35	14	18	48	104	229	400	647	837	1,064	1,276	A	
4	SM	1	30.225	B	N	FRENCHMANS CREEK ROAD	2/23/2013	SAT	72	48	30	22	16	45	157	285	484	644	917	1,108	1,163	A	
<b>Total</b>									<b>473</b>	<b>217</b>	<b>195</b>	<b>167</b>	<b>172</b>	<b>615</b>	<b>2,005</b>	<b>4,220</b>	<b>4,659</b>	<b>4,766</b>	<b>5,805</b>	<b>6,984</b>	<b>7,988</b>		
4	SM	1	30.225	B	S	FRENCHMANS CREEK ROAD	3/2/2013	SAT	54	39	27	33	24	81	267	542	731	985	1,123	1,083	1,118	A	
4	SM	1	30.225	B	S	FRENCHMANS CREEK ROAD	3/1/2013	FRI	27	10	20	25	67	262	793	1,209	1,024	911	785	922	870	A	
4	SM	1	30.225	B	S	FRENCHMANS CREEK ROAD	2/28/2013	THU	24	15	23	24	74	249	814	1,275	1,051	819	738	784	841	A	
4	SM	1	30.225	B	S	FRENCHMANS CREEK ROAD	2/27/2013	WED	26	11	15	27	76	253	876	1,299	999	847	687	814	748	A	
4	SM	1	30.225	B	S	FRENCHMANS CREEK ROAD	2/26/2013	TUE	17	7	11	21	62	231	778	1,145	1,201	838	767	810	777	A	
4	SM	1	30.225	B	S	FRENCHMANS CREEK ROAD	2/25/2013	MON	23	15	9	26	65	245	813	1,331	1,010	865	760	795	798	A	
4	SM	1	30.225	B	S	FRENCHMANS CREEK ROAD	2/24/2013	SUN	74	41	31	20	32	65	168	337	514	850	951	1,067	1,022	A	
4	SM	1	30.225	B	S	FRENCHMANS CREEK ROAD	2/23/2013	SAT	61	32	36	23	33	69	224	469	613	969	1,014	1,091	1,176	A	
<b>Total</b>									<b>306</b>	<b>170</b>	<b>172</b>	<b>199</b>	<b>433</b>	<b>1,455</b>	<b>4,733</b>	<b>7,507</b>	<b>7,143</b>	<b>7,084</b>	<b>6,825</b>	<b>7,366</b>	<b>7,350</b>		
4	SM	1	33.361	A	N	CAPISTRANO/OBISPO ROADS	5/27/2013	MON	56	38	17	9	22	41	105	148	207	369	518	518	656	655	A
4	SM	1	33.361	A	N	CAPISTRANO/OBISPO ROADS	5/26/2013	SUN	72	38	20	9	15	33	82	136	226	383	496	582	694	A	
4	SM	1	33.361	A	N	CAPISTRANO/OBISPO ROADS	5/25/2013	SAT	48	36	17	9	16	59	131	225	297	439	547	584	646	A	
4	SM	1	33.361	A	N	CAPISTRANO/OBISPO ROADS	5/24/2013	FRI	47	19	14	16	32	97	243	409	495	456	452	461	606	A	
4	SM	1	33.361	A	N	CAPISTRANO/OBISPO ROADS	5/23/2013	THU	38	21	8	7	40	126	289	452	456	432	395	474	514	A	
4	SM	1	33.361	A	N	CAPISTRANO/OBISPO ROADS	5/22/2013	WED	34	21	10	11	33	124	313	472	427	422	415	489	448	A	
4	SM	1	33.361	A	N	CAPISTRANO/OBISPO ROADS	5/21/2013	TUE	24	15	14	13	34	106	273	458	524	429	448	449	483	A	
4	SM	1	33.361	A	N	CAPISTRANO/OBISPO ROADS	5/20/2013	MON	28	12	10	9	32	105	254	458	498	400	418	531	515	A	
4	SM	1	33.361	A	N	CAPISTRANO/OBISPO ROADS	5/19/2013	SUN	88	54	18	7	30	55	95	145	246	389	535	622	775	A	
4	SM	1	33.361	A	N	CAPISTRANO/OBISPO ROADS	5/18/2013	SAT	63	43	16	10	17	53	114	216	352	435	494	653	724	A	
4	SM	1	33.361	A	N	CAPISTRANO/OBISPO ROADS	5/17/2013	FRI	49	15	5	13	37	115	278	419	475	409	489	443	521	A	
<b>Total</b>									<b>547</b>	<b>303</b>	<b>149</b>	<b>113</b>	<b>308</b>	<b>914</b>	<b>2,177</b>	<b>3,538</b>	<b>4,203</b>	<b>4,563</b>	<b>5,207</b>	<b>5,944</b>	<b>6,581</b>		
4	SM	1	33.361	A	S	CAPISTRANO/OBISPO ROADS	5/31/2013	FRI	74	47	22	15	11	39	96	334	546	535	529	548	612	C	
4	SM	1	33.361	A	S	CAPISTRANO/OBISPO ROADS	5/30/2013	THU	70	62	14	21	13	45	121	371	547	529	506	555	516	A	
4	SM	1	33.361	A	S	CAPISTRANO/OBISPO ROADS	5/29/2013	WED	58	31	26	18	19	53	139	372	596	550	481	506	520	A	
4	SM	1	33.361	A	S	CAPISTRANO/OBISPO ROADS	5/28/2013	TUE	66	24	15	13	16	52	123	367	556	611	558	521	528	A	
4	SM	1	33.361	A	S	CAPISTRANO/OBISPO ROADS	5/27/2013	MON	97	44	24	29	12	43	112	146	167	273	472	673	802	A	
4	SM	1	33.361	A	S	CAPISTRANO/OBISPO ROADS	5/26/2013	SUN	103	66	51	25	19	23	60	90	197	278	572	722	868	A	
4	SM	1	33.361	A	S	CAPISTRANO/OBISPO ROADS	5/25/2013	SAT	127	54	42	41	15	33	83	140	257	475	659	740	900	A	
4	SM	1	33.361	A	S	CAPISTRANO/OBISPO ROADS	5/24/2013	FRI	86	45	21	16	15	44	99	338	516	597	589	553	612	A	
4	SM	1	33.361	A	S	CAPISTRANO/OBISPO ROADS	5/23/2013	THU	79	35	12	16	14	40	107	369	585	508	501	530	579	A	
4	SM	1	33.361	A	S	CAPISTRANO/OBISPO ROADS	5/22/2013	WED	75	26	11	8	13	47	127	370	585	547	492	499	501	A	

### Traffic Volumes Counts

Dist	Cnty	Rte	Prefix	PM	Leg	Dir	Description	Date	Day	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24hr total											
4	SM	1	30.225	A	N		FRENCHMANS CREEK ROAD	5/19/2013	SUN	1,227	A	1,175	A	1,212	A	1,264	A	1,212	A	1,006	A	738	A	564	A	351	A	176	A	98	A	13,917
4	SM	1	30.225	A	N		FRENCHMANS CREEK ROAD	5/18/2013	SAT	1,222	A	1,218	A	1,162	A	1,144	A	1,093	A	1,091	A	873	A	731	A	598	A	410	A	211	A	15,022
4	SM	1	30.225	A	N		FRENCHMANS CREEK ROAD	5/17/2013	FRI	982	A	934	A	1,229	A	1,290	A	1,289	A	1,203	A	867	A	580	A	588	A	326	A	152	A	14,321
4	SM	1	30.225	A	N		FRENCHMANS CREEK ROAD	5/16/2013	THU	767	A	902	A	1,193	A	1,155	A	1,263	A	1,109	A	840	A	629	A	421	A	235	A	122	A	13,154
<b>Total</b>										<b>27,984</b>	<b>29,110</b>	<b>30,964</b>	<b>31,284</b>	<b>29,564</b>	<b>25,545</b>	<b>19,539</b>	<b>14,859</b>	<b>10,562</b>	<b>6,541</b>	<b>3,226</b>	<b>399,715</b>											
4	SM	1	30.225	A	S		FRENCHMANS CREEK ROAD	5/28/2013	TUE	917	C	896	C	897	C	976	C	906	C	727	C	473	C	342	C	277	C	148	C	89	C	13,330
4	SM	1	30.225	A	S		FRENCHMANS CREEK ROAD	5/27/2013	MON	1,066	A	1,058	A	1,009	A	796	A	726	A	637	A	473	A	316	A	238	A	134	A	67	A	11,590
4	SM	1	30.225	A	S		FRENCHMANS CREEK ROAD	5/26/2013	SUN	1,141	A	1,154	A	1,115	A	1,026	A	938	A	772	A	672	A	531	A	414	A	259	A	127	A	13,503
4	SM	1	30.225	A	S		FRENCHMANS CREEK ROAD	5/25/2013	SAT	1,132	A	1,057	A	1,139	A	1,156	A	940	A	685	A	604	A	476	A	375	A	282	A	142	A	14,291
4	SM	1	30.225	A	S		FRENCHMANS CREEK ROAD	5/24/2013	FRI	972	A	1,082	A	1,052	A	1,102	A	920	A	700	A	594	A	461	A	374	A	258	A	170	A	14,549
4	SM	1	30.225	A	S		FRENCHMANS CREEK ROAD	5/23/2013	THU	834	A	981	A	985	A	990	A	878	A	802	A	508	A	439	A	273	A	199	A	79	A	13,526
4	SM	1	30.225	A	S		FRENCHMANS CREEK ROAD	5/22/2013	WED	823	A	949	A	943	A	949	A	879	A	752	A	548	A	421	A	249	A	176	A	74	A	13,355
4	SM	1	30.225	A	S		FRENCHMANS CREEK ROAD	5/21/2013	TUE	917	A	896	A	897	A	976	A	906	A	727	A	473	A	342	A	277	A	148	A	89	A	13,250
4	SM	1	30.225	A	S		FRENCHMANS CREEK ROAD	5/20/2013	MON	937	A	1,032	A	964	A	1,044	A	892	A	661	A	524	A	365	A	246	A	151	A	78	A	13,784
4	SM	1	30.225	A	S		FRENCHMANS CREEK ROAD	5/19/2013	SUN	1,189	A	1,156	A	1,169	A	1,047	A	871	A	794	A	615	A	537	A	315	A	178	A	85	A	13,629
4	SM	1	30.225	A	S		FRENCHMANS CREEK ROAD	5/18/2013	SAT	1,141	A	1,079	A	1,164	A	1,158	A	1,047	A	867	A	669	A	590	A	460	A	290	A	189	A	14,955
4	SM	1	30.225	A	S		FRENCHMANS CREEK ROAD	5/17/2013	FRI	945	A	1,081	A	1,026	A	1,043	A	912	A	826	A	607	A	483	A	380	A	298	A	145	A	14,501
4	SM	1	30.225	A	S		FRENCHMANS CREEK ROAD	5/16/2013	THU	736	A	919	A	844	A	984	A	790	A	689	A	567	A	353	A	245	A	198	A	88	A	12,928
<b>Total</b>										<b>12,750</b>	<b>13,340</b>	<b>13,204</b>	<b>13,247</b>	<b>11,605</b>	<b>9,639</b>	<b>7,327</b>	<b>5,656</b>	<b>4,123</b>	<b>2,719</b>	<b>1,422</b>	<b>177,191</b>											
4	SM	1	30.225	B	N		FRENCHMANS CREEK ROAD	3/2/2013	SAT	1,281	A	1,217	A	1,193	A	1,154	A	1,172	A	806	A	526	A	359	A	352	A	293	A	153	A	13,817
4	SM	1	30.225	B	N		FRENCHMANS CREEK ROAD	3/1/2013	FRI	1,003	A	1,091	A	1,259	A	1,246	A	1,275	A	1,195	A	745	A	457	A	402	A	323	A	157	A	14,165
4	SM	1	30.225	B	N		FRENCHMANS CREEK ROAD	2/28/2013	THU	947	A	890	A	1,203	A	1,204	A	1,261	A	1,087	A	724	A	498	A	385	A	182	A	83	A	12,980
4	SM	1	30.225	B	N		FRENCHMANS CREEK ROAD	2/27/2013	WED	833	A	890	A	1,189	A	1,173	A	1,253	A	1,000	A	708	A	569	A	382	A	198	A	64	A	12,888
4	SM	1	30.225	B	N		FRENCHMANS CREEK ROAD	2/26/2013	TUE	840	A	857	A	1,194	A	1,205	A	1,230	A	1,097	A	695	A	466	A	386	A	174	A	80	A	12,751
4	SM	1	30.225	B	N		FRENCHMANS CREEK ROAD	2/25/2013	MON	827	A	831	A	1,190	A	1,218	A	1,243	A	981	A	564	A	434	A	337	A	150	A	69	A	12,308
4	SM	1	30.225	B	N		FRENCHMANS CREEK ROAD	2/24/2013	SUN	1,187	A	1,268	A	1,200	A	1,199	A	978	A	652	A	424	A	292	A	222	A	139	A	61	A	12,438
4	SM	1	30.225	B	N		FRENCHMANS CREEK ROAD	2/23/2013	SAT	1,136	A	1,245	A	1,176	A	1,191	A	1,081	A	784	A	550	A	382	A	335	A	275	A	136	A	13,282
<b>Total</b>										<b>8,054</b>	<b>8,289</b>	<b>9,604</b>	<b>9,590</b>	<b>9,493</b>	<b>7,602</b>	<b>4,936</b>	<b>3,457</b>	<b>2,801</b>	<b>1,734</b>	<b>803</b>	<b>104,629</b>											
4	SM	1	30.225	B	S		FRENCHMANS CREEK ROAD	3/2/2013	SAT	1,146	A	1,160	A	1,121	A	1,113	A	921	A	736	A	495	A	318	A	272	A	245	A	129	A	13,763
4	SM	1	30.225	B	S		FRENCHMANS CREEK ROAD	3/1/2013	FRI	971	A	1,115	A	1,079	A	1,095	A	840	A	814	A	523	A	323	A	263	A	206	A	132	A	14,286
4	SM	1	30.225	B	S		FRENCHMANS CREEK ROAD	2/28/2013	THU	833	A	961	A	961	A	974	A	821	A	668	A	380	A	265	A	207	A	128	A	49	A	12,978
4	SM	1	30.225	B	S		FRENCHMANS CREEK ROAD	2/27/2013	WED	822	A	974	A	902	A	939	A	851	A	730	A	404	A	280	A	219	A	114	A	51	A	12,964
4	SM	1	30.225	B	S		FRENCHMANS CREEK ROAD	2/26/2013	TUE	870	A	959	A	876	A	892	A	813	A	656	A	373	A	243	A	203	A	125	A	55	A	12,730
4	SM	1	30.225	B	S		FRENCHMANS CREEK ROAD	2/25/2013	MON	854	A	906	A	865	A	902	A	797	A	616	A	371	A	239	A	192	A	106	A	36	A	12,539
4	SM	1	30.225	B	S		FRENCHMANS CREEK ROAD	2/24/2013	SUN	1,186	A	1,158	A	1,210	A	1,059	A	863	A	673	A	371	A	267	A	233	A	109	A	43	A	12,344
4	SM	1	30.225	B	S		FRENCHMANS CREEK ROAD	2/23/2013	SAT	1,164	A	1,069	A	1,108	A	1,026	A	893	A	747	A	478	A	329	A	294	A	215	A	113	A	13,246
<b>Total</b>										<b>7,846</b>	<b>8,302</b>	<b>8,122</b>	<b>8,000</b>	<b>6,799</b>	<b>5,640</b>	<b>3,395</b>	<b>2,264</b>	<b>1,883</b>	<b>1,248</b>	<b>608</b>	<b>104,850</b>											
4	SM	1	33.361	A	N		CAPISTRANO/OBISPO ROADS	5/27/2013	MON	754	A	784	A	738	A	688	A	669	A	515	A	415	A	294	A	235	A	100	A	56	A	8,089
4	SM	1	33.361	A	N		CAPISTRANO/OBISPO ROADS	5/26/2013	SUN	686	A	702	A	742	A	815	A	801	A	595	A	535	A	447	A	310	A	189	A	109	A	8,717
4	SM	1	33.361	A	N		CAPISTRANO/OBISPO ROADS	5/25/2013	SAT	685	A	658	A	733	A	795	A	718	A	626	A	499	A	383	A	326	A	237	A	112	A	8,826
4	SM	1	33.361	A	N		CAPISTRANO/OBISPO ROADS	5/24/2013	FRI	638	A	686	A	716	A	745	A	649	A	719	A	511	A	379	A	270	A	180	A	124	A	8,964
4	SM	1	33.361	A	N		CAPISTRANO/OBISPO ROADS	5/23/2013	THU	520	A	563	A	676	A	666	A	686	A	601	A	498	A	401	A	293	A	159	A	95	A	8,401
4	SM	1	33.361	A	N		CAPISTRANO/OBISPO ROADS	5/22/2013	WED	472	A	555	A	657	A	590	A	672	A	628	A	465	A	357	A	257	A	115	A	75	A	8,062
4	SM	1	33.361	A	N		CAPISTRANO/OBISPO ROADS	5/21/2013	TUE	526	A	525	A	658	A	684	A	717	A	610	A	455	A	346	A	257	A	132	A	34	A	8,214
4	SM	1	33.361	A	N		CAPISTRANO/OBISPO ROADS	5/20/2013	MON	596	A	651	A	669	A	721	A	704	A	640												



### Traffic Volumes Counts

						24 hour Period Hourly Counts																
Dist	Cnty	Rte	Prefix	PM	Leg Dir	Description	Date	Day	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	
4	SM	1	33.361	A	S	CAPISTRANO/OBISPO ROADS	5/21/2013	TUE	36	12	10	15	4	113	343	560	570	529	551	578	547	4
4	SM	1	33.361	A	S	CAPISTRANO/OBISPO ROADS	5/20/2013	MON	22	22	12	13	38	106	357	583	555	590	559	607	606	4
4	SM	1	33.361	A	S	CAPISTRANO/OBISPO ROADS	5/19/2013	SUN	73	54	18	12	17	41	92	168	361	592	806	855	982	4
4	SM	1	33.361	A	S	CAPISTRANO/OBISPO ROADS	5/18/2013	SAT	73	36	35	20	29	39	115	251	441	633	765	897	825	4
4	SM	1	33.361	A	S	CAPISTRANO/OBISPO ROADS	5/17/2013	FRI	41	19	5	15	40	101	376	524	557	562	566	627	602	4
<b>Total</b>									<b>1,080</b>	<b>577</b>	<b>318</b>	<b>277</b>	<b>314</b>	<b>819</b>	<b>2,350</b>	<b>4,983</b>	<b>7,036</b>	<b>7,809</b>	<b>8,606</b>	<b>9,411</b>	<b>10,000</b>	
4	SM	1	33.361	B	N	CAPISTRANO/OBISPO ROADS	5/31/2013	FRI	47	24	16	14	25	113	253	381	531	498	544	555	706	4
4	SM	1	33.361	B	N	CAPISTRANO/OBISPO ROADS	5/30/2013	THU	37	22	18	19	33	110	241	430	470	467	557	597	4	
4	SM	1	33.361	B	N	CAPISTRANO/OBISPO ROADS	5/29/2013	WED	40	24	22	26	71	183	303	560	530	483	431	554	566	4
4	SM	1	33.361	B	N	CAPISTRANO/OBISPO ROADS	5/28/2013	TUE	31	13	15	29	76	144	302	531	491	613	601	584	534	4
4	SM	1	33.361	B	N	CAPISTRANO/OBISPO ROADS	5/27/2013	MON	63	46	19	22	96	166	197	226	321	419	607	817	1,094	4
4	SM	1	33.361	B	N	CAPISTRANO/OBISPO ROADS	5/26/2013	SUN	85	48	29	29	42	82	129	178	284	432	614	749	980	4
4	SM	1	33.361	B	N	CAPISTRANO/OBISPO ROADS	5/25/2013	SAT	72	25	25	10	27	78	165	232	377	517	660	738	805	4
4	SM	1	33.361	B	N	CAPISTRANO/OBISPO ROADS	5/24/2013	FRI	57	18	21	17	29	110	217	402	537	478	490	555	706	4
4	SM	1	33.361	B	N	CAPISTRANO/OBISPO ROADS	5/23/2013	THU	51	15	11	11	35	104	252	394	462	444	447	506	593	4
4	SM	1	33.361	B	N	CAPISTRANO/OBISPO ROADS	5/22/2013	WED	41	17	16	12	29	96	271	438	466	434	429	549	503	4
4	SM	1	33.361	B	N	CAPISTRANO/OBISPO ROADS	5/21/2013	TUE	27	13	19	17	24	84	225	374	543	422	480	476	575	4
4	SM	1	33.361	B	N	CAPISTRANO/OBISPO ROADS	5/20/2013	MON	33	16	13	14	34	99	216	409	492	442	494	593	616	4
4	SM	1	33.361	B	N	CAPISTRANO/OBISPO ROADS	5/19/2013	SUN	103	52	19	7	27	43	119	176	290	503	618	688	852	4
4	SM	1	33.361	B	N	CAPISTRANO/OBISPO ROADS	5/18/2013	SAT	58	58	23	15	29	59	148	242	413	481	607	765	907	4
4	SM	1	33.361	B	N	CAPISTRANO/OBISPO ROADS	5/17/2013	FRI	54	21	11	19	46	121	248	394	472	432	547	537	644	4
<b>Total</b>									<b>799</b>	<b>412</b>	<b>277</b>	<b>261</b>	<b>623</b>	<b>1,592</b>	<b>3,286</b>	<b>5,367</b>	<b>7,226</b>	<b>7,068</b>	<b>8,036</b>	<b>9,223</b>	<b>10,678</b>	
4	SM	1	33.361	B	S	CAPISTRANO/OBISPO ROADS	5/31/2013	FRI	36	21	17	20	43	133	475	724	637	631	651	713	792	4
4	SM	1	33.361	B	S	CAPISTRANO/OBISPO ROADS	5/30/2013	THU	52	19	21	14	52	153	492	724	634	603	652	615	636	4
4	SM	1	33.361	B	S	CAPISTRANO/OBISPO ROADS	5/29/2013	WED	36	23	21	22	60	161	505	770	670	553	614	639	621	4
4	SM	1	33.361	B	S	CAPISTRANO/OBISPO ROADS	5/28/2013	TUE	33	15	10	19	52	147	450	694	827	638	637	651	651	4
4	SM	1	33.361	B	S	CAPISTRANO/OBISPO ROADS	5/27/2013	MON	53	24	24	16	30	60	141	214	349	571	816	884	1,005	4
4	SM	1	33.361	B	S	CAPISTRANO/OBISPO ROADS	5/26/2013	SUN	71	45	35	20	20	52	113	249	365	669	774	990	1,144	4
4	SM	1	33.361	B	S	CAPISTRANO/OBISPO ROADS	5/25/2013	SAT	59	42	36	19	33	97	177	347	538	788	915	1,118	1,031	4
4	SM	1	33.361	B	S	CAPISTRANO/OBISPO ROADS	5/24/2013	FRI	32	20	17	21	46	148	477	701	666	653	643	713	792	4
4	SM	1	33.361	B	S	CAPISTRANO/OBISPO ROADS	5/23/2013	THU	29	11	18	16	48	146	510	751	614	586	613	617	596	4
4	SM	1	33.361	B	S	CAPISTRANO/OBISPO ROADS	5/22/2013	WED	24	8	10	19	55	167	518	752	653	583	577	568	589	4
4	SM	1	33.361	B	S	CAPISTRANO/OBISPO ROADS	5/21/2013	TUE	37	13	8	15	56	163	454	709	709	618	599	656	634	4
4	SM	1	33.361	B	S	CAPISTRANO/OBISPO ROADS	5/20/2013	MON	16	17	14	12	47	150	489	739	653	699	648	714	705	4
4	SM	1	33.361	B	S	CAPISTRANO/OBISPO ROADS	5/19/2013	SUN	102	64	21	12	20	58	124	217	436	696	857	943	986	4
4	SM	1	33.361	B	S	CAPISTRANO/OBISPO ROADS	5/18/2013	SAT	58	38	38	25	24	58	165	333	513	761	889	945	926	4
4	SM	1	33.361	B	S	CAPISTRANO/OBISPO ROADS	5/17/2013	FRI	43	15	8	19	43	140	487	716	608	621	643	735	682	4
<b>Total</b>									<b>681</b>	<b>375</b>	<b>298</b>	<b>269</b>	<b>629</b>	<b>1,833</b>	<b>5,577</b>	<b>8,640</b>	<b>8,872</b>	<b>9,670</b>	<b>10,528</b>	<b>11,501</b>	<b>11,790</b>	
4	SM	1	35.336	B	N	VALLEMAR/ETHELDORE STREET	8/14/2013	WED	27	19	10	12	44	143	326	477	458	443	376	472	479	4
4	SM	1	35.336	B	N	VALLEMAR/ETHELDORE STREET	8/13/2013	TUE	28	27	7	15	44	148	305	461	406	433	422	408	418	4
4	SM	1	35.336	B	N	VALLEMAR/ETHELDORE STREET	8/12/2013	MON	26	26	9	13	39	120	338	442	403	379	415	454	487	4
4	SM	1	35.336	B	N	VALLEMAR/ETHELDORE STREET	8/11/2013	SUN	72	40	10	10	32	37	70	125	204	305	447	577	669	4
4	SM	1	35.336	B	N	VALLEMAR/ETHELDORE STREET	8/10/2013	SAT	59	27	18	13	29	45	124	188	290	404	470	565	581	4
4	SM	1	35.336	B	N	VALLEMAR/ETHELDORE STREET	8/9/2013	FRI	28	17	19	13	49	125	288	410	410	442	465	490	508	4
4	SM	1	35.336	B	N	VALLEMAR/ETHELDORE STREET	8/8/2013	THU	39	9	15	17	37	149	295	420	453	419	448	437	464	4
<b>Total</b>									<b>279</b>	<b>165</b>	<b>88</b>	<b>93</b>	<b>274</b>	<b>767</b>	<b>1,746</b>	<b>2,523</b>	<b>2,624</b>	<b>2,825</b>	<b>3,043</b>	<b>3,403</b>	<b>3,606</b>	
4	SM	1	35.336	B	N	VALLEMAR/ETHELDORE STREET	5/21/2013	TUE	0	1	1	0	1	3	10	16	27	231	401	420	420	4
4	SM	1	35.336	B	N	VALLEMAR/ETHELDORE STREET	5/20/2013	MON	1	1	1	0	1	3	5	10	26	284	400	453	482	4
4	SM	1	35.336	B	N	VALLEMAR/ETHELDORE STREET	5/19/2013	SUN	96	0	3	0	1	1	3	2	11	90	344	488	557	4
4	SM	1	35.336	B	N	VALLEMAR/ETHELDORE STREET	5/18/2013	SAT	44	42	17	13	8	35	59	131	249	359	491	510	544	4
4	SM	1	35.336	B	N	VALLEMAR/ETHELDORE STREET	5/17/2013	FRI	52	11	3	1	2	9	39	83	320	536	428	383	304	4
4	SM	1	35.336	B	N	VALLEMAR/ETHELDORE STREET	5/16/2013	THU	36	8	9	1	5	14	66	150	344	526	482	385	373	4
4	SM	1	35.336	B	N	VALLEMAR/ETHELDORE STREET	5/15/2013	WED	0	20	18	6	21	32	160	391	537	491	380	366	333	4
4	SM	1	35.336	B	N	VALLEMAR/ETHELDORE STREET	2/25/2013	MON	6	7	16	42	138	817	1,151	589	358	338	351	411	427	4
4	SM	1	35.336	B	N	VALLEMAR/ETHELDORE STREET	2/24/2013	SUN	49	38	16	17	35	49	103	174	279	364	506	580	665	4
4	SM	1	35.336	B	N	VALLEMAR/ETHELDORE STREET	2/23/2013	SAT	43	21	14	17	21	53	145	177	318	392	500	508	578	4
4	SM	1	35.336	B	N	VALLEMAR/ETHELDORE STREET	2/22/2013	FRI	16	13	8	13	29	150	321	492	487	371	421	383	468	4
4	SM	1	35.336	B	N	VALLEMAR/ETHELDORE STREET	2/21/2013	THU	21	13	9	12	30	153	366	548						

**Traffic Volumes Counts**

Dist	Cnty	Rte	Prefix	PM	Leg	Dir	Description	Date	Day	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24hr total											
4	SM	1	33.361	A	S		CAPISTRANO/OBISPO ROADS	5/21/2013	TUE	531	A	571	A	592	A	651	A	1	A	643	A	513	A	363	A	244	A	195	A	122	A	8,333
4	SM	1	33.361	A	S		CAPISTRANO/OBISPO ROADS	5/20/2013	MON	623	A	611	A	626	A	670	A	577	A	477	A	365	A	236	A	163	A	136	A	64	A	8,618
4	SM	1	33.361	A	S		CAPISTRANO/OBISPO ROADS	5/19/2013	SUN	862	A	814	A	724	A	567	A	519	A	481	A	371	A	301	A	178	A	127	A	69	A	9,084
4	SM	1	33.361	A	S		CAPISTRANO/OBISPO ROADS	5/18/2013	SAT	814	A	787	A	789	A	724	A	634	A	582	A	444	A	352	A	254	A	170	A	112	A	9,821
4	SM	1	33.361	A	S		CAPISTRANO/OBISPO ROADS	5/17/2013	FRI	610	A	639	A	693	A	680	A	661	A	585	A	413	A	313	A	219	A	227	A	108	A	9,183
<b>Total</b>										<b>10,021</b>	<b>9,759</b>	<b>9,916</b>	<b>9,757</b>	<b>8,760</b>	<b>8,589</b>	<b>6,969</b>	<b>5,251</b>	<b>3,785</b>	<b>2,806</b>	<b>2,028</b>	<b>131,221</b>											
4	SM	1	33.361	B	N		CAPISTRANO/OBISPO ROADS	5/31/2013	FRI	708	C	789	C	1,287	C	834	C	834	C	590	C	454	C	342	C	227	C	150	C	10,683		
4	SM	1	33.361	B	N		CAPISTRANO/OBISPO ROADS	5/30/2013	THU	610	A	603	A	715	A	746	A	763	A	785	A	633	A	451	A	363	A	227	A	94	A	9,538
4	SM	1	33.361	B	N		CAPISTRANO/OBISPO ROADS	5/29/2013	WED	580	A	605	A	753	A	806	A	785	A	710	A	591	A	452	A	309	A	169	A	74	A	9,627
4	SM	1	33.361	B	N		CAPISTRANO/OBISPO ROADS	5/28/2013	TUE	580	A	601	A	770	A	783	A	804	A	690	A	532	A	404	A	304	A	167	A	69	A	10,138
4	SM	1	33.361	B	N		CAPISTRANO/OBISPO ROADS	5/27/2013	MON	1,326	A	1,162	A	1,033	A	739	A	732	A	739	A	638	A	344	A	253	A	138	A	74	A	11,271
4	SM	1	33.361	B	N		CAPISTRANO/OBISPO ROADS	5/26/2013	SUN	844	A		0-1195	A		377	A	735	A	595	A	511	A	327	A	224	A	131	A	8,620		
4	SM	1	33.361	B	N		CAPISTRANO/OBISPO ROADS	5/25/2013	SAT	876	A	799	A	830	A	886	A	819	A	731	A	581	A	423	A	348	A	267	A	151	A	10,442
4	SM	1	33.361	B	N		CAPISTRANO/OBISPO ROADS	5/24/2013	FRI	708	A	789	A	1,287	A	834	A	761	A	834	A	590	A	454	A	342	A	227	A	150	A	10,613
4	SM	1	33.361	B	N		CAPISTRANO/OBISPO ROADS	5/23/2013	THU	608	A	641	A	808	A	760	A	800	A	694	A	598	A	473	A	323	A	202	A	103	A	9,335
4	SM	1	33.361	B	N		CAPISTRANO/OBISPO ROADS	5/22/2013	WED	525	A	629	A	754	A	736	A	793	A	744	A	555	A	452	A	324	A	154	A	84	A	9,051
4	SM	1	33.361	B	N		CAPISTRANO/OBISPO ROADS	5/21/2013	TUE	596	A	597	A	760	A	818	A	816	A	672	A	560	A	432	A	287	A	172	A	52	A	9,041
4	SM	1	33.361	B	N		CAPISTRANO/OBISPO ROADS	5/20/2013	MON	644	A	743	A	752	A	845	A	823	A	732	A	571	A	398	A	265	A	147	A	82	A	9,473
4	SM	1	33.361	B	N		CAPISTRANO/OBISPO ROADS	5/19/2013	SUN	895	A	759	A	793	A	826	A	866	A	815	A	579	A	464	A	272	A	142	A	66	A	9,974
4	SM	1	33.361	B	N		CAPISTRANO/OBISPO ROADS	5/18/2013	SAT	1,001	A	923	A	604	A	0-1019	A														7,516	
4	SM	1	33.361	B	N		CAPISTRANO/OBISPO ROADS	5/17/2013	FRI	631	A	597	A	728	A	866	A	852	A	777	A	624	A	437	A	372	A	212	A	112	A	9,754
<b>Total</b>										<b>11,132</b>	<b>10,237</b>	<b>11,874</b>	<b>10,479</b>	<b>10,752</b>	<b>10,492</b>	<b>8,237</b>	<b>6,149</b>	<b>4,431</b>	<b>2,675</b>	<b>1,556</b>	<b>145,076</b>											
4	SM	1	33.361	B	S		CAPISTRANO/OBISPO ROADS	5/31/2013	FRI	755	C	847	C	340	C	824	C	693	C	547	C	475	C	397	C	294	C	202	C	145	C	10,412
4	SM	1	33.361	B	S		CAPISTRANO/OBISPO ROADS	5/30/2013	THU	641	A	728	A	699	A	730	A	722	A	586	A	446	A	336	A	235	A	146	A	66	A	10,002
4	SM	1	33.361	B	S		CAPISTRANO/OBISPO ROADS	5/29/2013	WED	629	A	696	A	721	A	698	A	627	A	600	A	432	A	319	A	244	A	156	A	73	A	9,890
4	SM	1	33.361	B	S		CAPISTRANO/OBISPO ROADS	5/28/2013	TUE	659	A	703	A	707	A	656	A	720	A	537	A	347	A	293	A	201	A	130	A	59	A	9,836
4	SM	1	33.361	B	S		CAPISTRANO/OBISPO ROADS	5/27/2013	MON	1,105	A	932	A	817	A	644	A	546	A	327	A	150	A	236	A	181	A	102	A	61	A	9,288
4	SM	1	33.361	B	S		CAPISTRANO/OBISPO ROADS	5/26/2013	SUN	1,173	A	1,205	A	1,195	A	856	A	716	A	615	A	499	A	383	A	316	A	205	A	93	A	11,803
4	SM	1	33.361	B	S		CAPISTRANO/OBISPO ROADS	5/25/2013	SAT	982	A	858	A	1,032	A	967	A	728	A	543	A	477	A	370	A	274	A	238	A	112	A	11,781
4	SM	1	33.361	B	S		CAPISTRANO/OBISPO ROADS	5/24/2013	FRI	755	A	847	A	340	A	824	A	693	A	547	A	475	A	397	A	294	A	202	A	145	A	10,448
4	SM	1	33.361	B	S		CAPISTRANO/OBISPO ROADS	5/23/2013	THU	695	A	726	A	711	A	665	A	674	A	591	A	429	A	354	A	233	A	155	A	66	A	9,854
4	SM	1	33.361	B	S		CAPISTRANO/OBISPO ROADS	5/22/2013	WED	638	A	696	A	690	A	687	A	673	A	583	A	430	A	330	A	206	A	145	A	66	A	9,667
4	SM	1	33.361	B	S		CAPISTRANO/OBISPO ROADS	5/21/2013	TUE	646	A	680	A	689	A	717	A	672	A	522	A	373	A	270	A	205	A	118	A	70	A	9,633
4	SM	1	33.361	B	S		CAPISTRANO/OBISPO ROADS	5/20/2013	MON	762	A	775	A	711	A	755	A	661	A	528	A	402	A	292	A	171	A	139	A	61	A	10,160
4	SM	1	33.361	B	S		CAPISTRANO/OBISPO ROADS	5/19/2013	SUN	980	A	1,053	A	1,088	A	944	A	624	A	615	A	484	A	417	A	253	A	156	A	61	A	11,211
4	SM	1	33.361	B	S		CAPISTRANO/OBISPO ROADS	5/18/2013	SAT	999	A	1,005	A	1,035	A	1,019	A	768	A	686	A	564	A	477	A	354	A	228	A	158	A	12,066
4	SM	1	33.361	B	S		CAPISTRANO/OBISPO ROADS	5/17/2013	FRI	752	A	789	A	763	A	769	A	705	A	634	A	491	A	387	A	288	A	244	A	111	A	10,693
<b>Total</b>										<b>12,171</b>	<b>12,540</b>	<b>11,538</b>	<b>11,755</b>	<b>10,222</b>	<b>8,461</b>	<b>6,474</b>	<b>5,258</b>	<b>3,749</b>	<b>2,566</b>	<b>1,347</b>	<b>156,744</b>											
4	SM	1	35.336	B	N		VALLEMAR/ETHELDORE STREET	8/14/2013	WED	525	A	526	A	544	A	517	A	534	A	482	A	353	A	307	A	219	A	134	A	66	A	7,493
4	SM	1	35.336	B	N		VALLEMAR/ETHELDORE STREET	8/13/2013	TUE	473	A	494	A	592	A	559	A	545	A	481	A	359	A	363	A	222	A	134	A	83	A	7,427
4	SM	1	35.336	B	N		VALLEMAR/ETHELDORE STREET	8/12/2013	MON	462	A	492	A	558	A	535	A	555	A	493	A	391	A	266	A	181	A	107	A	60	A	7,251
4	SM	1	35.336	B	N		VALLEMAR/ETHELDORE STREET	8/11/2013	SUN	628	A	726	A	774	A	826	A	731	A	562	A	443	A	356	A	265	A	123	A	72	A	8,104
4	SM	1	35.336	B	N		VALLEMAR/ETHELDORE STREET	8/10/2013	SAT	598	A	632	A	670	A	715	A	736	A	631	A	491	A	404	A	305	A	206	A	121	A	8,322
4	SM	1	35.336	B	N		VALLEMAR/ETHELDORE STREET	8/9/2013	FRI	554	A	542	A	592	A	647	A	817	A	591	A	412	A	329	A	267	A	191	A	114	A	8,320
4	SM	1	35.336	B	N		VALLEMAR/ETHELDORE STREET	8/8/2013	THU	270	A	519	A	528	A	554	A	614	A	480	A	382	A	295	A	235	A	144	A	74	A	7,297
<b>Total</b>										<b>3,510&lt;/</b>																						

**Traffic Volumes Counts**

							24 hour Period Hourly Counts															
Dist	Cnty	Rte	Prefix	PM	Leg	Dir	Description	Date	Day	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13
4	SM	1	35.336	B	N		VALLEMAR/ETHELDORE STREET	2/19/2013	TUE	15 A	4 A	7 A	16 A	38 A	154 A	384 A	548 A	531 A	384 A	373 A	375 A	451 A
4	SM	1	35.336	B	N		VALLEMAR/ETHELDORE STREET	2/18/2013	MON	22 A	9 A	3 A	10 A	32 A	137 A	367 A	558 A	501 A	355 A	360 A	356 A	393 A
4	SM	1	35.336	B	N		VALLEMAR/ETHELDORE STREET	2/17/2013	SUN	47 A	23 A	15 A	16 A	20 A	35 A	66 A	136 A	201 A	331 A	431 A	465 A	591 A
4	SM	1	35.336	B	N		VALLEMAR/ETHELDORE STREET	2/16/2013	SAT	43 A	17 A	14 A	9 A	25 A	57 A	121 A	209 A	308 A	407 A	511 A	520 A	591 A
4	SM	1	35.336	B	N		VALLEMAR/ETHELDORE STREET	2/15/2013	FRI	23 A	9 A	6 A	14 A	34 A	144 A	349 A	507 A	473 A	378 A	388 A	410 A	464 A
4	SM	1	35.336	B	N		VALLEMAR/ETHELDORE STREET	2/14/2013	THU	4 A	1 A	4 A	14 A	34 A	148 A	358 A	565 A	432 A	393 A	376 A	343 A	381 A
4	SM	1	35.336	B	N		VALLEMAR/ETHELDORE STREET	2/13/2013	WED	18 A	13 A	5 A	18 A	30 A	156 A	388 A	535 A	500 A	377 A	365 A	371 A	417 A
<b>Total</b>										<b>547</b>	<b>261</b>	<b>171</b>	<b>235</b>	<b>539</b>	<b>2,298</b>	<b>4,849</b>	<b>6,426</b>	<b>7,032</b>	<b>7,341</b>	<b>8,195</b>	<b>8,439</b>	<b>9,105</b>
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	8/15/2013	THU	39 A	22 A	18 A	14 A	29 A	76 A	225 A	323 A	390 A	438 A	546 C	648 C	579 C
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	8/14/2013	WED	44 A	22 A	18 A	9 A	28 A	68 A	213 A	299 A	413 A	479 A	498 A	597 A	561 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	8/13/2013	TUE	45 A	21 A	14 A	13 A	41 A	71 A	236 A	280 A	380 A	412 A	511 A	586 A	619 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	8/12/2013	MON	64 A	35 A	9 A	20 A	31 A	72 A	223 A	294 A	423 A	429 A	484 A	555 A	534 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	8/11/2013	SUN	65 A	44 A	32 A	14 A	20 A	55 A	98 A	143 A	248 A	431 A	603 A	742 A	863 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	8/10/2013	SAT	71 A	38 A	40 A	24 A	32 A	78 A	118 A	202 A	328 A	541 A	644 A	770 A	800 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	8/9/2013	FRI	60 A	26 A	23 A	17 A	29 A	75 A	212 A	265 A	385 A	480 A	517 A	620 A	581 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	8/8/2013	THU	44 A	22 A	17 A	12 A	25 A	90 A	233 A	279 A	414 A	497 A	546 A	648 A	579 A
<b>Total</b>										<b>432</b>	<b>230</b>	<b>171</b>	<b>123</b>	<b>235</b>	<b>585</b>	<b>1,558</b>	<b>2,085</b>	<b>2,981</b>	<b>3,707</b>	<b>4,349</b>	<b>5,166</b>	<b>5,116</b>
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/31/2013	FRI	57 A	23 A	12 A	8 A	32 A	76 A	260 A	345 A	427 A	494 A	469 A	467 C	489 C
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/30/2013	THU	51 A	20 A	21 A	11 A	28 A	81 A	286 A	351 A	445 A	464 A	478 A	472 A	440 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/29/2013	WED	47 A	18 A	16 A	17 A	44 A	96 A	299 A	380 A	497 A	420 A	431 A	450 A	471 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/28/2013	TUE	33 A	17 A	6 A	16 A	35 A	95 A	294 A	383 A	506 A	425 A	442 A	454 A	504 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/27/2013	MON	45 A	30 A	25 A	12 A	37 A	121 A	173 A	147 A	265 A	419 A	628 A	720 A	731 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/26/2013	SUN	70 A	40 A	31 A	21 A	28 A	56 A	106 A	160 A	278 A	502 A	664 A	844 A	865 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/25/2013	SAT	68 A	54 A	35 A	11 A	35 A	68 A	129 A	209 A	400 A	582 A	738 A	828 A	823 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/24/2013	FRI	54 A	38 A	18 A	13 A	36 A	80 A	256 A	357 A	501 A	479 A	491 A	598 A	616 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/23/2013	THU	40 A	15 A	21 A	8 A	30 A	78 A	283 A	383 A	436 A	412 A	458 A	521 A	513 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/22/2013	WED	44 A	13 A	8 A	14 A	32 A	76 A	297 A	401 A	453 A	433 A	419 A	456 A	489 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/21/2013	TUE	38 A	13 A	8 A	17 A	26 A	84 A	262 A	355 A	460 A	428 A	464 A	535 A	455 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/20/2013	MON	27 A	19 A	14 A	13 A	29 A	81 A	285 A	383 A	475 A	496 A	501 A	584 A	585 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/19/2013	SUN	81 A	46 A	20 A	16 A	15 A	41 A	92 A	141 A	307 A	533 A	770 A	910 A	1,002 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/18/2013	SAT	85 A	35 A	42 A	23 A	22 A	39 A	103 A	208 A	351 A	545 A	647 A	876 A	782 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/17/2013	FRI	37 A	19 A	7 A	11 A	32 A	74 A	271 A	350 A	461 A	452 A	510 A	581 A	518 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/16/2013	THU	43 A	20 A	14 A	12 A	39 A	79 A	254 A	349 A	507 A	416 A	427 A	420 A	415 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/10/2013	FRI	45 A	29 A	14 A	7 A	50 A	87 A	276 A	355 A	484 A	429 A	448 A	556 A	488 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/9/2013	THU	43 A	17 A	20 A	8 A	41 A	89 A	294 A	325 A	428 A	395 A	455 A	473 A	471 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/8/2013	WED	39 A	13 A	13 A	21 A	30 A	110 A	281 A	363 A	478 A	406 A	473 A	467 A	489 A
<b>Total</b>										<b>1,379</b>	<b>709</b>	<b>516</b>	<b>382</b>	<b>856</b>	<b>2,096</b>	<b>6,059</b>	<b>8,030</b>	<b>11,140</b>	<b>12,437</b>	<b>14,262</b>	<b>16,378</b>	<b>16,262</b>
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	2/14/2013	THU	40 A	14 A	11 A	7 A	24 A	67 A	270 A	342 A	445 A	369 A	398 A	500 A	405 C
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	2/13/2013	WED	27 A	8 A	8 A	14 A	24 A	61 A	275 A	330 A	420 A	340 A	379 A	380 A	437 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	2/12/2013	TUE	21 A	12 A	12 A	13 A	26 A	73 A	240 A	325 A	443 A	358 A	433 A	446 A	446 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	2/11/2013	MON	19 A	13 A	9 A	8 A	25 A	79 A	255 A	349 A	476 A	402 A	384 A	429 A	460 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	2/10/2013	SUN	74 A	31 A	30 A	17 A	14 A	24 A	65 A	108 A	313 A	397 A	606 A	716 A	801 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	2/9/2013	SAT	62 A	39 A	22 A	17 A	10 A	36 A	79 A	180 A	309 A	494 A	589 A	743 A	749 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	2/8/2013	FRI	40 A	14 A	12 A	10 A	18 A	64 A	223 A	334 A	406 A	347 A	389 A	391 A	435 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	2/7/2013	THU	30 A	18 A	11 A	9 A	21 A	69 A	257 A	350 A	403 A	316 A	345 A	383 A	388 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	2/6/2013	WED	16 A	11 A	9 A	7 A	18 A	78 A	261 A	391 A	424 A	360 A	388 A	422 A	428 A
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	2/5/2013	TUE	13 A	13 A	8 A	7 A	19 A	63 A	254 A	351 A	434 A	301 A	359 A	397 A	405 A
<b>Total</b>										<b>342</b>	<b>173</b>	<b>132</b>	<b>109</b>	<b>199</b>	<b>614</b>	<b>2,179</b>	<b>3,060</b>	<b>4,073</b>	<b>3,684</b>	<b>4,194</b>	<b>4,794</b>	<b>4,954</b>

**Traffic Volumes Counts**

Dist	Cnty	Rte	Prefix	PM	Leg	Dir	Description	Date	Day	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24hr total
4	SM	1	35.336	B	N		VALLEMAR/ETHELDORE STREET	2/19/2013	TUE	413	414	471	501	489	399	238	194	141	75	43	6,658
4	SM	1	35.336	B	N		VALLEMAR/ETHELDORE STREET	2/18/2013	MON	363	438	486	511	475	408	215	147	144	70	37	6,397
4	SM	1	35.336	B	N		VALLEMAR/ETHELDORE STREET	2/17/2013	SUN	661	768	778	750	514	420	240	196	111	69	38	6,922
4	SM	1	35.336	B	N		VALLEMAR/ETHELDORE STREET	2/16/2013	SAT	628	721	771	781	642	502	281	231	178	167	94	7,828
4	SM	1	35.336	B	N		VALLEMAR/ETHELDORE STREET	2/15/2013	FRI	500	566	395	0	480	542	340	226	198	137	90	6,673
4	SM	1	35.336	B	N		VALLEMAR/ETHELDORE STREET	2/14/2013	THU	406	455	495	484	533	449	298	218	139	101	45	6,676
4	SM	1	35.336	B	N		VALLEMAR/ETHELDORE STREET	2/13/2013	WED	392	440	458	169	101	414	238	203	139	76	37	5,860
<b>Total</b>										<b>9,746</b>	<b>10,875</b>	<b>11,808</b>	<b>11,293</b>	<b>10,255</b>	<b>8,852</b>	<b>6,197</b>	<b>4,117</b>	<b>2,945</b>	<b>2,153</b>	<b>1,217</b>	<b>134,896</b>
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	8/15/2013	THU	549	524	612	683	620	545	363	297	226	187	99	8,052
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	8/14/2013	WED	546	587	623	681	653	549	384	276	202	148	82	7,980
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	8/13/2013	TUE	603	610	626	662	656	528	415	297	194	136	80	8,036
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	8/12/2013	MON	534	602	620	648	668	557	398	240	159	135	74	7,808
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	8/11/2013	SUN	735	739	687	577	534	423	331	242	178	150	91	8,045
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	8/10/2013	SAT	788	797	708	628	582	466	388	259	220	195	124	8,841
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	8/9/2013	FRI	582	645	682	726	834	920	598	285	230	190	156	9,138
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	8/8/2013	THU	549	524	612	683	620	545	363	297	226	187	99	8,111
<b>Total</b>										<b>4,886</b>	<b>5,028</b>	<b>5,170</b>	<b>5,288</b>	<b>5,167</b>	<b>4,533</b>	<b>3,240</b>	<b>2,193</b>	<b>1,635</b>	<b>1,328</b>	<b>805</b>	<b>66,011</b>
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/31/2013	FRI	432	521	575	623	620	515	338	242	190	122	70	7,407
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/30/2013	THU	473	539	624	645	658	509	418	305	203	148	79	7,749
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/29/2013	WED	483	535	605	577	596	543	385	263	186	178	102	7,639
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/28/2013	TUE	553	529	642	563	621	521	364	225	199	142	59	7,628
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/27/2013	MON	667	603	513	474	422	335	242	171	137	94	64	7,075
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/26/2013	SUN	825	817	752	630	518	436	344	258	187	158	87	8,677
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/25/2013	SAT	841	754	788	627	554	433	329	266	164	181	108	9,025
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/24/2013	FRI	633	651	675	710	618	519	393	287	220	207	111	8,561
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/23/2013	THU	512	572	627	620	620	567	448	289	206	158	91	7,908
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/22/2013	WED	505	550	605	597	607	578	372	285	179	162	78	7,653
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/21/2013	TUE	492	528	587	628	610	513	350	238	216	133	81	7,521
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/20/2013	MON	548	556	614	643	622	508	373	232	172	148	82	7,990
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/19/2013	SUN	934	855	761	633	512	468	347	283	177	137	64	9,145
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/18/2013	SAT	837	752	753	662	589	491	393	298	224	181	107	9,045
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/17/2013	FRI	551	595	706	646	670	584	407	305	234	224	92	8,337
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/16/2013	THU	426	496	547	557	593	515	372	267	185	201	100	7,254
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/10/2013	FRI	583	602	667	611	655	538	361	257	196	191	156	8,085
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/9/2013	THU	494	522	625	602	579	537	350	229	178	197	109	7,481
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	5/8/2013	WED	432	521	575	623	620	515	338	242	190	122	70	7,431
<b>Total</b>										<b>16,107</b>	<b>16,526</b>	<b>17,411</b>	<b>16,959</b>	<b>16,451</b>	<b>14,158</b>	<b>10,164</b>	<b>7,135</b>	<b>5,278</b>	<b>4,412</b>	<b>2,515</b>	<b>217,622</b>
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	2/14/2013	THU	385	399	487	528	550	497	297	193	164	118	36	6,546
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	2/13/2013	WED	415	493	518	562	581	510	306	254	170	129	58	6,699
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	2/12/2013	TUE	464	424	523	616	560	490	302	217	168	111	53	6,687
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	2/11/2013	MON	493	527	513	578	557	444	274	165	133	114	41	6,747
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	2/10/2013	SUN	872	735	725	584	481	308	207	159	139	98	35	7,539
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	2/9/2013	SAT	775	817	715	613	507	355	236	199	179	144	109	7,978
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	2/8/2013	FRI	475	539	597	610	547	489	322	226	184	231	101	7,004
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	2/7/2013	THU	407	437	528	548	524	503	302	211	152	132	58	6,402
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	2/6/2013	WED	427	513	543	571	535	464	298	193	188	136	62	6,743
4	SM	1	35.336	B	S		VALLEMAR/ETHELDORE STREET	2/5/2013	TUE	385	399	487	528	550	497	297	193	164	118	36	6,278
<b>Total</b>										<b>5,098</b>	<b>5,283</b>	<b>5,636</b>	<b>5,738</b>	<b>5,392</b>	<b>4,557</b>	<b>2,841</b>	<b>2,010</b>	<b>1,641</b>	<b>1,331</b>	<b>589</b>	<b>68,623</b>

## **Appendix C**

### **Volume Summary Table**

Big Wave North Parcel Alternative TIA

Intersection Number:	1												
Traffic Node Number:	1												
Intersection Name:	Capistrano Rd & Prospect Wy											Date of Analysis: 05/02/14	
Peak Hour:	AM												
Count Date:	01/00/00												
Scenario:	189,000 sf office building & 70,500 Wellness Center												
Future Growth % Per Year for Background along SR 1 and SR 92: 2%													
Movements													
Scenario:	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	31	9	0	0	0	0	0	6	143	152	0	12	353
<b>Approved Project Trips</b>													
ATI	0	0	0	0	0	0	0	0	2	2	0	0	4
Growth	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	0	0	0	0	2	2	0	0	4
Background Conditions	31	9	0	0	0	0	0	6	145	154	0	12	357
check	31	9	0	0	0	0	0	6	145	154	0	12	
<b>Project Trips</b>													
Project Trips	0	0	0	0	0	0	0	0	86	20	0	0	106
Project Trips-2	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Trips-3	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Project Trips	0	0	0	0	0	0	0	0	86	20	0	0	106
Existing + Project	31	9	0	0	0	0	0	6	229	172	0	12	459
Existing + Project Check	31	9	0	0	0	0	0	6	229	172	0	12	
Background + Project	31	9	0	0	0	0	0	6	231	174	0	12	463
Bkgrd+Proj check	31	9	0	0	0	0	0	6	231	174	0	12	
<b>Link Volume Growth</b>	0			0			47			0			
Growth	0	0	0	0	0	0	0	2	45	0	0	0	47
Cumulative Conditions	31	9	0	0	0	0	0	8	188	152	0	12	400
Cumulative Check	31	9	0	0	0	0	0	8	188	152	0	12	400

Intersection Number:	2												
Traffic Node Number:	2												
Intersection Name:	Cornell Ave & Prospect Wy											Date of Analysis: 05/02/14	
Peak Hour:	AM												
Count Date:	01/00/00												
Scenario:	189,000 sf office building & 70,500 Wellness Center												
Future Growth % Per Year for Background along SR 1 and SR 92: 2%													
Movements													
Scenario:	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	0	1	144	124	0	47	18	0	0	0	0	0	334
<b>Approved Project Trips</b>													
ATI	0	0	1	0	0	2	1	0	0	0	0	0	4
Growth	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	1	0	0	2	1	0	0	0	0	0	4
Background Conditions	0	1	145	124	0	49	19	0	0	0	0	0	338
check	0	1	145	124	0	49	19	0	0	0	0	0	
<b>Project Trips</b>													
Project Trips	0	0	20	86	0	0	0	0	0	0	0	0	106
Project Trips-2	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Trips-3	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Project Trips	0	0	20	86	0	0	0	0	0	0	0	0	106
Existing + Project	0	1	164	210	0	47	18	0	0	0	0	0	440
Existing + Project Check	0	1	164	210	0	47	18	0	0	0	0	0	
Background + Project	0	1	165	210	0	49	19	0	0	0	0	0	444
Bkgrd+Proj check	0	1	165	210	0	49	19	0	0	0	0	0	
<b>Link Volume Growth</b>	0			47			0			0			
Growth	0	0	0	34	0	13	0	0	0	0	0	0	47
Cumulative Conditions	0	1	144	158	0	60	18	0	0	0	0	0	381
Cumulative Check	0	1	144	158	0	60	18	0	0	0	0	0	381

Big Wave North Parcel Alternative TIA

Intersection Number:	3													
Traffic Node Number:	3													
Intersection Name:	Airport St						& Stanford/Cornell Ave						Date of Analysis:	05/02/14
Peak Hour:	AM													
Count Date:	01/00/00													
Scenario:	189,000 sf office building & 70,500 Wellness Center													
Future Growth % Per Year for Background along SR 1 and SR 92: 2%														
Movements														
Scenario:	North Approach			East Approach			South Approach			West Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	6	68	85	37	5	4	1	11	2	0	5	8	232	
<b>Approved Project Trips</b>														
ATI	0	1	1	0	0	0	0	1	0	0	0	0	3	
Growth	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Approved Trips	0	1	1	0	0	0	0	1	0	0	0	0	3	
Background Conditions	6	69	86	37	5	4	1	12	2	0	5	8	235	
check	6	69	86	37	5	4	1	12	2	0	5	8		
<b>Project Trips</b>														
Project Trips	0	12	8	33	0	0	0	55	0	0	0	0	108	
Project Trips-2	0	0	0	0	0	0	0	0	0	0	0	0	0	
Project Trips-3	0	0	0	0	0	0	0	0	0	0	0	0	0	
Net Project Trips	0	12	8	33	0	0	0	55	0	0	0	0	108	
Existing + Project	6	80	93	70	5	4	1	66	2	0	5	8	340	
Existing + Project Check	6	80	93	70	5	4	1	66	2	0	5	8		
Background + Project	6	81	94	70	5	4	1	67	2	0	5	8	343	
Bkgrd+Proj check	6	81	94	70	5	4	1	67	2	0	5	8		
<b>Link Volume Growth</b>	49			47			0			0				
Growth	2	21	26	38	5	4	0	0	0	0	0	0	96	
Cumulative Conditions	8	89	111	75	10	8	1	11	2	0	5	8	328	
Cumulative Check	8	89	111	75	10	8	1	11	2	0	5	8	328	

Intersection Number:	4													
Traffic Node Number:	4													
Intersection Name:	Airport St						& La Granada Ave						Date of Analysis:	05/02/14
Peak Hour:	AM													
Count Date:	01/00/00													
Scenario:	189,000 sf office building & 70,500 Wellness Center													
Future Growth % Per Year for Background along SR 1 and SR 92: 2%														
Movements														
Scenario:	North Approach			East Approach			South Approach			West Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	11	16	0	0	0	0	0	22	45	124	0	37	255	
<b>Approved Project Trips</b>														
ATI	0	1	0	0	0	0	0	1	0	1	0	0	3	
Growth	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Approved Trips	0	1	0	0	0	0	0	1	0	1	0	0	3	
Background Conditions	11	17	0	0	0	0	0	23	45	125	0	37	258	
check	11	17	0	0	0	0	0	23	45	125	0	37		
<b>Project Trips</b>														
Project Trips	0	73	0	0	0	0	0	16	0	2	0	0	91	
Project Trips-2	0	0	0	0	0	0	0	0	0	0	0	0	0	
Project Trips-3	0	0	0	0	0	0	0	0	0	0	0	0	0	
Net Project Trips	0	73	0	0	0	0	0	16	0	2	0	0	91	
Existing + Project	11	89	0	0	0	0	0	38	45	126	0	37	346	
Existing + Project Check	11	89	0	0	0	0	0	38	45	126	0	37		
Background + Project	11	90	0	0	0	0	0	39	45	127	0	37	349	
Bkgrd+Proj check	11	90	0	0	0	0	0	39	45	127	0	37		
<b>Link Volume Growth</b>	41			0			49			0				
Growth	17	24	0	0	0	0	0	16	33	0	0	0	90	
Cumulative Conditions	28	40	0	0	0	0	0	38	78	124	0	37	345	
Cumulative Check	28	40	0	0	0	0	0	38	78	124	0	37	345	

Big Wave North Parcel Alternative TIA

Intersection Number:	5													
Traffic Node Number:	5													
Intersection Name:	Airport St						& Los Banos Ave						Date of Analysis:	05/02/14
Peak Hour:	AM													
Count Date:	01/00/00													
Scenario:	189,000 sf office building & 70,500 Wellness Center													
Future Growth % Per Year for Background along SR 1 and SR 92: 2%														
Movements														
Scenario:	North Approach			East Approach			South Approach			West Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	10	30	0	0	0	0	0	48	4	4	0	22	118	
<b>Approved Project Trips</b>														
ATI	0	1	0	0	0	0	0	1	0	0	0	0	2	
Growth	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Approved Trips	0	1	0	0	0	0	0	1	0	0	0	0	2	
Background Conditions	10	31	0	0	0	0	0	49	4	4	0	22	120	
check	10	31	0	0	0	0	0	49	4	4	0	22		
<b>Project Trips</b>														
Project Trips	0	72	0	0	0	0	0	16	0	1	0	0	89	
Project Trips-2	0	0	0	0	0	0	0	0	0	0	0	0	0	
Project Trips-3	0	0	0	0	0	0	0	0	0	0	0	0	0	
Net Project Trips	0	72	0	0	0	0	0	16	0	1	0	0	89	
Existing + Project	10	102	0	0	0	0	0	64	4	5	0	22	207	
Existing + Project Check	10	102	0	0	0	0	0	64	4	5	0	22		
Background + Project	10	103	0	0	0	0	0	65	4	5	0	22	209	
Bkgrd+Proj check	10	103	0	0	0	0	0	65	4	5	0	22		
<b>Link Volume Growth</b>	41			0			49			0				
Growth	10	31	0	0	0	0	0	45	4	0	0	0	90	
Cumulative Conditions	20	61	0	0	0	0	0	93	8	4	0	22	208	
Cumulative Check	20	61	0	0	0	0	0	93	8	4	0	22	208	

Intersection Number:	6													
Traffic Node Number:	6													
Intersection Name:	Hwy 1						& Cypress Ave						Date of Analysis:	05/02/14
Peak Hour:	AM													
Count Date:	01/00/00													
Scenario:	189,000 sf office building & 70,500 Wellness Center													
Future Growth % Per Year for Background along SR 1 and SR 92: 2%														
Movements														
Scenario:	North Approach			East Approach			South Approach			West Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	36	498	4	7	1	15	6	489	15	19	1	64	1155	
<b>Approved Project Trips</b>														
ATI	0	0	1	0	0	0	0	0	0	0	1	0	2	
Growth	1	20	0	0	0	0	0	20	1	0	0	0	42	
Total Approved Trips	1	20	1	0	0	0	0	20	1	0	1	0	44	
Background Conditions	37	518	5	7	1	15	6	509	16	19	2	64	1199	
check	37	518	5	7	1	15	6	509	16	19	2	64		
<b>Project Trips</b>														
Project Trips	64	0	0	0	8	0	0	0	0	0	3	13	88	
Project Trips-2	0	0	0	0	0	0	0	0	0	0	0	0	0	
Project Trips-3	0	0	0	0	0	0	0	0	0	0	0	0	0	
Net Project Trips	64	0	0	0	8	0	0	0	0	0	3	13	88	
Existing + Project	100	498	4	7	9	15	6	489	15	19	4	77	1243	
Existing + Project Check	100	498	4	7	9	15	6	489	15	19	4	77		
Background + Project	101	518	5	7	9	15	6	509	16	19	5	77	1287	
Bkgrd+Proj check	101	518	5	7	9	15	6	509	16	19	5	77		
<b>Link Volume Growth</b>	468			0			193			49				
Growth	31	433	3	0	0	0	2	185	6	11	1	37	710	
Cumulative Conditions	67	931	7	7	1	15	8	674	21	30	2	101	1865	
Cumulative Check	67	931	7	7	1	15	8	674	21	30	2	101	1864	



Big Wave North Parcel Alternative TIA

Intersection Number: <b>7</b> Trafix Node Number: 7 Intersection Name: Hwy 1 & Capistrano Rd (N) Peak Hour: AM Count Date: 01/00/00 Scenario: 189,000 sf office building & 70,500 Wellness Center Date of Analysis: 05/02/14													
Future Growth % Per Year for Background along SR 1 and SR 92: 2%													
Movements													
Scenario:	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	14	545	0	0	0	0	0	506	2	3	0	7	1077
<b>Approved Project Trips</b>													
	ATI	0	0	0	0	0	0	0	0	0	0	0	0
	Growth	1	22	0	0	0	0	20	0	0	0	0	43
	Total Approved Trips	1	22	0	0	0	0	20	0	0	0	0	43
Background Conditions	15	567	0	0	0	0	0	526	2	3	0	7	1120
	check	15	567	0	0	0	0	526	2	3	0	7	
<b>Project Trips</b>													
	Project Trips	0	0	0	0	0	0	0	0	0	0	0	0
	Project Trips-2	0	0	0	0	0	0	0	0	0	0	0	0
	Project Trips-3	0	0	0	0	0	0	0	0	0	0	0	0
	Net Project Trips	0	0	0	0	0	0	0	0	0	0	0	0
Existing + Project	14	545	0	0	0	0	0	506	2	3	0	7	1077
	Existing + Project Check	14	545	0	0	0	0	506	2	3	0	7	
Background + Project	15	567	0	0	0	0	0	526	2	3	0	7	1120
	Bkgrd+Proj check	15	567	0	0	0	0	526	2	3	0	7	
<b>Link Volume Growth</b>		<b>427</b>		<b>0</b>				<b>144</b>		<b>0</b>			
	Growth	11	416	0	0	0	0	143	1	0	0	0	571
Cumulative Conditions	25	961	0	0	0	0	0	649	3	3	0	7	1648
	Cumulative Check	25	961	0	0	0	0	649	3	3	0	7	1648

Intersection Number: <b>8</b> Trafix Node Number: 8 Intersection Name: Hwy 1 & Capistrano Rd (S) Peak Hour: AM Count Date: 01/00/00 Scenario: 189,000 sf office building & 70,500 Wellness Center Date of Analysis: 05/02/14													
Future Growth % Per Year for Background along SR 1 and SR 92: 2%													
Movements													
Scenario:	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	12	430	50	152	83	87	37	330	129	114	63	12	1499
<b>Approved Project Trips</b>													
	ATI	0	0	0	0	1	0	0	0	1	2	0	4
	Growth	0	17	2	0	0	0	1	13	5	0	0	40
	Total Approved Trips	0	17	2	0	1	0	1	13	6	2	0	44
Background Conditions	12	447	52	152	84	87	38	343	135	116	63	12	1543
	check	12	447	52	152	84	87	38	343	135	116	63	12
<b>Project Trips</b>													
	Project Trips	0	0	0	0	16	0	0	0	70	16	4	106
	Project Trips-2	0	0	0	0	0	0	0	0	0	0	0	0
	Project Trips-3	0	0	0	0	0	0	0	0	0	0	0	0
	Net Project Trips	0	0	0	0	16	0	0	0	70	16	4	106
Existing + Project	12	430	50	152	99	87	37	330	199	130	67	12	1605
	Existing + Project Check	12	430	50	152	99	87	37	330	199	130	67	12
Background + Project	12	447	52	152	100	87	38	343	205	132	67	12	1649
	Bkgrd+Proj check	12	447	52	152	100	87	38	343	205	132	67	12
<b>Link Volume Growth</b>		<b>427</b>		<b>62</b>				<b>128</b>		<b>49</b>			
	Growth	10	373	43	29	16	17	10	85	33	30	16	3
Cumulative Conditions	22	803	93	181	99	104	47	415	162	144	79	15	2165
	Cumulative Check	22	803	93	181	99	104	47	415	162	144	79	15

Big Wave North Parcel Alternative TIA

Intersection Number:	9												
Traffic Node Number:	9												
Intersection Name:	SR 1 & Main St												
Peak Hour:	AM												
Count Date:	01/00/00												
Scenario:	189,000 sf office building & 70,500 Wellness Center												
Future Growth % Per Year for Background along SR 1 and SR 92: 2%													
Movements													
Scenario:	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	133	1004	400	232	48	95	79	485	65	63	86	69	2759
<b>Approved Project Trips</b>													
ATI	0	0	0	0	0	0	0	0	0	0	0	0	0
Growth	5	40	16	0	0	0	3	19	3	0	0	0	87
Total Approved Trips	5	40	16	0	0	0	3	19	3	0	0	0	87
Background Conditions	138	1044	416	232	48	95	82	504	68	63	86	69	2846
check	138	1044	416	232	48	95	82	504	68	63	86	69	
<b>Project Trips</b>													
Project Trips	0	8	3	16	0	0	0	32	0	0	0	0	59
Project Trips-2	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Trips-3	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Project Trips	0	8	3	16	0	0	0	32	0	0	0	0	59
Existing + Project	133	1012	403	248	48	95	79	517	65	63	86	69	2818
Existing + Project Check	133	1012	403	248	48	95	79	517	65	63	86	69	
Background + Project	138	1052	419	248	48	95	82	536	68	63	86	69	2905
Bkgrd+Proj check	138	1052	419	248	48	95	82	536	68	63	86	69	
<b>Link Volume Growth</b>	363			20			62			0			
Growth	31	237	94	12	3	5	8	48	6	0	0	0	445
Cumulative Conditions	164	1241	494	244	51	100	87	533	71	63	86	69	3204
Cumulative Check	164	1241	494	244	51	100	87	533	71	63	86	69	3203

Intersection Number:	10												
Traffic Node Number:	10												
Intersection Name:	SR 1 & SR 92												
Peak Hour:	AM												
Count Date:	01/00/00												
Scenario:	189,000 sf office building & 70,500 Wellness Center												
Future Growth % Per Year for Background along SR 1 and SR 92: 2%													
Movements													
Scenario:	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	6	662	390	78	35	244	445	567	78	56	38	13	2612
<b>Approved Project Trips</b>													
ATI	0	0	0	0	0	0	0	0	0	0	0	0	0
Growth	0	26	16	3	1	10	18	23	3	2	2	1	104
Total Approved Trips	0	26	16	3	1	10	18	23	3	2	2	1	104
Background Conditions	6	688	406	81	36	254	463	590	81	58	40	14	2716
check	6	688	406	81	36	254	463	590	81	58	40	14	
<b>Project Trips</b>													
Project Trips	0	3	5	16	0	0	0	16	0	0	0	0	40
Project Trips-2	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Trips-3	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Project Trips	0	3	5	16	0	0	0	16	0	0	0	0	40
Existing + Project	6	665	395	94	35	244	445	583	78	56	38	13	2652
Existing + Project Check	6	665	395	94	35	244	445	583	78	56	38	13	
Background + Project	6	691	411	97	36	254	463	606	81	58	40	14	2756
Bkgrd+Proj check	6	691	411	97	36	254	463	606	81	58	40	14	
<b>Link Volume Growth</b>	168			144			62			0			
Growth	1	105	62	31	14	98	25	32	4	0	0	0	374
Cumulative Conditions	7	767	452	109	49	342	470	599	82	56	38	13	2986
Cumulative Check	7	767	452	109	49	342	470	599	82	56	38	13	2984

Big Wave North Parcel Alternative TIA

Intersection Number:	11												
Traffic Node Number:	11												
Intersection Name:	SR 92 & Main St												
Peak Hour:	AM										Date of Analysis: 05/02/14		
Count Date:	01/00/00												
Scenario:	189,000 sf office building & 70,500 Wellness Center												
Future Growth % Per Year for Background along SR 1 and SR 92: 2%													
	Movements												
Scenario:	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	29	81	239	141	250	104	164	174	62	80	730	76	2130
<b>Approved Project Trips</b>													
ATI	0	0	0	0	0	0	0	0	0	0	0	0	0
Growth	0	0	0	6	10	4	0	0	0	3	29	3	55
Total Approved Trips	0	0	0	6	10	4	0	0	0	3	29	3	55
Background Conditions	29	81	239	147	260	108	164	174	62	83	759	79	2185
check	29	81	239	147	260	108	164	174	62	83	759	79	
<b>Project Trips</b>													
Project Trips	0	0	3	16	16	0	0	0	0	0	5	0	40
Project Trips-2	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Trips-3	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Project Trips	0	0	3	16	16	0	0	0	0	0	5	0	40
Existing + Project	29	81	242	157	266	104	164	174	62	80	735	76	2170
Existing + Project Check	29	81	242	157	266	104	164	174	62	80	735	76	
Background + Project	29	81	242	163	276	108	164	174	62	83	764	79	2225
Bkgrd+Proj check	29	81	242	163	276	108	164	174	62	83	764	79	
<b>Link Volume Growth</b>	<b>194</b>			<b>290</b>			<b>157</b>			<b>-213</b>			
Growth	16	45	133	83	146	61	64	68	24	-19	-175	-18	428
Cumulative Conditions	45	126	372	224	396	165	228	242	86	61	555	58	2558
Cumulative Check	45	126	372	224	396	165	228	242	86	61	555	58	2558

Big Wave North Parcel Alternative TIA

Intersection Number:	1												
Traffic Node Number:	1												
Intersection Name:	Capistrano Rd & Prospect Wy												
Peak Hour:	PM											Date of Analysis:	05/02/14
Count Date:	01/00/00												
Scenario:	189,000 sf office building & 70,500 Wellness Center												
Future Growth % Per Year for Background along SR 1 and SR 92: 2%													
Movements													
Scenario:	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	40	32	0	0	0	0	0	36	168	185	0	25	486
<b>Approved Project Trips</b>													
CSJ ATI	0	0	0	0	0	0	0	0	1	4	0	0	5
Growth	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	0	0	0	0	1	4	0	0	5
Background Conditions	40	32	0	0	0	0	0	36	169	189	0	25	491
check	40	32	0	0	0	0	0	36	169	189	0	25	
<b>Project Trips</b>													
Project Trips	0	0	0	0	0	0	0	0	23	80	0	0	103
Project Trips-2	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Trips-3	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Project Trips	0	0	0	0	0	0	0	0	23	80	0	0	103
Existing + Project	40	32	0	0	0	0	0	36	191	265	0	25	589
Existing + Project Check	40	32	0	0	0	0	0	36	191	265	0	25	
Background + Project	40	32	0	0	0	0	0	36	192	269	0	25	594
Bkgrd+Proj check	40	32	0	0	0	0	0	36	192	269	0	25	
<b>Link Volume Growth</b>	0			0			46			36			
Growth	0	0	0	0	0	0	0	8	38	32	0	4	82
Cumulative Conditions	40	32	0	0	0	0	0	44	206	217	0	29	568
Cumulative Check	40	32	0	0	0	0	0	44	206	217	0	29	568

Intersection Number:	2												
Traffic Node Number:	2												
Intersection Name:	Cornell Ave & Prospect Wy												
Peak Hour:	PM											Date of Analysis:	05/02/14
Count Date:	01/00/00												
Scenario:	189,000 sf office building & 70,500 Wellness Center												
Future Growth % Per Year for Background along SR 1 and SR 92: 2%													
Movements													
Scenario:	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	0	2	162	165	0	41	47	2	0	0	0	0	419
<b>Approved Project Trips</b>													
CSJ ATI	0	0	3	0	0	1	1	0	0	0	0	0	5
Growth	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	3	0	0	1	1	0	0	0	0	0	5
Background Conditions	0	2	165	165	0	42	48	2	0	0	0	0	424
check	0	2	165	165	0	42	48	2	0	0	0	0	
<b>Project Trips</b>													
Project Trips	0	0	80	23	0	0	0	0	0	0	0	0	103
Project Trips-2	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Trips-3	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Project Trips	0	0	80	23	0	0	0	0	0	0	0	0	103
Existing + Project	0	2	242	188	0	41	47	2	0	0	0	0	522
Existing + Project Check	0	2	242	188	0	41	47	2	0	0	0	0	
Background + Project	0	2	245	188	0	42	48	2	0	0	0	0	527
Bkgrd+Proj check	0	2	245	188	0	42	48	2	0	0	0	0	
<b>Link Volume Growth</b>	36			46			0			0			
Growth	0	0	36	37	0	9	0	0	0	0	0	0	82
Cumulative Conditions	0	2	198	202	0	50	47	2	0	0	0	0	501
Cumulative Check	0	2	198	202	0	50	47	2	0	0	0	0	501

Big Wave North Parcel Alternative TIA

Intersection Number:	3												
Traffic Node Number:	3												
Intersection Name:	Airport St						& Stanford/Cornell Ave						
Peak Hour:	PM						Date of Analysis: 05/02/14						
Count Date:	01/00/00												
Scenario:	189,000 sf office building & 70,500 Wellness Center												
Future Growth % Per Year for Background along SR 1 and SR 92: 2%													
Movements													
Scenario:	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	3	59	46	101	3	3	4	24	1	4	13	10	271
<b>Approved Project Trips</b>													
CSJ ATI	0	0	0	0	0	0	1	2	0	0	0	0	3
Growth	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	0	0	1	2	0	0	0	0	3
Background Conditions	3	59	46	101	3	3	5	26	1	4	13	10	274
check	3	59	46	101	3	3	5	26	1	4	13	10	
<b>Project Trips</b>													
Project Trips	0	51	30	9	0	0	0	14	0	0	0	0	104
Project Trips-2	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Trips-3	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Project Trips	0	51	30	9	0	0	0	14	0	0	0	0	104
Existing + Project	3	110	76	110	3	3	4	38	1	4	13	10	375
Existing + Project Check	3	110	76	110	3	3	4	38	1	4	13	10	
Background + Project	3	110	76	110	3	3	5	40	1	4	13	10	378
Bkgrd+Proj check	3	110	76	110	3	3	5	40	1	4	13	10	
<b>Link Volume Growth</b>	2			46			0			0			
Growth	0	1	1	43	1	1	0	0	0	0	0	0	48
Cumulative Conditions	3	60	47	144	4	4	4	24	1	4	13	10	319
Cumulative Check	3	60	47	144	4	4	4	24	1	4	13	10	318

Intersection Number:	4												
Traffic Node Number:	4												
Intersection Name:	Airport St						& La Granada Ave						
Peak Hour:	PM						Date of Analysis: 05/02/14						
Count Date:	01/00/00												
Scenario:	189,000 sf office building & 70,500 Wellness Center												
Future Growth % Per Year for Background along SR 1 and SR 92: 2%													
Movements													
Scenario:	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	39	49	0	0	0	0	0	53	73	50	0	9	273
<b>Approved Project Trips</b>													
CSJ ATI	0	0	0	0	0	0	0	1	1	1	0	0	3
Growth	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	0	0	0	1	1	1	0	0	3
Background Conditions	39	49	0	0	0	0	0	54	74	51	0	9	276
check	39	49	0	0	0	0	0	54	74	51	0	9	
<b>Project Trips</b>													
Project Trips	0	19	0	0	0	0	0	68	1	0	0	0	88
Project Trips-2	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Trips-3	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Project Trips	0	19	0	0	0	0	0	68	1	0	0	0	88
Existing + Project	39	68	0	0	0	0	0	121	74	50	0	9	361
Existing + Project Check	39	68	0	0	0	0	0	121	74	50	0	9	
Background + Project	39	68	0	0	0	0	0	122	75	51	0	9	364
Bkgrd+Proj check	39	68	0	0	0	0	0	122	75	51	0	9	
<b>Link Volume Growth</b>	2			0			0			0			
Growth	1	1	0	0	0	0	0	0	0	0	0	0	2
Cumulative Conditions	40	50	0	0	0	0	0	53	73	50	0	9	275
Cumulative Check	40	50	0	0	0	0	0	53	73	50	0	9	275

Big Wave North Parcel Alternative TIA

Intersection Number:	5													
Traffic Node Number:	5													
Intersection Name:	Airport St						& Los Banos Ave						Date of Analysis:	05/02/14
Peak Hour:	PM													
Count Date:	01/00/00													
Scenario:	189,000 sf office building & 70,500 Wellness Center													
Future Growth % Per Year for Background along SR 1 and SR 92: 2%														
Movements														
Scenario:	North Approach			East Approach			South Approach			West Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	20	70	0	0	0	0	0	50	6	10	0	14	170	
<b>Approved Project Trips</b>														
CSJ ATI	0	0	0	0	0	0	0	1	1	0	0	0	2	
Growth	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Approved Trips	0	0	0	0	0	0	0	1	1	0	0	0	2	
Background Conditions	20	70	0	0	0	0	0	51	7	10	0	14	172	
check	20	70	0	0	0	0	0	51	7	10	0	14		
<b>Project Trips</b>														
Project Trips	0	18	0	0	0	0	0	66	2	1	0	0	87	
Project Trips-2	0	0	0	0	0	0	0	0	0	0	0	0	0	
Project Trips-3	0	0	0	0	0	0	0	0	0	0	0	0	0	
Net Project Trips	0	18	0	0	0	0	0	66	2	1	0	0	87	
Existing + Project	20	88	0	0	0	0	0	116	8	11	0	14	257	
Existing + Project Check	20	88	0	0	0	0	0	116	8	11	0	14		
Background + Project	20	88	0	0	0	0	0	117	9	11	0	14	259	
Bkgrd+Proj check	20	88	0	0	0	0	0	117	9	11	0	14		
<b>Link Volume Growth</b>	2			0			0			0				
Growth	0	2	0	0	0	0	0	0	0	0	0	0	2	
Cumulative Conditions	20	72	0	0	0	0	0	50	6	10	0	14	172	
Cumulative Check	20	72	0	0	0	0	0	50	6	10	0	14	172	

Intersection Number:	6													
Traffic Node Number:	6													
Intersection Name:	Hwy 1						& Cypress Ave						Date of Analysis:	05/02/14
Peak Hour:	PM													
Count Date:	01/00/00													
Scenario:	189,000 sf office building & 70,500 Wellness Center													
Future Growth % Per Year for Background along SR 1 and SR 92: 2%														
Movements														
Scenario:	North Approach			East Approach			South Approach			West Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	75	627	9	5	3	4	7	609	36	16	5	48	1444	
<b>Approved Project Trips</b>														
CSJ ATI	0	0	0	0	0	0	0	0	0	0	1	0	1	
Growth	3	25	0	0	0	0	0	24	1	0	0	0	55	
Total Approved Trips	3	25	0	0	0	0	0	24	1	0	1	0	56	
Background Conditions	78	652	9	5	3	4	7	633	37	16	6	48	1500	
check	78	652	9	5	3	4	7	633	37	16	6	48		
<b>Project Trips</b>														
Project Trips	15	0	0	0	3	0	0	0	0	0	7	59	84	
Project Trips-2	0	0	0	0	0	0	0	0	0	0	0	0	0	
Project Trips-3	0	0	0	0	0	0	0	0	0	0	0	0	0	
Net Project Trips	15	0	0	0	3	0	0	0	0	0	7	59	84	
Existing + Project	90	627	9	5	6	4	7	609	36	16	12	107	1528	
Existing + Project Check	90	627	9	5	6	4	7	609	36	16	12	107		
Background + Project	93	652	9	5	6	4	7	633	37	16	13	107	1584	
Bkgrd+Proj check	93	652	9	5	6	4	7	633	37	16	13	107		
<b>Link Volume Growth</b>	250			4			279			155				
Growth	26	220	3	2	1	1	3	261	15	36	11	108	688	
Cumulative Conditions	101	847	12	7	4	5	10	870	51	52	16	156	2132	
Cumulative Check	101	847	12	7	4	5	10	870	51	52	16	156	2131	

Big Wave North Parcel Alternative TIA

Intersection Number:	7												
Traffic Node Number:	7												
Intersection Name:	Hwy 1 & Capistrano Rd (N)												
Peak Hour:	PM												
Count Date:	01/00/00												
Scenario:	189,000 sf office building & 70,500 Wellness Center												
Future Growth % Per Year for Background along SR 1 and SR 92: 2%													
Movements													
Scenario:	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	45	644	0	0	0	0	0	653	9	12	0	24	1387
<b>Approved Project Trips</b>													
CSJ ATI	0	0	0	0	0	0	0	0	0	0	0	0	0
Growth	2	26	0	0	0	0	0	26	0	0	0	0	54
Total Approved Trips	2	26	0	0	0	0	0	26	0	0	0	0	54
Background Conditions	47	670	0	0	0	0	0	679	9	12	0	24	1441
check	47	670	0	0	0	0	0	679	9	12	0	24	
<b>Project Trips</b>													
Project Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Trips-2	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Trips-3	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Project Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing + Project	45	644	0	0	0	0	0	653	9	12	0	24	1387
Existing + Project Check	45	644	0	0	0	0	0	653	9	12	0	24	
Background + Project	47	670	0	0	0	0	0	679	9	12	0	24	1441
Bkgrd+Proj check	47	670	0	0	0	0	0	679	9	12	0	24	
<b>Link Volume Growth</b>	204			0			370			0			
Growth	13	191	0	0	0	0	0	365	5	0	0	0	574
Cumulative Conditions	58	835	0	0	0	0	0	1018	14	12	0	24	1961
Cumulative Check	58	835	0	0	0	0	0	1018	14	12	0	24	1961

Intersection Number:	8												
Traffic Node Number:	8												
Intersection Name:	Hwy 1 & Capistrano Rd (S)												
Peak Hour:	PM												
Count Date:	01/00/00												
Scenario:	189,000 sf office building & 70,500 Wellness Center												
Future Growth % Per Year for Background along SR 1 and SR 92: 2%													
Movements													
Scenario:	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	21	460	140	99	65	37	60	575	197	150	75	55	1934
<b>Approved Project Trips</b>													
CSJ ATI	0	0	0	0	0	0	0	0	1	2	0	0	3
Growth	1	18	6	0	0	0	2	23	8	0	0	0	58
Total Approved Trips	1	18	6	0	0	0	2	23	9	2	0	0	61
Background Conditions	22	478	146	99	65	37	62	598	206	152	75	55	1995
check	22	478	146	99	65	37	62	598	206	152	75	55	
<b>Project Trips</b>													
Project Trips	0	0	0	0	4	0	0	0	19	65	15	0	103
Project Trips-2	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Trips-3	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Project Trips	0	0	0	0	4	0	0	0	19	65	15	0	103
Existing + Project	21	460	140	99	69	37	60	575	216	215	90	55	2037
Existing + Project Check	21	460	140	99	69	37	60	575	216	215	90	55	
Background + Project	22	478	146	99	69	37	62	598	225	217	90	55	2098
Bkgrd+Proj check	22	478	146	99	69	37	62	598	225	217	90	55	
<b>Link Volume Growth</b>	204			54			381			36			
Growth	7	151	46	27	17	10	27	263	90	19	10	7	675
Cumulative Conditions	28	611	186	126	82	47	87	838	287	169	85	62	2609
Cumulative Check	28	611	186	126	82	47	87	838	287	169	85	62	2608

Big Wave North Parcel Alternative TIA

Intersection Number:	9												
Traffic Node Number:	9												
Intersection Name:	SR 1 & Main St												
Peak Hour:	PM												
Count Date:	01/00/00												
Scenario:	189,000 sf office building & 70,500 Wellness Center												
Future Growth % Per Year for Background along SR 1 and SR 92: 2%													
Movements													
Scenario:	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	145	688	271	535	78	50	38	721	72	55	58	174	2885
<b>Approved Project Trips</b>													
CSJ ATI	0	0	0	0	0	0	0	0	0	0	0	0	0
Growth	6	28	11	0	0	0	2	29	3	0	0	0	77
Total Approved Trips	6	28	11	0	0	0	2	29	3	0	0	0	77
Background Conditions	151	716	282	535	78	50	40	750	75	55	58	174	2962
check	151	716	282	535	78	50	40	750	75	55	58	174	
<b>Project Trips</b>													
Project Trips	0	31	14	3	0	0	0	9	0	0	0	0	57
Project Trips-2	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Trips-3	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Project Trips	0	31	14	3	0	0	0	9	0	0	0	0	57
Existing + Project	145	719	285	538	78	50	38	730	72	55	58	174	2942
Existing + Project Check	145	719	285	538	78	50	38	730	72	55	58	174	
Background + Project	151	747	296	538	78	50	40	759	75	55	58	174	3019
Bkgrd+Proj check	151	747	296	538	78	50	40	759	75	55	58	174	
<b>Link Volume Growth</b>	150			203			130			0			
Growth	20	93	37	164	24	15	6	113	11	0	0	0	483
Cumulative Conditions	165	781	308	699	102	65	44	834	83	55	58	174	3368
Cumulative Check	165	781	308	699	102	65	44	834	83	55	58	174	3368

Intersection Number:	10												
Traffic Node Number:	10												
Intersection Name:	SR 1 & SR 92												
Peak Hour:	PM												
Count Date:	01/00/00												
Scenario:	189,000 sf office building & 70,500 Wellness Center												
Future Growth % Per Year for Background along SR 1 and SR 92: 2%													
Movements													
Scenario:	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	10	635	185	106	90	515	273	704	125	156	21	41	2861
<b>Approved Project Trips</b>													
CSJ ATI	0	0	0	0	0	0	0	0	0	0	0	0	0
Growth	0	25	7	4	4	21	11	28	5	6	1	2	114
Total Approved Trips	0	25	7	4	4	21	11	28	5	6	1	2	114
Background Conditions	10	660	192	110	94	536	284	732	130	162	22	43	2975
check	10	660	192	110	94	536	284	732	130	162	22	43	
<b>Project Trips</b>													
Project Trips	0	15	16	6	0	0	0	3	0	0	0	0	40
Project Trips-2	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Trips-3	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Project Trips	0	15	16	6	0	0	0	3	0	0	0	0	40
Existing + Project	10	650	201	112	90	515	273	707	125	156	21	41	2901
Existing + Project Check	10	650	201	112	90	515	273	707	125	156	21	41	
Background + Project	10	675	208	116	94	536	284	735	130	162	22	43	3015
Bkgrd+Proj check	10	675	208	116	94	536	284	735	130	162	22	43	
<b>Link Volume Growth</b>	31			-54			310			0			
Growth	0	24	7	-8	-7	-39	77	198	35	0	0	0	287
Cumulative Conditions	10	659	192	98	83	476	350	902	160	156	21	41	3148
Cumulative Check	10	659	192	98	83	476	350	902	160	156	21	41	3148



Big Wave North Parcel Alternative TIA

Intersection Number:	11												
Traffic Node Number:	11												
Intersection Name:	SR 92 & Main St												
Peak Hour:	PM									Date of Analysis: 05/02/14			
Count Date:	01/00/00												
Scenario:	189,000 sf office building & 70,500 Wellness Center												
Future Growth % Per Year for Background along SR 1 and SR 92: 2%													
Movements													
Scenario:	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	62	157	198	423	546	172	118	209	109	104	323	39	2460
<b>Approved Project Trips</b>													
CSJ ATI	0	0	0	0	0	0	0	0	0	0	0	0	0
Growth	0	0	0	17	22	7	0	0	0	4	13	2	64
Total Approved Trips	0	0	0	17	22	7	0	0	0	4	13	2	64
Background Conditions	62	157	198	440	568	179	118	209	109	108	336	41	2524
check	62	157	198	440	568	179	118	209	109	108	336	41	
<b>Project Trips</b>													
Project Trips	0	0	14	3	6	0	0	0	0	0	16	0	39
Project Trips-2	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Trips-3	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Project Trips	0	0	14	3	6	0	0	0	0	0	16	0	39
Existing + Project	62	157	212	426	552	172	118	209	109	104	339	39	2499
Existing + Project Check	62	157	212	426	552	172	118	209	109	104	339	39	
Background + Project	62	157	212	443	574	179	118	209	109	108	352	41	2563
Bkgrd+Proj check	62	157	212	443	574	179	118	209	109	108	352	41	
<b>Link Volume Growth</b>	<b>120</b>			<b>269</b>			<b>259</b>			<b>110</b>			
Growth	18	45	57	100	129	41	70	124	65	25	76	9	758
Cumulative Conditions	80	202	255	523	675	213	188	333	174	129	399	48	3218
Cumulative Check	80	202	255	523	675	213	188	333	174	129	399	48	3219

## **Appendix D**

### **Level of Service Calculations and Traffic Signal Warrants**

## HCM Unsignalized Intersection Capacity Analysis

### 1: Prospect & Capistrano (N)

5/30/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	12	152	143	6	9	31
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	165	155	7	10	34
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	344	27	43			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	344	27	43			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	84	90			
cM capacity (veh/h)	588	1049	1565			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	178	162	43			
Volume Left	13	155	0			
Volume Right	165	0	34			
cSH	992	1565	1700			
Volume to Capacity	0.18	0.10	0.03			
Queue Length 95th (ft)	16	8	0			
Control Delay (s)	9.4	7.3	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.4	7.3	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			7.5			
Intersection Capacity Utilization		31.6%		ICU Level of Service		A
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 2: Prospect & Broadway

5/30/2014



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	47	124	0	18	144	1
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	51	135	0	20	157	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	324	10			20	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	324	10			20	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	87			90	
cM capacity (veh/h)	604	1072			1597	

















Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	186	20	158
Volume Left	51	0	157
Volume Right	135	20	0
cSH	884	1700	1597
Volume to Capacity	0.21	0.01	0.10
Queue Length 95th (ft)	20	0	8
Control Delay (s)	10.2	0.0	7.5
Lane LOS	B		A
Approach Delay (s)	10.2	0.0	7.5
Approach LOS	B		

Intersection Summary			
Average Delay		8.4	
Intersection Capacity Utilization		31.6%	ICU Level of Service A
Analysis Period (min)		15	

### HCM Unsignalized Intersection Capacity Analysis

#### 3: Airport & Stannford/Cornell

5/30/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	8	5	0	4	5	37	2	11	1	85	68	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	5	0	4	5	40	2	12	1	92	74	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	322	279	77	282	282	12	80			13		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	322	279	77	282	282	12	80			13		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	99	100	99	99	96	100			94		
cM capacity (veh/h)	576	592	984	636	590	1068	1517			1605		
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>								
Volume Total	14	50	15	173								
Volume Left	9	4	2	92								
Volume Right	0	40	1	7								
cSH	582	931	1517	1605								
Volume to Capacity	0.02	0.05	0.00	0.06								
Queue Length 95th (ft)	2	4	0	5								
Control Delay (s)	11.3	9.1	1.1	4.2								
Lane LOS	B	A	A	A								
Approach Delay (s)	11.3	9.1	1.1	4.2								
Approach LOS	B	A										
<b>Intersection Summary</b>												
Average Delay			5.3									
Intersection Capacity Utilization			25.3%		ICU Level of Service					A		
Analysis Period (min)			15									

## HCM Unsignalized Intersection Capacity Analysis

### 4: Airport & La Granada

5/30/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	37	124	45	22	16	11
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	40	135	49	24	17	12
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	145	23	29			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	145	23	29			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	95	87	97			
cM capacity (veh/h)	821	1053	1584			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	175	73	29			
Volume Left	40	49	0			
Volume Right	135	0	12			
cSH	989	1584	1700			
Volume to Capacity	0.18	0.03	0.02			
Queue Length 95th (ft)	16	2	0			
Control Delay (s)	9.4	5.0	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.4	5.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			7.3			
Intersection Capacity Utilization		26.7%		ICU Level of Service		A
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 5: Airport & Los Banos

5/30/2014





















Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	22	4	4	48	30	10
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	24	4	4	52	33	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	99	38	43			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	99	38	43			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	100	100			
cM capacity (veh/h)	897	1034	1565			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	28	57	43			
Volume Left	24	4	0			
Volume Right	4	0	11			
cSH	916	1565	1700			
Volume to Capacity	0.03	0.00	0.03			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	9.1	0.6	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.1	0.6	0.0			
Approach LOS	A					
<b>Intersection Summary</b>						
Average Delay			2.3			
Intersection Capacity Utilization			15.8%		ICU Level of Service	A
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 6: Highway 1 & Cypress

5/30/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	64	1	19	15	1	7	15	489	6	4	498	36
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	70	1	21	16	1	8	16	532	7	4	541	39
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1142	1140	561	1139	1157	535	580			538		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1142	1140	561	1139	1157	535	580			538		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	59	99	96	90	99	99	98			100		
cM capacity (veh/h)	172	197	527	168	192	545	994			1030		
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>	<b>NB 2</b>	<b>SB 1</b>	<b>SB 2</b>						
Volume Total	91	25	16	538	4	580						
Volume Left	70	16	16	0	4	0						
Volume Right	21	8	0	7	0	39						
cSH	203	214	994	1700	1030	1700						
Volume to Capacity	0.45	0.12	0.02	0.32	0.00	0.34						
Queue Length 95th (ft)	53	10	1	0	0	0						
Control Delay (s)	36.5	24.0	8.7	0.0	8.5	0.0						
Lane LOS	E	C	A		A							
Approach Delay (s)	36.5	24.0	0.3		0.1							
Approach LOS	E	C										
<b>Intersection Summary</b>												
Average Delay			3.3									
Intersection Capacity Utilization			41.0%		ICU Level of Service					A		
Analysis Period (min)			15									



## HCM Unsignalized Intersection Capacity Analysis 7: Highway 1 & Capistrano (N)

5/30/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	7	3	2	506	545	14
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	3	2	550	592	15
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	872	592	592			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	872	592	592			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	99	100			
cM capacity (veh/h)	289	449	979			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	8	3	2	275	275	592	15
Volume Left	8	0	2	0	0	0	0
Volume Right	0	3	0	0	0	0	15
cSH	289	449	979	1700	1700	1700	1700
Volume to Capacity	0.03	0.01	0.00	0.16	0.16	0.35	0.01
Queue Length 95th (ft)	2	1	0	0	0	0	0
Control Delay (s)	17.8	13.1	8.7	0.0	0.0	0.0	0.0
Lane LOS	C	B	A				
Approach Delay (s)	16.4		0.0	0.0			
Approach LOS	C						

Intersection Summary			
Average Delay			0.2
Intersection Capacity Utilization	38.7%		ICU Level of Service
Analysis Period (min)	15		A

### HCM Signalized Intersection Capacity Analysis

#### 8: Capistrano (S) & Highway 1

5/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↖	↕		↖	↕	↗
Volume (vph)	12	63	114	87	83	152	129	330	37	50	430	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00		0.97	0.95		1.00	0.95	1.00
Frt		1.00	0.85		0.94		1.00	0.98		1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1848	1583		1721		3433	3486		1770	3539	1583
Flt Permitted		0.93	1.00		0.89		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1735	1583		1558		3433	3486		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	68	124	95	90	165	140	359	40	54	467	13
RTOR Reduction (vph)	0	0	66	0	34	0	0	8	0	0	0	9
Lane Group Flow (vph)	0	81	58	0	316	0	140	391	0	54	467	4
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								6
Actuated Green, G (s)		16.2	24.3		16.2		8.1	19.2		4.5	15.6	15.6
Effective Green, g (s)		16.2	24.3		16.2		8.1	19.2		4.5	15.6	15.6
Actuated g/C Ratio		0.31	0.47		0.31		0.16	0.37		0.09	0.30	0.30
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		541	863		486		535	1289		153	1063	475
v/s Ratio Prot			0.01				0.04	c0.11		c0.03	c0.13	
v/s Ratio Perm		0.05	0.03		c0.20							0.00
v/c Ratio		0.15	0.07		0.65		0.26	0.30		0.35	0.44	0.01
Uniform Delay, d1		12.9	7.6		15.4		19.3	11.6		22.3	14.6	12.7
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.1	0.0		3.1		0.3	0.1		1.4	0.3	0.0
Delay (s)		13.0	7.6		18.5		19.5	11.7		23.7	14.9	12.7
Level of Service		B	A		B		B	B		C	B	B
Approach Delay (s)		9.7			18.5			13.8			15.8	
Approach LOS		A			B			B			B	























#### Intersection Summary

HCM 2000 Control Delay	14.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	51.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

## HCM Signalized Intersection Capacity Analysis

### 9: Highway 1 & Main Street

5/30/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	69	86	63	95	48	232	65	485	79	400	1004	133
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	0.98		1.00	0.98	
Flt Protected		0.98	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1822	1583		1803	1583	1770	3465		1770	3477	
Flt Permitted		0.98	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1822	1583		1803	1583	1770	3465		1770	3477	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	75	93	68	103	52	252	71	527	86	435	1091	145
RTOR Reduction (vph)	0	0	54	0	0	146	0	13	0	0	10	0
Lane Group Flow (vph)	0	168	14	0	155	106	71	600	0	435	1226	0
Turn Type	Split	NA	pm+ov	Split	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	4	4	5	8	8	1	5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)		13.0	19.1		12.6	37.9	6.1	23.1		25.3	42.3	
Effective Green, g (s)		13.0	19.1		12.6	37.9	6.1	23.1		25.3	42.3	
Actuated g/C Ratio		0.14	0.21		0.14	0.42	0.07	0.26		0.28	0.47	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		263	335		252	736	119	889		497	1634	
v/s Ratio Prot		c0.09	0.00		c0.09	0.04	0.04	0.17		c0.25	c0.35	
v/s Ratio Perm			0.01			0.03						
v/c Ratio		0.64	0.04		0.62	0.14	0.60	0.67		0.88	0.75	
Uniform Delay, d1		36.3	28.2		36.4	16.1	40.8	30.1		30.8	19.5	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		5.0	0.1		4.4	0.1	7.8	4.1		15.7	3.2	
Delay (s)		41.3	28.2		40.8	16.1	48.6	34.2		46.6	22.7	
Level of Service		D	C		D	B	D	C		D	C	
Approach Delay (s)		37.5			25.5			35.6			28.9	
Approach LOS		D			C			D			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			30.7				HCM 2000 Level of Service				C	
HCM 2000 Volume to Capacity ratio			0.78									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)			16.0		
Intersection Capacity Utilization			63.1%				ICU Level of Service			B		
Analysis Period (min)			15									
c	Critical Lane Group											

# HCM Signalized Intersection Capacity Analysis

## 10: Highway 92 & Highway 1

5/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗	↖	↖	↗	↖	↕	↗	↖	↕	↖
Volume (vph)	13	38	56	244	35	78	78	567	445	390	662	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	0.97	0.95	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.99	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1839	1583	1681	1706	1583	1770	3539	1583	3433	3534	
Flt Permitted		0.93	1.00	0.58	0.73	1.00	0.28	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1732	1583	1026	1292	1583	522	3539	1583	3433	3534	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	14	41	61	265	38	85	85	616	484	424	720	7
RTOR Reduction (vph)	0	0	47	0	0	52	0	0	371	0	1	0
Lane Group Flow (vph)	0	55	14	151	152	33	85	616	113	424	726	0
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2			
Actuated Green, G (s)		14.0	14.0	23.5	23.5	23.5	24.5	14.0	14.0	10.5	14.0	
Effective Green, g (s)		14.0	14.0	23.5	23.5	23.5	24.5	14.0	14.0	10.5	14.0	
Actuated g/C Ratio		0.23	0.23	0.39	0.39	0.39	0.41	0.23	0.23	0.18	0.23	
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		404	369	461	543	620	431	825	369	600	824	
v/s Ratio Prot				c0.03	0.03		0.03	0.17		c0.12	c0.21	
v/s Ratio Perm		0.03	0.01	c0.10	0.08	0.02	0.05		0.07			
v/c Ratio		0.14	0.04	0.33	0.28	0.05	0.20	0.75	0.31	0.71	0.88	
Uniform Delay, d1		18.2	17.8	13.0	12.5	11.3	11.0	21.4	19.0	23.3	22.2	
Progression Factor		1.00	1.00	0.63	0.60	0.82	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.7	0.2	0.4	0.3	0.2	0.2	3.7	0.5	6.9	13.0	
Delay (s)		18.9	18.0	8.6	7.8	9.4	11.3	25.1	19.5	30.2	35.2	
Level of Service		B	B	A	A	A	B	C	B	C	D	
Approach Delay (s)		18.4			8.5			21.8			33.4	
Approach LOS		B			A			C			C	

### Intersection Summary

HCM 2000 Control Delay	24.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

# HCM Signalized Intersection Capacity Analysis

## 11: Highway 92 & Main Street

5/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	76	730	80	104	250	141	62	174	164	239	81	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1788	
Flt Permitted	0.41	1.00	1.00	0.29	1.00	1.00	0.46	1.00	1.00	0.64	1.00	
Satd. Flow (perm)	768	3539	1583	548	3539	1583	858	1863	1583	1189	1788	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	83	793	87	113	272	153	67	189	178	260	88	32
RTOR Reduction (vph)	0	0	63	0	0	110	0	0	131	0	20	0
Lane Group Flow (vph)	83	793	24	113	272	43	67	189	47	260	100	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	16.4	16.4	16.4	16.8	16.8	16.8	16.0	16.0	16.0	20.8	20.8	
Effective Green, g (s)	16.4	16.4	16.4	16.8	16.8	16.8	16.0	16.0	16.0	20.8	20.8	
Actuated g/C Ratio	0.27	0.27	0.27	0.28	0.28	0.28	0.27	0.27	0.27	0.35	0.35	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	256	967	432	218	990	443	283	496	422	493	619	
v/s Ratio Prot	0.02	c0.22		c0.03	0.08		0.01	c0.10		c0.07	0.06	
v/s Ratio Perm	0.07		0.02	0.12		0.03	0.05		0.03	c0.11		
v/c Ratio	0.32	0.82	0.06	0.52	0.27	0.10	0.24	0.38	0.11	0.53	0.16	
Uniform Delay, d1	16.8	20.4	16.1	20.9	16.8	16.0	16.9	18.0	16.6	16.4	13.6	
Progression Factor	1.21	1.25	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.5	6.0	0.2	2.1	0.2	0.1	0.4	2.2	0.5	1.0	0.1	
Delay (s)	22.8	31.6	16.3	22.9	17.0	16.1	17.3	20.2	17.2	17.4	13.7	
Level of Service	C	C	B	C	B	B	B	C	B	B	B	
Approach Delay (s)		29.4			18.0			18.5			16.2	
Approach LOS		C			B			B			B	

### Intersection Summary

HCM 2000 Control Delay	22.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	61.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

## HCM Unsignalized Intersection Capacity Analysis

### 1: Prospect & Capistrano (N)

5/30/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	25	185	168	36	32	40
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	27	201	183	39	35	43
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	461	57	78			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	461	57	78			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	94	80	88			
cM capacity (veh/h)	492	1010	1520			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	228	222	78			
Volume Left	27	183	0			
Volume Right	201	0	43			
cSH	897	1520	1700			
Volume to Capacity	0.25	0.12	0.05			
Queue Length 95th (ft)	25	10	0			
Control Delay (s)	10.4	6.5	0.0			
Lane LOS	B	A				
Approach Delay (s)	10.4	6.5	0.0			
Approach LOS	B					
Intersection Summary						
Average Delay			7.2			
Intersection Capacity Utilization		37.3%		ICU Level of Service		A
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 2: Prospect & Broadway

5/30/2014



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	41	165	2	47	162	2
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	45	179	2	51	176	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	382	28			53	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	382	28			53	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	83			89	
cM capacity (veh/h)	550	1048			1552	

















Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	224	53	178
Volume Left	45	0	176
Volume Right	179	51	0
cSH	888	1700	1552
Volume to Capacity	0.25	0.03	0.11
Queue Length 95th (ft)	25	0	10
Control Delay (s)	10.4	0.0	7.5
Lane LOS	B		A
Approach Delay (s)	10.4	0.0	7.5
Approach LOS	B		

Intersection Summary			
Average Delay		8.1	
Intersection Capacity Utilization		34.9%	ICU Level of Service A
Analysis Period (min)		15	

### HCM Unsignalized Intersection Capacity Analysis

#### 3: Airport & Stannford/Cornell

5/30/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	13	4	3	3	101	1	24	4	46	59	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	14	4	3	3	110	1	26	4	50	64	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	308	198	66	208	198	28	67			30		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	308	198	66	208	198	28	67			30		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	98	100	100	100	90	100			97		
cM capacity (veh/h)	561	675	998	717	675	1047	1534			1582		
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>								
Volume Total	29	116	32	117								
Volume Left	11	3	1	50								
Volume Right	4	110	4	3								
cSH	657	1018	1534	1582								
Volume to Capacity	0.04	0.11	0.00	0.03								
Queue Length 95th (ft)	4	10	0	2								
Control Delay (s)	10.7	9.0	0.3	3.3								
Lane LOS	B	A	A	A								
Approach Delay (s)	10.7	9.0	0.3	3.3								
Approach LOS	B	A										
<b>Intersection Summary</b>												
Average Delay			6.0									
Intersection Capacity Utilization			25.8%		ICU Level of Service				A			
Analysis Period (min)			15									



## HCM Unsignalized Intersection Capacity Analysis

### 4: Airport & La Granada

5/30/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	9	50	73	53	49	39
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	54	79	58	53	42
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	291	74	96			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	291	74	96			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	94	95			
cM capacity (veh/h)	663	987	1498			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	64	137	96			
Volume Left	10	79	0			
Volume Right	54	0	42			
cSH	919	1498	1700			
Volume to Capacity	0.07	0.05	0.06			
Queue Length 95th (ft)	6	4	0			
Control Delay (s)	9.2	4.5	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.2	4.5	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			4.1			
Intersection Capacity Utilization			23.7%	ICU Level of Service	A	
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 5: Airport & Los Banos

5/30/2014






















Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	14	10	6	50	70	20
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	15	11	7	54	76	22
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	154	87	98			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	154	87	98			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	99	100			
cM capacity (veh/h)	834	972	1495			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	26	61	98			
Volume Left	15	7	0			
Volume Right	11	0	22			
cSH	886	1495	1700			
Volume to Capacity	0.03	0.00	0.06			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	9.2	0.8	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.2	0.8	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			1.6			
Intersection Capacity Utilization		17.7%		ICU Level of Service		A
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 6: Highway 1 & Cypress

5/30/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	48	5	16	4	3	5	36	609	7	9	627	75
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	52	5	17	4	3	5	39	662	8	10	682	82
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1489	1490	722	1465	1527	666	763			670		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1489	1490	722	1465	1527	666	763			670		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	45	95	96	95	97	99	95			99		
cM capacity (veh/h)	94	117	427	94	111	460	850			921		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	75	13	39	670	10	763						
Volume Left	52	4	39	0	10	0						
Volume Right	17	5	0	8	0	82						
cSH	117	149	850	1700	921	1700						
Volume to Capacity	0.64	0.09	0.05	0.39	0.01	0.45						
Queue Length 95th (ft)	82	7	4	0	1	0						
Control Delay (s)	78.8	31.4	9.4	0.0	9.0	0.0						
Lane LOS	F	D	A		A							
Approach Delay (s)	78.8	31.4	0.5		0.1							
Approach LOS	F	D										
Intersection Summary												
Average Delay			4.3									
Intersection Capacity Utilization			51.7%	ICU Level of Service	A							
Analysis Period (min)			15									

## HCM Unsignalized Intersection Capacity Analysis

### 7: Highway 1 & Capistrano (N)

5/30/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	24	12	9	653	644	75
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	26	13	10	710	700	82
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1074	700	700			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1074	700	700			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	88	97	99			
cM capacity (veh/h)	212	382	893			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	26	13	10	355	355	700	82
Volume Left	26	0	10	0	0	0	0
Volume Right	0	13	0	0	0	0	82
cSH	212	382	893	1700	1700	1700	1700
Volume to Capacity	0.12	0.03	0.01	0.21	0.21	0.41	0.05
Queue Length 95th (ft)	10	3	1	0	0	0	0
Control Delay (s)	24.3	14.8	9.1	0.0	0.0	0.0	0.0
Lane LOS	C	B	A				
Approach Delay (s)	21.1		0.1			0.0	
Approach LOS	C						

Intersection Summary			
Average Delay		0.6	
Intersection Capacity Utilization	43.9%		ICU Level of Service A
Analysis Period (min)	15		

### HCM Signalized Intersection Capacity Analysis

#### 8: Capistrano (S) & Highway 1

5/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕		↗	↕	↗
Volume (vph)	55	75	150	37	65	99	197	575	60	140	460	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00		0.97	0.95		1.00	0.95	1.00
Frt		1.00	0.85		0.93		1.00	0.99		1.00	1.00	0.85
Flt Protected		0.98	1.00		0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1824	1583		1723		3433	3489		1770	3539	1583
Flt Permitted		0.79	1.00		0.92		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1476	1583		1603		3433	3489		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	60	82	163	40	71	108	214	625	65	152	500	23
RTOR Reduction (vph)	0	0	83	0	41	0	0	7	0	0	0	15
Lane Group Flow (vph)	0	142	80	0	178	0	214	683	0	152	500	8
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								6
Actuated Green, G (s)		12.0	21.5		12.0		9.5	20.2		8.7	19.4	19.4
Effective Green, g (s)		12.0	21.5		12.0		9.5	20.2		8.7	19.4	19.4
Actuated g/C Ratio		0.23	0.41		0.23		0.18	0.38		0.16	0.37	0.37
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		334	763		363		616	1332		291	1297	580
v/s Ratio Prot			0.02				0.06	c0.20		c0.09	0.14	
v/s Ratio Perm		0.10	0.03		c0.11							0.01
v/c Ratio		0.43	0.11		0.49		0.35	0.51		0.52	0.39	0.01
Uniform Delay, d1		17.5	9.7		17.8		19.0	12.6		20.2	12.4	10.7
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.9	0.1		1.0		0.3	0.3		1.7	0.2	0.0
Delay (s)		18.4	9.8		18.8		19.3	12.9		21.9	12.5	10.7
Level of Service		B	A		B		B	B		C	B	B
Approach Delay (s)		13.8			18.8			14.4			14.6	
Approach LOS		B			B			B			B	























#### Intersection Summary

HCM 2000 Control Delay	14.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	52.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

## HCM Signalized Intersection Capacity Analysis

### 9: Highway 1 & Main Street
























5/30/2014

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations														
Volume (vph)	174	58	55	50	78	535	72	721	38	271	688	145		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0			
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95			
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	0.97			
Flt Protected		0.96	1.00		0.98	1.00	0.95	1.00		0.95	1.00			
Satd. Flow (prot)		1795	1583		1827	1583	1770	3513		1770	3447			
Flt Permitted		0.96	1.00		0.98	1.00	0.95	1.00		0.95	1.00			
Satd. Flow (perm)		1795	1583		1827	1583	1770	3513		1770	3447			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	189	63	60	54	85	582	78	784	41	295	748	158		
RTOR Reduction (vph)	0	0	46	0	0	85	0	4	0	0	18	0		
Lane Group Flow (vph)	0	252	14	0	139	497	78	821	0	295	888	0		
Turn Type	Split	NA	pm+ov	Split	NA	pm+ov	Prot	NA		Prot	NA			
Protected Phases	4	4	5	8	8	1	5	2		1	6			
Permitted Phases			4			8								
Actuated Green, G (s)		15.2	21.6		12.0	32.6	6.4	26.2		20.6	40.4			
Effective Green, g (s)		15.2	21.6		12.0	32.6	6.4	26.2		20.6	40.4			
Actuated g/C Ratio		0.17	0.24		0.13	0.36	0.07	0.29		0.23	0.45			
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0			
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0			
Lane Grp Cap (vph)		303	379		243	643	125	1022		405	1547			
v/s Ratio Prot		c0.14	0.00		0.08	c0.18	0.04	c0.23		0.17	0.26			
v/s Ratio Perm			0.01			0.14								
v/c Ratio		0.83	0.04		0.57	0.77	0.62	0.80		0.73	0.57			
Uniform Delay, d1		36.2	26.2		36.6	25.4	40.6	29.5		32.1	18.4			
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00			
Incremental Delay, d2		17.4	0.0		3.2	5.7	9.3	6.7		6.4	1.6			
Delay (s)		53.5	26.3		39.8	31.1	50.0	36.2		38.5	20.0			
Level of Service		D	C		D	C	D	D		D	B			
Approach Delay (s)		48.3			32.8			37.4			24.5			
Approach LOS		D			C			D			C			
<b>Intersection Summary</b>														
HCM 2000 Control Delay			32.5									HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio			0.84											
Actuated Cycle Length (s)			90.0								16.0			
Intersection Capacity Utilization			77.0%										ICU Level of Service	D
Analysis Period (min)			15											
c	Critical Lane Group													

### HCM Signalized Intersection Capacity Analysis

#### 10: Highway 92 & Highway 1

5/30/2014

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Volume (vph)	41	21	156	515	90	106	125	704	273	185	635	10	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lane Util. Factor		1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	0.97	0.95		
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00		
Flt Protected		0.97	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00		
Satd. Flow (prot)		1803	1583	1681	1709	1583	1770	3539	1583	3433	3531		
Flt Permitted		0.93	1.00	0.58	0.73	1.00	0.28	1.00	1.00	0.95	1.00		
Satd. Flow (perm)		1732	1583	1026	1292	1583	522	3539	1583	3433	3531		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	45	23	170	560	98	115	136	765	297	201	690	11	
RTOR Reduction (vph)	0	0	130	0	0	67	0	0	228	0	1	0	
Lane Group Flow (vph)	0	68	40	325	333	48	136	765	69	201	700	0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA		
Protected Phases		4		3	8		5	2		1	6		
Permitted Phases	4		4	8		8	2		2				
Actuated Green, G (s)		14.0	14.0	25.2	25.2	25.2	14.0	14.0	14.0	8.8	20.8		
Effective Green, g (s)		14.0	14.0	25.2	25.2	25.2	14.0	14.0	14.0	8.8	20.8		
Actuated g/C Ratio		0.23	0.23	0.42	0.42	0.42	0.23	0.23	0.23	0.15	0.35		
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)		404	369	509	592	664	163	825	369	503	1224		
v/s Ratio Prot				c0.08	0.07		0.03	c0.22		0.06	c0.20		
v/s Ratio Perm		0.04	0.03	c0.19	0.17	0.03	0.17		0.04				
v/c Ratio		0.17	0.11	0.64	0.56	0.07	0.83	0.93	0.19	0.40	0.57		
Uniform Delay, d1		18.4	18.1	14.8	13.2	10.4	22.4	22.5	18.4	23.2	16.0		
Progression Factor		1.00	1.00	0.67	0.62	1.47	1.00	1.00	1.00	1.00	1.00		
Incremental Delay, d2		0.9	0.6	2.2	1.0	0.2	29.1	16.2	0.2	2.4	1.9		
Delay (s)		19.3	18.7	12.0	9.2	15.5	51.6	38.7	18.7	25.6	17.9		
Level of Service		B	B	B	A	B	D	D	B	C	B		
Approach Delay (s)		18.8			11.3			35.2			19.6		
Approach LOS		B			B			D			B		
<b>Intersection Summary</b>													
HCM 2000 Control Delay			23.5		HCM 2000 Level of Service					C			
HCM 2000 Volume to Capacity ratio			0.78										
Actuated Cycle Length (s)			60.0		Sum of lost time (s)					16.0			
Intersection Capacity Utilization			58.1%		ICU Level of Service					B			
Analysis Period (min)			15										
c	Critical Lane Group												

### HCM Signalized Intersection Capacity Analysis

#### 11: Highway 92 & Main Street

5/30/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	323	104	172	546	423	109	209	118	198	157	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1784	
Flt Permitted	0.33	1.00	1.00	0.54	1.00	1.00	0.36	1.00	1.00	0.62	1.00	
Satd. Flow (perm)	621	3539	1583	1009	3539	1583	665	1863	1583	1149	1784	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	42	351	113	187	593	460	118	227	128	215	171	67
RTOR Reduction (vph)	0	0	84	0	0	337	0	0	94	0	23	0
Lane Group Flow (vph)	42	351	29	187	593	123	118	227	34	215	215	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	15.2	15.2	15.2	16.0	16.0	16.0	16.0	16.0	16.0	20.0	20.0	
Effective Green, g (s)	15.2	15.2	15.2	16.0	16.0	16.0	16.0	16.0	16.0	20.0	20.0	
Actuated g/C Ratio	0.25	0.25	0.25	0.27	0.27	0.27	0.27	0.27	0.27	0.33	0.33	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	218	896	401	319	943	422	265	496	422	474	594	
v/s Ratio Prot	0.01	c0.10		0.04	c0.17		0.04	c0.12		c0.07	0.12	
v/s Ratio Perm	0.04		0.02	0.12		0.08	0.08		0.02	0.08		
v/c Ratio	0.19	0.39	0.07	0.59	0.63	0.29	0.45	0.46	0.08	0.45	0.36	
Uniform Delay, d1	17.7	18.6	17.0	19.8	19.4	17.5	17.6	18.4	16.5	16.4	15.2	
Progression Factor	1.15	1.18	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.8	1.2	0.3	2.7	1.3	0.4	1.2	3.0	0.4	0.7	1.7	
Delay (s)	22.1	23.1	17.3	22.5	20.7	17.9	18.8	21.4	16.9	17.1	16.9	
Level of Service	C	C	B	C	C	B	B	C	B	B	B	
Approach Delay (s)		21.8			19.9			19.5			17.0	
Approach LOS		C			B			B			B	

#### Intersection Summary



















HCM 2000 Control Delay	19.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	53.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



## HCM Unsignalized Intersection Capacity Analysis

### 6: Highway 1 & Cypress

5/30/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	35	4	34	10	5	4	36	694	4	3	839	61
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	38	4	37	11	5	4	39	754	4	3	912	66
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1791	1789	945	1792	1820	757	978			759		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1791	1789	945	1792	1820	757	978			759		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	32	94	88	78	93	99	94			100		
cM capacity (veh/h)	56	76	318	51	73	408	705			853		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	79	21	39	759	3	978						
Volume Left	38	11	39	0	3	0						
Volume Right	37	4	0	4	0	66						
cSH	93	69	705	1700	853	1700						
Volume to Capacity	0.85	0.30	0.06	0.45	0.00	0.58						
Queue Length 95th (ft)	117	27	4	0	0	0						
Control Delay (s)	137.2	78.4	10.4	0.0	9.2	0.0						
Lane LOS	F	F	B		A							
Approach Delay (s)	137.2	78.4	0.5		0.0							
Approach LOS	F	F										
Intersection Summary												
Average Delay			6.9									
Intersection Capacity Utilization			59.6%	ICU Level of Service		B						
Analysis Period (min)			15									

## HCM Unsignalized Intersection Capacity Analysis

### 7: Highway 1 & Capistrano (N)

5/30/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	35	41	16	685	845	57
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	38	45	17	745	918	62
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1326	918	918			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1326	918	918			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	74	84	98			
cM capacity (veh/h)	144	274	739			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	38	45	17	372	372	918	62
Volume Left	38	0	17	0	0	0	0
Volume Right	0	45	0	0	0	0	62
cSH	144	274	739	1700	1700	1700	1700
Volume to Capacity	0.26	0.16	0.02	0.22	0.22	0.54	0.04
Queue Length 95th (ft)	25	14	2	0	0	0	0
Control Delay (s)	38.9	20.7	10.0	0.0	0.0	0.0	0.0
Lane LOS	E	C	A				
Approach Delay (s)	29.1		0.2			0.0	
Approach LOS	D						

Intersection Summary			
Average Delay		1.4	
Intersection Capacity Utilization		54.5%	ICU Level of Service A
Analysis Period (min)		15	

# HCM Signalized Intersection Capacity Analysis

## 8: Capistrano (S) & Highway 1

5/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕		↗	↕	↗
Volume (vph)	108	135	291	9	94	83	276	447	35	245	481	126
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00		0.97	0.95		1.00	0.95	1.00
Frt		1.00	0.85		0.94		1.00	0.99		1.00	1.00	0.85
Flt Protected		0.98	1.00		1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1822	1583		1746		3433	3501		1770	3539	1583
Flt Permitted		0.76	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1419	1583		1719		3433	3501		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	117	147	316	10	102	90	300	486	38	266	523	137
RTOR Reduction (vph)	0	0	64	0	31	0	0	6	0	0	0	94
Lane Group Flow (vph)	0	264	252	0	171	0	300	518	0	266	523	43
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								6
Actuated Green, G (s)		18.4	30.4		18.4		12.0	16.3		15.3	19.6	19.6
Effective Green, g (s)		18.4	30.4		18.4		12.0	16.3		15.3	19.6	19.6
Actuated g/C Ratio		0.30	0.49		0.30		0.19	0.26		0.25	0.32	0.32
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		421	878		510		664	920		436	1118	500
v/s Ratio Prot			0.06				0.09	c0.15		c0.15	c0.15	
v/s Ratio Perm		c0.19	0.10		0.10							0.03
v/c Ratio		0.63	0.29		0.34		0.45	0.56		0.61	0.47	0.09
Uniform Delay, d1		18.8	9.4		17.0		22.1	19.8		20.7	17.0	14.9
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		2.9	0.2		0.4		0.5	0.8		2.5	0.3	0.1
Delay (s)		21.7	9.6		17.4		22.6	20.6		23.2	17.3	15.0
Level of Service		C	A		B		C	C		C	B	B
Approach Delay (s)		15.1			17.4			21.3			18.7	
Approach LOS		B			B			C			B	























### Intersection Summary

HCM 2000 Control Delay	18.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	62.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

## HCM Signalized Intersection Capacity Analysis

### 9: Highway 1 & Main Street

5/30/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	133	58	104	51	63	260	79	817	54	303	909	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	0.98	
Flt Protected		0.97	1.00		0.98	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1800	1583		1822	1583	1770	3506		1770	3463	
Flt Permitted		0.97	1.00		0.98	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1800	1583		1822	1583	1770	3506		1770	3463	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	145	63	113	55	68	283	86	888	59	329	988	165
RTOR Reduction (vph)	0	0	85	0	0	118	0	5	0	0	14	0
Lane Group Flow (vph)	0	208	28	0	123	165	86	942	0	329	1139	0
Turn Type	Split	NA	pm+ov	Split	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	4	4	5	8	8	1	5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)		14.2	22.5		11.3	32.5	8.3	27.3		21.2	40.2	
Effective Green, g (s)		14.2	22.5		11.3	32.5	8.3	27.3		21.2	40.2	
Actuated g/C Ratio		0.16	0.25		0.13	0.36	0.09	0.30		0.24	0.45	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		284	395		228	641	163	1063		416	1546	
v/s Ratio Prot		c0.12	0.01		c0.07	0.06	0.05	c0.27		c0.19	0.33	
v/s Ratio Perm			0.01			0.04						
v/c Ratio		0.73	0.07		0.54	0.26	0.53	0.89		0.79	0.74	
Uniform Delay, d1		36.1	25.8		36.9	20.2	39.0	29.9		32.3	20.5	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		9.4	0.1		2.4	0.2	3.1	10.9		9.9	3.2	
Delay (s)		45.5	25.9		39.4	20.5	42.0	40.8		42.2	23.7	
Level of Service		D	C		D	C	D	D		D	C	
Approach Delay (s)		38.6			26.2			40.9			27.8	
Approach LOS		D			C			D			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			32.8				HCM 2000 Level of Service				C	
HCM 2000 Volume to Capacity ratio			0.78									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)				16.0		
Intersection Capacity Utilization			68.2%			ICU Level of Service				C		
Analysis Period (min)			15									
c	Critical Lane Group											

### HCM Signalized Intersection Capacity Analysis

#### 10: Highway 92 & Highway 1

5/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↕	↕	↕	↕	↕	↕↕	↕	↕↕	↕↕	
Volume (vph)	34	36	149	624	74	297	107	609	404	305	748	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	0.97	0.95	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected		0.98	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1818	1583	1681	1702	1583	1770	3539	1583	3433	3520	
Flt Permitted		0.93	1.00	0.58	0.73	1.00	0.28	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1732	1583	1026	1292	1583	522	3539	1583	3433	3520	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	37	39	162	678	80	323	116	662	439	332	813	30
RTOR Reduction (vph)	0	0	124	0	0	88	0	0	337	0	5	0
Lane Group Flow (vph)	0	76	38	373	385	235	116	662	102	332	838	0
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2			
Actuated Green, G (s)		14.0	14.0	26.3	26.3	26.3	21.7	14.0	14.0	7.7	14.0	
Effective Green, g (s)		14.0	14.0	26.3	26.3	26.3	21.7	14.0	14.0	7.7	14.0	
Actuated g/C Ratio		0.23	0.23	0.44	0.44	0.44	0.36	0.23	0.23	0.13	0.23	
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		404	369	540	623	693	348	825	369	440	821	
v/s Ratio Prot				c0.10	0.09		0.04	0.19		c0.10	c0.24	
v/s Ratio Perm		0.04	0.02	c0.21	0.19	0.15	0.08		0.06			
v/c Ratio		0.19	0.10	0.69	0.62	0.34	0.33	0.80	0.28	0.75	1.02	
Uniform Delay, d1		18.4	18.1	14.7	13.0	11.1	13.1	21.7	18.9	25.2	23.0	
Progression Factor		1.00	1.00	0.65	0.59	0.50	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		1.0	0.6	2.6	1.2	0.9	0.6	5.7	0.4	11.4	36.9	
Delay (s)		19.5	18.6	12.1	9.0	6.4	13.6	27.4	19.3	36.6	59.9	
Level of Service		B	B	B	A	A	B	C	B	D	E	
Approach Delay (s)		18.9			9.3			23.1			53.3	
Approach LOS		B			A			C			D	

























#### Intersection Summary

HCM 2000 Control Delay	28.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	63.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

### HCM Signalized Intersection Capacity Analysis

#### 11: Highway 92 & Main Street

5/30/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	42	532	88	168	738	157	136	149	130	206	153	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1787	
Flt Permitted	0.33	1.00	1.00	0.43	1.00	1.00	0.36	1.00	1.00	0.65	1.00	
Satd. Flow (perm)	621	3539	1583	809	3539	1583	665	1863	1583	1219	1787	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	46	578	96	183	802	171	148	162	141	224	166	62
RTOR Reduction (vph)	0	0	69	0	0	125	0	0	103	0	22	0
Lane Group Flow (vph)	46	578	27	183	802	46	148	162	38	224	206	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	16.8	16.8	16.8	16.0	16.0	16.0	16.0	16.0	16.0	18.4	18.4	
Effective Green, g (s)	16.8	16.8	16.8	16.0	16.0	16.0	16.0	16.0	16.0	18.4	18.4	
Actuated g/C Ratio	0.28	0.28	0.28	0.27	0.27	0.27	0.27	0.27	0.27	0.31	0.31	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	265	990	443	279	943	422	265	496	422	439	548	
v/s Ratio Prot	0.01	c0.16		0.04	c0.23		c0.04	0.09		c0.06	0.12	
v/s Ratio Perm	0.03		0.02	0.13		0.03	c0.10		0.02	0.10		
v/c Ratio	0.17	0.58	0.06	0.66	0.85	0.11	0.56	0.33	0.09	0.51	0.38	
Uniform Delay, d1	16.5	18.6	15.8	20.6	20.9	16.6	17.9	17.7	16.5	17.7	16.3	
Progression Factor	1.11	1.17	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.1	1.9	0.2	5.5	7.4	0.1	2.5	1.8	0.4	1.0	0.4	
Delay (s)	19.4	23.6	16.0	26.1	28.3	16.7	20.5	19.4	16.9	18.7	16.7	
Level of Service	B	C	B	C	C	B	C	B	B	B	B	
Approach Delay (s)		22.3			26.2			19.0			17.7	
Approach LOS		C			C			B			B	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			22.6			HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio			0.69									
Actuated Cycle Length (s)			60.0			Sum of lost time (s)			16.0			
Intersection Capacity Utilization			56.6%			ICU Level of Service			B			
Analysis Period (min)			15									
c	Critical Lane Group											

## HCM Unsignalized Intersection Capacity Analysis

### 1: Prospect & Capistrano (N)

6/30/2014












Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	12	172	229	6	9	31
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	187	249	7	10	34
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	531	27	43			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	531	27	43			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	82	84			
cM capacity (veh/h)	428	1049	1565			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	200	255	43			
Volume Left	13	249	0			
Volume Right	187	0	34			
cSH	958	1565	1700			
Volume to Capacity	0.21	0.16	0.03			
Queue Length 95th (ft)	20	14	0			
Control Delay (s)	9.7	7.6	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.7	7.6	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			7.8			
Intersection Capacity Utilization		37.6%		ICU Level of Service		A
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 2: Prospect & Broadway

6/30/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	47	210	0	18	164	1
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	51	228	0	20	178	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	367	10			20	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	367	10			20	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	79			89	
cM capacity (veh/h)	562	1072			1597	
<b>Direction, Lane #</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	279	20	179			
Volume Left	51	0	178			
Volume Right	228	20	0			
cSH	919	1700	1597			
Volume to Capacity	0.30	0.01	0.11			
Queue Length 95th (ft)	32	0	9			
Control Delay (s)	10.6	0.0	7.5			
Lane LOS	B		A			
Approach Delay (s)	10.6	0.0	7.5			
Approach LOS	B					
<b>Intersection Summary</b>						
Average Delay			9.0			
Intersection Capacity Utilization			38.0%		ICU Level of Service	A
Analysis Period (min)			15			



### HCM Unsignalized Intersection Capacity Analysis

#### 3: Airport & Stannford/Cornell

6/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	8	5	0	4	5	70	2	66	1	93	80	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	5	0	4	5	76	2	72	1	101	87	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	448	370	90	372	372	72	93			73		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	448	370	90	372	372	72	93			73		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	99	100	99	99	92	100			93		
cM capacity (veh/h)	453	522	968	550	520	990	1501			1527		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	14	86	75	195
Volume Left	9	4	2	101
Volume Right	0	76	1	7
cSH	477	902	1501	1527
Volume to Capacity	0.03	0.10	0.00	0.07
Queue Length 95th (ft)	2	8	0	5
Control Delay (s)	12.8	9.4	0.2	4.2
Lane LOS	B	A	A	A
Approach Delay (s)	12.8	9.4	0.2	4.2
Approach LOS	B	A		

Intersection Summary			
Average Delay		4.9	
Intersection Capacity Utilization	27.8%		ICU Level of Service
Analysis Period (min)		15	A

## HCM Unsignalized Intersection Capacity Analysis

### 4: Airport & La Granada

6/30/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	37	126	45	38	89	11
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	40	137	49	41	97	12
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	242	103	109			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	242	103	109			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	94	86	97			
cM capacity (veh/h)	722	952	1482			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	177	90	109			
Volume Left	40	49	0			
Volume Right	137	0	12			
cSH	888	1482	1700			
Volume to Capacity	0.20	0.03	0.06			
Queue Length 95th (ft)	19	3	0			
Control Delay (s)	10.1	4.2	0.0			
Lane LOS	B	A				
Approach Delay (s)	10.1	4.2	0.0			
Approach LOS	B					
Intersection Summary						
Average Delay			5.7			
Intersection Capacity Utilization			27.6%	ICU Level of Service	A	
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 5: Airport & Los Banos

6/30/2014





















Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	22	5	4	64	102	10
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	24	5	4	70	111	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	195	116	122			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	195	116	122			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	99	100			
cM capacity (veh/h)	792	936	1466			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	29	74	122			
Volume Left	24	4	0			
Volume Right	5	0	11			
cSH	815	1466	1700			
Volume to Capacity	0.04	0.00	0.07			
Queue Length 95th (ft)	3	0	0			
Control Delay (s)	9.6	0.5	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.6	0.5	0.0			
Approach LOS	A					
<b>Intersection Summary</b>						
Average Delay			1.4			
Intersection Capacity Utilization			16.6%		ICU Level of Service	A
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 6: Highway 1 & Cypress

6/30/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	77	4	19	15	9	7	15	489	6	4	498	100
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	84	4	21	16	10	8	16	532	7	4	541	109
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1181	1175	596	1140	1226	535	650			538		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1181	1175	596	1140	1226	535	650			538		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	46	98	96	90	94	99	98			100		
cM capacity (veh/h)	155	187	504	165	175	545	936			1030		
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>	<b>NB 2</b>	<b>SB 1</b>	<b>SB 2</b>						
Volume Total	109	34	16	538	4	650						
Volume Left	84	16	16	0	4	0						
Volume Right	21	8	0	7	0	109						
cSH	180	200	936	1700	1030	1700						
Volume to Capacity	0.60	0.17	0.02	0.32	0.00	0.38						
Queue Length 95th (ft)	83	15	1	0	0	0						
Control Delay (s)	51.6	26.7	8.9	0.0	8.5	0.0						
Lane LOS	F	D	A		A							
Approach Delay (s)	51.6	26.7	0.3		0.1							
Approach LOS	F	D										
<b>Intersection Summary</b>												
Average Delay			5.0									
Intersection Capacity Utilization			47.7%		ICU Level of Service				A			
Analysis Period (min)			15									

## HCM Unsignalized Intersection Capacity Analysis 7: Highway 1 & Capistrano (N)

6/30/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	7	3	2	506	545	14
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	3	2	550	592	15
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	872	592	592			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	872	592	592			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	99	100			
cM capacity (veh/h)	289	449	979			

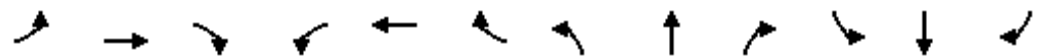
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	8	3	2	275	275	592	15
Volume Left	8	0	2	0	0	0	0
Volume Right	0	3	0	0	0	0	15
cSH	289	449	979	1700	1700	1700	1700
Volume to Capacity	0.03	0.01	0.00	0.16	0.16	0.35	0.01
Queue Length 95th (ft)	2	1	0	0	0	0	0
Control Delay (s)	17.8	13.1	8.7	0.0	0.0	0.0	0.0
Lane LOS	C	B	A				
Approach Delay (s)	16.4		0.0	0.0			
Approach LOS	C						

Intersection Summary			
Average Delay			0.2
Intersection Capacity Utilization	38.7%	ICU Level of Service	A
Analysis Period (min)			15

### HCM Signalized Intersection Capacity Analysis

#### 8: Capistrano (S) & Highway 1

6/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕		↗	↕	↗
Volume (vph)	12	67	130	87	99	152	199	330	37	50	430	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00		0.97	0.95		1.00	0.95	1.00
Frt		1.00	0.85		0.94		1.00	0.98		1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1849	1583		1728		3433	3486		1770	3539	1583
Flt Permitted		0.93	1.00		0.90		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1740	1583		1570		3433	3486		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	73	141	95	108	165	216	359	40	54	467	13
RTOR Reduction (vph)	0	0	72	0	30	0	0	7	0	0	0	9
Lane Group Flow (vph)	0	86	69	0	338	0	216	392	0	54	467	4
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								6
Actuated Green, G (s)		17.7	27.2		17.7		9.5	21.2		4.5	16.2	16.2
Effective Green, g (s)		17.7	27.2		17.7		9.5	21.2		4.5	16.2	16.2
Actuated g/C Ratio		0.32	0.49		0.32		0.17	0.38		0.08	0.29	0.29
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		555	891		501		588	1333		143	1034	462
v/s Ratio Prot			0.01				c0.06	0.11		0.03	c0.13	
v/s Ratio Perm		0.05	0.03		c0.22							0.00
v/c Ratio		0.15	0.08		0.67		0.37	0.29		0.38	0.45	0.01
Uniform Delay, d1		13.5	7.5		16.4		20.3	11.9		24.1	16.0	13.9
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.1	0.0		3.6		0.4	0.1		1.7	0.3	0.0
Delay (s)		13.6	7.5		19.9		20.7	12.0		25.8	16.3	13.9
Level of Service		B	A		B		C	B		C	B	B
Approach Delay (s)		9.8			19.9			15.1			17.2	
Approach LOS		A			B			B			B	























#### Intersection Summary

HCM 2000 Control Delay	16.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	55.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

## HCM Signalized Intersection Capacity Analysis

### 9: Highway 1 & Main Street

6/30/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	69	86	63	95	48	248	65	517	79	403	1012	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	0.98		1.00	0.98	
Flt Protected		0.98	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1822	1583		1803	1583	1770	3469		1770	3477	
Flt Permitted		0.98	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1822	1583		1803	1583	1770	3469		1770	3477	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	75	93	68	103	52	270	71	562	86	438	1100	145
RTOR Reduction (vph)	0	0	54	0	0	156	0	13	0	0	10	0
Lane Group Flow (vph)	0	168	14	0	155	114	71	635	0	438	1235	0
Turn Type	Split	NA	pm+ov	Split	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	4	4	5	8	8	1	5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)		13.0	19.1		12.6	38.0	6.1	23.0		25.4	42.3	
Effective Green, g (s)		13.0	19.1		12.6	38.0	6.1	23.0		25.4	42.3	
Actuated g/C Ratio		0.14	0.21		0.14	0.42	0.07	0.26		0.28	0.47	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		263	335		252	738	119	886		499	1634	
v/s Ratio Prot		c0.09	0.00		c0.09	0.04	0.04	0.18		c0.25	c0.36	
v/s Ratio Perm			0.01			0.03						
v/c Ratio		0.64	0.04		0.62	0.15	0.60	0.72		0.88	0.76	
Uniform Delay, d1		36.3	28.2		36.4	16.1	40.8	30.5		30.8	19.6	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		5.0	0.1		4.4	0.1	7.8	5.0		15.9	3.3	
Delay (s)		41.3	28.2		40.8	16.2	48.6	35.5		46.7	22.9	
Level of Service		D	C		D	B	D	D		D	C	
Approach Delay (s)		37.5			25.2			36.8			29.1	
Approach LOS		D			C			D			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			31.0				HCM 2000 Level of Service				C	
HCM 2000 Volume to Capacity ratio			0.78									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)			16.0		
Intersection Capacity Utilization			64.1%				ICU Level of Service			C		
Analysis Period (min)			15									
c	Critical Lane Group											

# HCM Signalized Intersection Capacity Analysis

## 10: Highway 92 & Highway 1

6/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗	↖	↖	↗	↖	↖↗	↗	↖↗	↖↗	
Volume (vph)	13	38	56	244	35	94	78	583	445	395	665	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	0.97	0.95	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.99	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1839	1583	1681	1706	1583	1770	3539	1583	3433	3534	
Flt Permitted		0.93	1.00	0.58	0.73	1.00	0.28	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1732	1583	1026	1292	1583	522	3539	1583	3433	3534	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	14	41	61	265	38	102	85	634	484	429	723	7
RTOR Reduction (vph)	0	0	47	0	0	62	0	0	371	0	1	0
Lane Group Flow (vph)	0	55	14	151	152	40	85	634	113	429	729	0
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2			
Actuated Green, G (s)		14.0	14.0	23.5	23.5	23.5	24.5	14.0	14.0	10.5	14.0	
Effective Green, g (s)		14.0	14.0	23.5	23.5	23.5	24.5	14.0	14.0	10.5	14.0	
Actuated g/C Ratio		0.23	0.23	0.39	0.39	0.39	0.41	0.23	0.23	0.18	0.23	
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		404	369	461	543	620	431	825	369	600	824	
v/s Ratio Prot				c0.03	0.03		0.03	0.18		c0.12	c0.21	
v/s Ratio Perm		0.03	0.01	c0.10	0.08	0.03	0.05		0.07			
v/c Ratio		0.14	0.04	0.33	0.28	0.06	0.20	0.77	0.31	0.71	0.88	
Uniform Delay, d1		18.2	17.8	13.0	12.5	11.4	11.0	21.5	19.0	23.3	22.2	
Progression Factor		1.00	1.00	0.62	0.59	0.83	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.7	0.2	0.4	0.3	0.2	0.2	4.3	0.5	7.1	13.4	
Delay (s)		18.9	18.0	8.5	7.6	9.6	11.3	25.8	19.5	30.5	35.6	
Level of Service		B	B	A	A	A	B	C	B	C	D	
Approach Delay (s)		18.4			8.5			22.2			33.7	
Approach LOS		B			A			C			C	

### Intersection Summary

HCM 2000 Control Delay	24.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	52.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



# HCM Signalized Intersection Capacity Analysis

## 11: Highway 92 & Main Street

6/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	76	735	80	104	266	157	62	174	164	242	81	29
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1788	
Flt Permitted	0.41	1.00	1.00	0.29	1.00	1.00	0.46	1.00	1.00	0.64	1.00	
Satd. Flow (perm)	756	3539	1583	548	3539	1583	858	1863	1583	1189	1788	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	83	799	87	113	289	171	67	189	178	263	88	32
RTOR Reduction (vph)	0	0	63	0	0	123	0	0	131	0	20	0
Lane Group Flow (vph)	83	799	24	113	289	48	67	189	47	263	100	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	16.4	16.4	16.4	16.8	16.8	16.8	16.0	16.0	16.0	20.8	20.8	
Effective Green, g (s)	16.4	16.4	16.4	16.8	16.8	16.8	16.0	16.0	16.0	20.8	20.8	
Actuated g/C Ratio	0.27	0.27	0.27	0.28	0.28	0.28	0.27	0.27	0.27	0.35	0.35	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	253	967	432	218	990	443	283	496	422	493	619	
v/s Ratio Prot	0.02	c0.23		c0.03	0.08		0.01	c0.10		c0.07	0.06	
v/s Ratio Perm	0.07		0.02	0.12		0.03	0.05		0.03	c0.11		
v/c Ratio	0.33	0.83	0.06	0.52	0.29	0.11	0.24	0.38	0.11	0.53	0.16	
Uniform Delay, d1	16.8	20.5	16.1	20.9	16.9	16.0	16.9	18.0	16.6	16.4	13.6	
Progression Factor	1.21	1.25	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.6	6.2	0.2	2.1	0.2	0.1	0.4	2.2	0.5	1.1	0.1	
Delay (s)	23.0	31.8	16.3	23.0	17.1	16.1	17.3	20.2	17.2	17.6	13.7	
Level of Service	C	C	B	C	B	B	B	C	B	B	B	
Approach Delay (s)		29.7			18.0			18.5			16.3	
Approach LOS		C			B			B			B	

### Intersection Summary

HCM 2000 Control Delay	22.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	62.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

## HCM Unsignalized Intersection Capacity Analysis

### 1: Prospect & Capistrano (N)

6/30/2014












Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	25	265	191	36	32	40
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	27	288	208	39	35	43
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	511	57	78			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	511	57	78			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	94	71	86			
cM capacity (veh/h)	451	1010	1520			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	315	247	78			
Volume Left	27	208	0			
Volume Right	288	0	43			
cSH	913	1520	1700			
Volume to Capacity	0.35	0.14	0.05			
Queue Length 95th (ft)	39	12	0			
Control Delay (s)	11.0	6.7	0.0			
Lane LOS	B	A				
Approach Delay (s)	11.0	6.7	0.0			
Approach LOS	B					
<b>Intersection Summary</b>						
Average Delay			8.0			
Intersection Capacity Utilization			43.6%	ICU Level of Service		A
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 2: Prospect & Broadway

















6/30/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	41	188	2	47	242	2
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	45	204	2	51	263	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	556	28			53	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	556	28			53	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	80			83	
cM capacity (veh/h)	409	1048			1552	
<b>Direction, Lane #</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	249	53	265			
Volume Left	45	0	263			
Volume Right	204	51	0			
cSH	818	1700	1552			
Volume to Capacity	0.30	0.03	0.17			
Queue Length 95th (ft)	32	0	15			
Control Delay (s)	11.3	0.0	7.7			
Lane LOS	B		A			
Approach Delay (s)	11.3	0.0	7.7			
Approach LOS	B					
<b>Intersection Summary</b>						
Average Delay			8.6			
Intersection Capacity Utilization			40.7%		ICU Level of Service	A
Analysis Period (min)			15			

### HCM Unsignalized Intersection Capacity Analysis

#### 3: Airport & Stannford/Cornell

6/30/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	13	4	3	3	110	1	38	4	76	110	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	14	4	3	3	120	1	41	4	83	120	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	453	334	121	343	334	43	123			46		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	453	334	121	343	334	43	123			46		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	97	100	99	99	88	100			95		
cM capacity (veh/h)	436	555	930	572	555	1027	1464			1562		
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>								
Volume Total	29	126	47	205								
Volume Left	11	3	1	83								
Volume Right	4	120	4	3								
cSH	533	985	1464	1562								
Volume to Capacity	0.06	0.13	0.00	0.05								
Queue Length 95th (ft)	4	11	0	4								
Control Delay (s)	12.2	9.2	0.2	3.2								
Lane LOS	B	A	A	A								
Approach Delay (s)	12.2	9.2	0.2	3.2								
Approach LOS	B	A										
<b>Intersection Summary</b>												
Average Delay			5.4									
Intersection Capacity Utilization			30.7%		ICU Level of Service				A			
Analysis Period (min)			15									

## HCM Unsignalized Intersection Capacity Analysis

### 4: Airport & La Granada

6/30/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	9	50	74	121	68	39
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	54	80	132	74	42
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	388	95	116			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	388	95	116			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	94	95			
cM capacity (veh/h)	582	962	1472			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	64	212	116			
Volume Left	10	80	0			
Volume Right	54	0	42			
cSH	875	1472	1700			
Volume to Capacity	0.07	0.05	0.07			
Queue Length 95th (ft)	6	4	0			
Control Delay (s)	9.4	3.2	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.4	3.2	0.0			
Approach LOS	A					
<b>Intersection Summary</b>						
Average Delay			3.2			
Intersection Capacity Utilization			27.4%		ICU Level of Service	A
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 5: Airport & Los Banos

6/30/2014





















Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	14	11	8	116	88	20
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	15	12	9	126	96	22
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	250	107	117			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	250	107	117			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	99	99			
cM capacity (veh/h)	734	948	1471			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	27	135	117			
Volume Left	15	9	0			
Volume Right	12	0	22			
cSH	815	1471	1700			
Volume to Capacity	0.03	0.01	0.07			
Queue Length 95th (ft)	3	0	0			
Control Delay (s)	9.6	0.5	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.6	0.5	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			1.2			
Intersection Capacity Utilization		22.7%		ICU Level of Service		A
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 6: Highway 1 & Cypress

6/30/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	107	12	16	4	6	5	36	609	7	9	627	90
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	116	13	17	4	7	5	39	662	8	10	682	98
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1499	1498	730	1469	1543	666	779			670		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1499	1498	730	1469	1543	666	779			670		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	89	96	95	94	99	95			99		
cM capacity (veh/h)	91	115	422	88	108	460	838			921		
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>	<b>NB 2</b>	<b>SB 1</b>	<b>SB 2</b>						
Volume Total	147	16	39	670	10	779						
Volume Left	116	4	39	0	10	0						
Volume Right	17	5	0	8	0	98						
cSH	102	135	838	1700	921	1700						
Volume to Capacity	1.44	0.12	0.05	0.39	0.01	0.46						
Queue Length 95th (ft)	268	10	4	0	1	0						
Control Delay (s)	318.4	35.4	9.5	0.0	9.0	0.0						
Lane LOS	F	E	A		A							
Approach Delay (s)	318.4	35.4	0.5		0.1							
Approach LOS	F	E										
<b>Intersection Summary</b>												
Average Delay			28.8									
Intersection Capacity Utilization			59.3%		ICU Level of Service					B		
Analysis Period (min)			15									

## HCM Unsignalized Intersection Capacity Analysis 7: Highway 1 & Capistrano (N)

6/30/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	24	12	9	653	644	45
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	26	13	10	710	700	49
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1074	700	700			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1074	700	700			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	88	97	99			
cM capacity (veh/h)	212	382	893			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	26	13	10	355	355	700	49
Volume Left	26	0	10	0	0	0	0
Volume Right	0	13	0	0	0	0	49
cSH	212	382	893	1700	1700	1700	1700
Volume to Capacity	0.12	0.03	0.01	0.21	0.21	0.41	0.03
Queue Length 95th (ft)	10	3	1	0	0	0	0
Control Delay (s)	24.3	14.8	9.1	0.0	0.0	0.0	0.0
Lane LOS	C	B	A				
Approach Delay (s)	21.1		0.1	0.0			
Approach LOS	C						

Intersection Summary							
Average Delay			0.6				
Intersection Capacity Utilization			43.9%	ICU Level of Service	A		
Analysis Period (min)			15				



### HCM Signalized Intersection Capacity Analysis

#### 8: Capistrano (S) & Highway 1

6/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕		↗	↕	↗
Volume (vph)	55	90	215	37	69	99	216	575	60	140	460	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00		0.97	0.95		1.00	0.95	1.00
Frt		1.00	0.85		0.93		1.00	0.99		1.00	1.00	0.85
Flt Protected		0.98	1.00		0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1828	1583		1725		3433	3489		1770	3539	1583
Flt Permitted		0.81	1.00		0.92		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1510	1583		1603		3433	3489		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	60	98	234	40	75	108	235	625	65	152	500	23
RTOR Reduction (vph)	0	0	81	0	39	0	0	7	0	0	0	15
Lane Group Flow (vph)	0	158	153	0	184	0	235	683	0	152	500	8
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								6
Actuated Green, G (s)		12.4	22.3		12.4		9.9	20.3		8.7	19.1	19.1
Effective Green, g (s)		12.4	22.3		12.4		9.9	20.3		8.7	19.1	19.1
Actuated g/C Ratio		0.23	0.42		0.23		0.19	0.38		0.16	0.36	0.36
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		350	779		372		636	1326		288	1265	566
v/s Ratio Prot			0.04				0.07	c0.20		c0.09	0.14	
v/s Ratio Perm		0.10	0.06		c0.11							0.01
v/c Ratio		0.45	0.20		0.49		0.37	0.51		0.53	0.40	0.01
Uniform Delay, d1		17.6	9.9		17.8		19.0	12.8		20.5	12.8	11.1
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.9	0.1		1.0		0.4	0.3		1.7	0.2	0.0
Delay (s)		18.5	10.0		18.8		19.4	13.1		22.2	13.0	11.1
Level of Service		B	A		B		B	B		C	B	B
Approach Delay (s)		13.4			18.8			14.7			15.0	
Approach LOS		B			B			B			B	























#### Intersection Summary

HCM 2000 Control Delay	15.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	53.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

## HCM Signalized Intersection Capacity Analysis

### 9: Highway 1 & Main Street
























6/30/2014

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Volume (vph)	174	58	55	50	78	538	72	730	38	285	719	145	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0		
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95		
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	0.97		
Flt Protected		0.96	1.00		0.98	1.00	0.95	1.00		0.95	1.00		
Satd. Flow (prot)		1795	1583		1827	1583	1770	3513		1770	3450		
Flt Permitted		0.96	1.00		0.98	1.00	0.95	1.00		0.95	1.00		
Satd. Flow (perm)		1795	1583		1827	1583	1770	3513		1770	3450		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	189	63	60	54	85	585	78	793	41	310	782	158	
RTOR Reduction (vph)	0	0	46	0	0	85	0	4	0	0	17	0	
Lane Group Flow (vph)	0	252	14	0	139	500	78	830	0	310	923	0	
Turn Type	Split	NA	pm+ov	Split	NA	pm+ov	Prot	NA		Prot	NA		
Protected Phases	4	4	5	8	8	1	5	2		1	6		
Permitted Phases			4			8							
Actuated Green, G (s)		15.2	21.6		12.0	32.9	6.4	25.9		20.9	40.4		
Effective Green, g (s)		15.2	21.6		12.0	32.9	6.4	25.9		20.9	40.4		
Actuated g/C Ratio		0.17	0.24		0.13	0.37	0.07	0.29		0.23	0.45		
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0		
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0		
Lane Grp Cap (vph)		303	379		243	649	125	1010		411	1548		
v/s Ratio Prot		c0.14	0.00		0.08	c0.18	0.04	c0.24		0.18	0.27		
v/s Ratio Perm			0.01			0.14							
v/c Ratio		0.83	0.04		0.57	0.77	0.62	0.82		0.75	0.60		
Uniform Delay, d1		36.2	26.2		36.6	25.2	40.6	29.9		32.2	18.7		
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		
Incremental Delay, d2		17.4	0.0		3.2	5.6	9.3	7.5		7.7	1.7		
Delay (s)		53.5	26.3		39.8	30.8	50.0	37.4		39.8	20.4		
Level of Service		D	C		D	C	D	D		D	C		
Approach Delay (s)		48.3			32.6			38.5			25.2		
Approach LOS		D			C			D			C		
<b>Intersection Summary</b>													
HCM 2000 Control Delay			32.9									HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.84										
Actuated Cycle Length (s)			90.0									Sum of lost time (s)	16.0
Intersection Capacity Utilization			77.4%									ICU Level of Service	D
Analysis Period (min)			15										
c	Critical Lane Group												

### HCM Signalized Intersection Capacity Analysis

#### 10: Highway 92 & Highway 1

6/30/2014

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations														
Volume (vph)	41	21	156	515	90	112	125	707	273	201	650	10		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor		1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	0.97	0.95			
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00			
Flt Protected		0.97	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00			
Satd. Flow (prot)		1803	1583	1681	1709	1583	1770	3539	1583	3433	3531			
Flt Permitted		0.93	1.00	0.58	0.73	1.00	0.28	1.00	1.00	0.95	1.00			
Satd. Flow (perm)		1732	1583	1026	1292	1583	522	3539	1583	3433	3531			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	45	23	170	560	98	122	136	768	297	218	707	11		
RTOR Reduction (vph)	0	0	130	0	0	71	0	0	228	0	1	0		
Lane Group Flow (vph)	0	68	40	325	333	51	136	768	69	218	717	0		
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA			
Protected Phases		4		3	8		5	2		1	6			
Permitted Phases	4		4	8		8	2		2					
Actuated Green, G (s)		14.0	14.0	25.2	25.2	25.2	14.0	14.0	14.0	8.8	20.8			
Effective Green, g (s)		14.0	14.0	25.2	25.2	25.2	14.0	14.0	14.0	8.8	20.8			
Actuated g/C Ratio		0.23	0.23	0.42	0.42	0.42	0.23	0.23	0.23	0.15	0.35			
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)		404	369	509	592	664	163	825	369	503	1224			
v/s Ratio Prot				c0.08	0.07		0.03	c0.22		0.06	c0.20			
v/s Ratio Perm		0.04	0.03	c0.19	0.17	0.03	0.17		0.04					
v/c Ratio		0.17	0.11	0.64	0.56	0.08	0.83	0.93	0.19	0.43	0.59			
Uniform Delay, d1		18.4	18.1	14.8	13.2	10.4	22.4	22.5	18.4	23.3	16.1			
Progression Factor		1.00	1.00	0.66	0.61	1.28	1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2		0.9	0.6	2.2	1.0	0.2	29.1	16.9	0.2	2.7	2.1			
Delay (s)		19.3	18.7	12.0	9.1	13.5	51.6	39.4	18.7	26.0	18.1			
Level of Service		B	B	B	A	B	D	D	B	C	B			
Approach Delay (s)		18.8			11.0			35.7			20.0			
Approach LOS		B			B			D			B			
<b>Intersection Summary</b>														
HCM 2000 Control Delay			23.6									HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio			0.78											
Actuated Cycle Length (s)			60.0								16.0		Sum of lost time (s)	
Intersection Capacity Utilization			58.6%										ICU Level of Service	B
Analysis Period (min)			15											
c	Critical Lane Group													

# HCM Signalized Intersection Capacity Analysis

## 11: Highway 92 & Main Street

6/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	339	104	172	552	426	109	209	118	212	157	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1784	
Flt Permitted	0.33	1.00	1.00	0.53	1.00	1.00	0.36	1.00	1.00	0.62	1.00	
Satd. Flow (perm)	621	3539	1583	992	3539	1583	665	1863	1583	1149	1784	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	42	368	113	187	600	463	118	227	128	230	171	67
RTOR Reduction (vph)	0	0	84	0	0	340	0	0	94	0	23	0
Lane Group Flow (vph)	42	368	29	187	600	123	118	227	34	230	215	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	15.2	15.2	15.2	16.0	16.0	16.0	16.0	16.0	16.0	20.0	20.0	
Effective Green, g (s)	15.2	15.2	15.2	16.0	16.0	16.0	16.0	16.0	16.0	20.0	20.0	
Actuated g/C Ratio	0.25	0.25	0.25	0.27	0.27	0.27	0.27	0.27	0.27	0.33	0.33	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	218	896	401	316	943	422	265	496	422	474	594	
v/s Ratio Prot	0.01	c0.10		0.04	c0.17		0.04	c0.12		c0.07	0.12	
v/s Ratio Perm	0.04		0.02	0.12		0.08	0.08		0.02	0.09		
v/c Ratio	0.19	0.41	0.07	0.59	0.64	0.29	0.45	0.46	0.08	0.49	0.36	
Uniform Delay, d1	17.7	18.7	17.0	19.9	19.4	17.5	17.6	18.4	16.5	16.7	15.2	
Progression Factor	1.16	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.8	1.3	0.3	3.0	1.4	0.4	1.2	3.0	0.4	0.8	1.7	
Delay (s)	22.2	23.6	17.3	22.8	20.8	17.9	18.8	21.4	16.9	17.5	16.9	
Level of Service	C	C	B	C	C	B	B	C	B	B	B	
Approach Delay (s)		22.1			20.0			19.5			17.2	
Approach LOS		C			C			B			B	



















### Intersection Summary

HCM 2000 Control Delay	19.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

# HCM Unsignalized Intersection Capacity Analysis

## 6: Highway 1 & Cypress

7/1/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	47	5	34	10	6	4	36	694	4	3	839	74
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	51	5	37	11	7	4	39	754	4	3	912	80
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1799	1796	952	1793	1834	757	992			759		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1799	1796	952	1793	1834	757	992			759		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	6	93	88	78	91	99	94			100		
cM capacity (veh/h)	54	76	315	50	72	408	697			853		
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>	<b>NB 2</b>	<b>SB 1</b>	<b>SB 2</b>						
Volume Total	93	22	39	759	3	992						
Volume Left	51	11	39	0	3	0						
Volume Right	37	4	0	4	0	80						
cSH	83	68	697	1700	853	1700						
Volume to Capacity	1.13	0.32	0.06	0.45	0.00	0.58						
Queue Length 95th (ft)	165	29	4	0	0	0						
Control Delay (s)	228.4	81.2	10.5	0.0	9.2	0.0						
Lane LOS	F	F	B		A							
Approach Delay (s)	228.4	81.2	0.5		0.0							
Approach LOS	F	F										
<b>Intersection Summary</b>												
Average Delay			12.3									
Intersection Capacity Utilization			61.7%		ICU Level of Service					B		
Analysis Period (min)			15									

## HCM Unsignalized Intersection Capacity Analysis

### 7: Highway 1 & Capistrano (N)

7/1/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	35	41	16	685	845	57
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	38	45	17	745	918	62
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1326	918	918			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1326	918	918			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	74	84	98			
cM capacity (veh/h)	144	274	739			

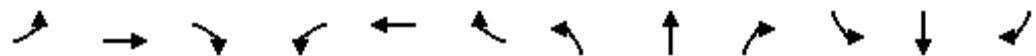
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	38	45	17	372	372	918	62
Volume Left	38	0	17	0	0	0	0
Volume Right	0	45	0	0	0	0	62
cSH	144	274	739	1700	1700	1700	1700
Volume to Capacity	0.26	0.16	0.02	0.22	0.22	0.54	0.04
Queue Length 95th (ft)	25	14	2	0	0	0	0
Control Delay (s)	38.9	20.7	10.0	0.0	0.0	0.0	0.0
Lane LOS	E	C	A				
Approach Delay (s)	29.1		0.2	0.0			
Approach LOS	D						

Intersection Summary			
Average Delay		1.4	
Intersection Capacity Utilization	54.5%		ICU Level of Service A
Analysis Period (min)	15		

# HCM Signalized Intersection Capacity Analysis

## 8: Capistrano (S) & Highway 1

7/1/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕		↗	↕	↗
Volume (vph)	108	139	304	9	97	83	292	447	35	245	481	126
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00		0.97	0.95		1.00	0.95	1.00
Frt		1.00	0.85		0.94		1.00	0.99		1.00	1.00	0.85
Flt Protected		0.98	1.00		1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1823	1583		1748		3433	3501		1770	3539	1583
Flt Permitted		0.76	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1421	1583		1721		3433	3501		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	117	151	330	10	105	90	317	486	38	266	523	137
RTOR Reduction (vph)	0	0	63	0	30	0	0	6	0	0	0	95
Lane Group Flow (vph)	0	268	267	0	175	0	317	518	0	266	523	42
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								6
Actuated Green, G (s)		18.7	31.1		18.7		12.4	16.4		15.3	19.3	19.3
Effective Green, g (s)		18.7	31.1		18.7		12.4	16.4		15.3	19.3	19.3
Actuated g/C Ratio		0.30	0.50		0.30		0.20	0.26		0.25	0.31	0.31
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		425	890		515		682	920		433	1094	489
v/s Ratio Prot			0.06				0.09	c0.15		c0.15	c0.15	
v/s Ratio Perm		c0.19	0.11		0.10							0.03
v/c Ratio		0.63	0.30		0.34		0.46	0.56		0.61	0.48	0.09
Uniform Delay, d1		18.9	9.2		17.0		22.1	19.9		20.9	17.5	15.3
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		3.0	0.2		0.4		0.5	0.8		2.6	0.3	0.1
Delay (s)		21.9	9.4		17.4		22.6	20.7		23.5	17.8	15.4
Level of Service		C	A		B		C	C		C	B	B
Approach Delay (s)		15.0			17.4			21.4			19.1	
Approach LOS		B			B			C			B	

### Intersection Summary

HCM 2000 Control Delay	18.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	62.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

# HCM Signalized Intersection Capacity Analysis

## 9: Highway 1 & Main Street

7/1/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↗		↗	↕↗	
Volume (vph)	133	58	104	51	63	263	79	825	54	305	916	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	0.98	
Flt Protected		0.97	1.00		0.98	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1800	1583		1822	1583	1770	3506		1770	3464	
Flt Permitted		0.97	1.00		0.98	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1800	1583		1822	1583	1770	3506		1770	3464	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	145	63	113	55	68	286	86	897	59	332	996	165
RTOR Reduction (vph)	0	0	85	0	0	117	0	5	0	0	14	0
Lane Group Flow (vph)	0	208	28	0	123	169	86	951	0	332	1147	0
Turn Type	Split	NA	pm+ov	Split	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	4	4	5	8	8	1	5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)		14.2	22.5		11.3	32.6	8.3	27.2		21.3	40.2	
Effective Green, g (s)		14.2	22.5		11.3	32.6	8.3	27.2		21.3	40.2	
Actuated g/C Ratio		0.16	0.25		0.13	0.36	0.09	0.30		0.24	0.45	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		284	395		228	643	163	1059		418	1547	
v/s Ratio Prot		c0.12	0.01		c0.07	0.06	0.05	c0.27		c0.19	0.33	
v/s Ratio Perm			0.01			0.04						
v/c Ratio		0.73	0.07		0.54	0.26	0.53	0.90		0.79	0.74	
Uniform Delay, d1		36.1	25.8		36.9	20.2	39.0	30.1		32.3	20.6	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		9.4	0.1		2.4	0.2	3.1	11.9		10.0	3.2	
Delay (s)		45.5	25.9		39.4	20.4	42.0	42.0		42.3	23.8	
Level of Service		D	C		D	C	D	D		D	C	
Approach Delay (s)		38.6			26.1			42.0			27.9	
Approach LOS		D			C			D			C	

### Intersection Summary

HCM 2000 Control Delay	33.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	68.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



### HCM Signalized Intersection Capacity Analysis

#### 10: Highway 92 & Highway 1

7/1/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↕	↕	↕	↕	↕	↕↕	↕	↕↕	↕↕	
Volume (vph)	34	36	149	624	74	301	107	613	404	309	751	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	0.97	0.95	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected		0.98	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1818	1583	1681	1702	1583	1770	3539	1583	3433	3520	
Flt Permitted		0.93	1.00	0.58	0.73	1.00	0.28	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1732	1583	1026	1292	1583	522	3539	1583	3433	3520	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	37	39	162	678	80	327	116	666	439	336	816	30
RTOR Reduction (vph)	0	0	124	0	0	88	0	0	337	0	5	0
Lane Group Flow (vph)	0	76	38	373	385	239	116	666	102	336	841	0
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2			
Actuated Green, G (s)		14.0	14.0	26.3	26.3	26.3	21.7	14.0	14.0	7.7	14.0	
Effective Green, g (s)		14.0	14.0	26.3	26.3	26.3	21.7	14.0	14.0	7.7	14.0	
Actuated g/C Ratio		0.23	0.23	0.44	0.44	0.44	0.36	0.23	0.23	0.13	0.23	
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		404	369	540	623	693	348	825	369	440	821	
v/s Ratio Prot				c0.10	0.09		0.04	0.19		c0.10	c0.24	
v/s Ratio Perm		0.04	0.02	c0.21	0.19	0.15	0.08		0.06			
v/c Ratio		0.19	0.10	0.69	0.62	0.35	0.33	0.81	0.28	0.76	1.02	
Uniform Delay, d1		18.4	18.1	14.7	13.0	11.2	13.1	21.7	18.9	25.3	23.0	
Progression Factor		1.00	1.00	0.65	0.59	0.50	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		1.0	0.6	2.6	1.2	0.9	0.6	5.8	0.4	11.9	37.9	
Delay (s)		19.5	18.6	12.0	8.9	6.4	13.6	27.5	19.3	37.2	60.9	
Level of Service		B	B	B	A	A	B	C	B	D	E	
Approach Delay (s)		18.9			9.2			23.3			54.1	
Approach LOS		B			A			C			D	

#### Intersection Summary

HCM 2000 Control Delay	28.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

# HCM Signalized Intersection Capacity Analysis

## 11: Highway 92 & Main Street

7/1/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	42	536	88	168	742	160	136	149	130	208	153	57
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1787	
Flt Permitted	0.33	1.00	1.00	0.43	1.00	1.00	0.36	1.00	1.00	0.65	1.00	
Satd. Flow (perm)	621	3539	1583	805	3539	1583	665	1863	1583	1219	1787	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	46	583	96	183	807	174	148	162	141	226	166	62
RTOR Reduction (vph)	0	0	69	0	0	128	0	0	103	0	22	0
Lane Group Flow (vph)	46	583	27	183	807	46	148	162	38	226	206	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	16.8	16.8	16.8	16.0	16.0	16.0	16.0	16.0	16.0	18.4	18.4	
Effective Green, g (s)	16.8	16.8	16.8	16.0	16.0	16.0	16.0	16.0	16.0	18.4	18.4	
Actuated g/C Ratio	0.28	0.28	0.28	0.27	0.27	0.27	0.27	0.27	0.27	0.31	0.31	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	265	990	443	279	943	422	265	496	422	439	548	
v/s Ratio Prot	0.01	c0.16		0.04	c0.23		c0.04	0.09		c0.06	0.12	
v/s Ratio Perm	0.03		0.02	0.13		0.03	c0.10		0.02	0.10		
v/c Ratio	0.17	0.59	0.06	0.66	0.86	0.11	0.56	0.33	0.09	0.51	0.38	
Uniform Delay, d1	16.5	18.6	15.8	20.6	20.9	16.6	17.9	17.7	16.5	17.7	16.3	
Progression Factor	1.11	1.17	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.1	1.9	0.2	5.5	7.7	0.1	2.5	1.8	0.4	1.0	0.4	
Delay (s)	19.4	23.7	16.0	26.1	28.6	16.7	20.5	19.4	16.9	18.7	16.7	
Level of Service	B	C	B	C	C	B	C	B	B	B	B	
Approach Delay (s)		22.4			26.4			19.0			17.7	
Approach LOS		C			C			B			B	

Intersection Summary		
HCM 2000 Control Delay	22.8	HCM 2000 Level of Service C
HCM 2000 Volume to Capacity ratio	0.69	
Actuated Cycle Length (s)	60.0	Sum of lost time (s) 16.0
Intersection Capacity Utilization	56.8%	ICU Level of Service B
Analysis Period (min)	15	
c Critical Lane Group		

## HCM Unsignalized Intersection Capacity Analysis

### 1: Prospect & Capistrano (N)

5/30/2014












Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	12	154	145	6	9	31
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	167	158	7	10	34
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	348	27	43			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	348	27	43			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	84	90			
cM capacity (veh/h)	583	1049	1565			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	180	164	43			
Volume Left	13	158	0			
Volume Right	167	0	34			
cSH	992	1565	1700			
Volume to Capacity	0.18	0.10	0.03			
Queue Length 95th (ft)	17	8	0			
Control Delay (s)	9.4	7.3	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.4	7.3	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			7.5			
Intersection Capacity Utilization		31.9%		ICU Level of Service		A
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 2: Prospect & Broadway

















5/30/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	49	124	0	19	145	1
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	53	135	0	21	158	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	327	10			21	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	327	10			21	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	87			90	
cM capacity (veh/h)	602	1071			1595	
<b>Direction, Lane #</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	188	21	159			
Volume Left	53	0	158			
Volume Right	135	21	0			
cSH	877	1700	1595			
Volume to Capacity	0.21	0.01	0.10			
Queue Length 95th (ft)	20	0	8			
Control Delay (s)	10.2	0.0	7.5			
Lane LOS	B		A			
Approach Delay (s)	10.2	0.0	7.5			
Approach LOS	B					
<b>Intersection Summary</b>						
Average Delay			8.5			
Intersection Capacity Utilization			31.8%		ICU Level of Service	A
Analysis Period (min)			15			

### HCM Unsignalized Intersection Capacity Analysis

#### 3: Airport & Stannford/Cornell

5/30/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	8	5	0	4	5	37	2	12	1	86	69	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	5	0	4	5	40	2	13	1	93	75	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	326	284	78	286	286	14	82			14		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	326	284	78	286	286	14	82			14		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	99	100	99	99	96	100			94		
cM capacity (veh/h)	572	588	982	632	586	1066	1516			1604		
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>								
Volume Total	14	50	16	175								
Volume Left	9	4	2	93								
Volume Right	0	40	1	7								
cSH	578	928	1516	1604								
Volume to Capacity	0.02	0.05	0.00	0.06								
Queue Length 95th (ft)	2	4	0	5								
Control Delay (s)	11.4	9.1	1.0	4.2								
Lane LOS	B	A	A	A								
Approach Delay (s)	11.4	9.1	1.0	4.2								
Approach LOS	B	A										
<b>Intersection Summary</b>												
Average Delay			5.3									
Intersection Capacity Utilization			25.4%		ICU Level of Service					A		
Analysis Period (min)			15									

## HCM Unsignalized Intersection Capacity Analysis

### 4: Airport & La Granada

5/30/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	37	125	45	23	17	11
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	40	136	49	25	18	12
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	147	24	30			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	147	24	30			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	95	87	97			
cM capacity (veh/h)	819	1052	1582			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	176	74	30			
Volume Left	40	49	0			
Volume Right	136	0	12			
cSH	988	1582	1700			
Volume to Capacity	0.18	0.03	0.02			
Queue Length 95th (ft)	16	2	0			
Control Delay (s)	9.4	4.9	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.4	4.9	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			7.2			
Intersection Capacity Utilization			26.8%	ICU Level of Service	A	
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 5: Airport & Los Banos

5/30/2014





















Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	22	4	4	49	31	10
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	24	4	4	53	34	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	101	39	45			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	101	39	45			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	100	100			
cM capacity (veh/h)	895	1032	1564			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	28	58	45			
Volume Left	24	4	0			
Volume Right	4	0	11			
cSH	914	1564	1700			
Volume to Capacity	0.03	0.00	0.03			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	9.1	0.6	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.1	0.6	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			2.2			
Intersection Capacity Utilization		15.9%		ICU Level of Service		A
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 6: Highway 1 & Cypress

5/30/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	64	2	19	15	1	7	16	509	6	5	518	37
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	70	2	21	16	1	8	17	553	7	5	563	40
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1190	1189	583	1187	1205	557	603			560		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1190	1189	583	1187	1205	557	603			560		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	56	99	96	89	99	99	98			99		
cM capacity (veh/h)	158	184	512	154	179	530	974			1011		
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>	<b>NB 2</b>	<b>SB 1</b>	<b>SB 2</b>						
Volume Total	92	25	17	560	5	603						
Volume Left	70	16	17	0	5	0						
Volume Right	21	8	0	7	0	40						
cSH	188	198	974	1700	1011	1700						
Volume to Capacity	0.49	0.13	0.02	0.33	0.01	0.35						
Queue Length 95th (ft)	60	11	1	0	0	0						
Control Delay (s)	41.3	25.7	8.8	0.0	8.6	0.0						
Lane LOS	E	D	A		A							
Approach Delay (s)	41.3	25.7	0.3		0.1							
Approach LOS	E	D										
<b>Intersection Summary</b>												
Average Delay			3.6									
Intersection Capacity Utilization			42.1%		ICU Level of Service					A		
Analysis Period (min)			15									



## HCM Unsignalized Intersection Capacity Analysis

### 7: Highway 1 & Capistrano (N)

5/30/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	7	3	2	526	567	15
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	3	2	572	616	16
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	907	616	616			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	907	616	616			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	99	100			
cM capacity (veh/h)	275	433	960			

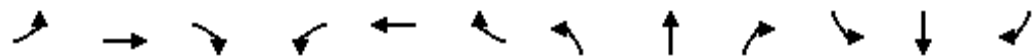
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	8	3	2	286	286	616	16
Volume Left	8	0	2	0	0	0	0
Volume Right	0	3	0	0	0	0	16
cSH	275	433	960	1700	1700	1700	1700
Volume to Capacity	0.03	0.01	0.00	0.17	0.17	0.36	0.01
Queue Length 95th (ft)	2	1	0	0	0	0	0
Control Delay (s)	18.5	13.4	8.8	0.0	0.0	0.0	0.0
Lane LOS	C	B	A				
Approach Delay (s)	16.9		0.0	0.0			
Approach LOS	C						

Intersection Summary			
Average Delay		0.2	
Intersection Capacity Utilization	39.8%	ICU Level of Service	A
Analysis Period (min)	15		

### HCM Signalized Intersection Capacity Analysis

#### 8: Capistrano (S) & Highway 1

5/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕		↗	↕	↗
Volume (vph)	12	63	116	87	84	152	135	343	38	52	447	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00		0.97	0.95		1.00	0.95	1.00
Frt		1.00	0.85		0.94		1.00	0.99		1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1848	1583		1721		3433	3487		1770	3539	1583
Flt Permitted		0.93	1.00		0.89		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1735	1583		1558		3433	3487		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	68	126	95	91	165	147	373	41	57	486	13
RTOR Reduction (vph)	0	0	67	0	33	0	0	8	0	0	0	9
Lane Group Flow (vph)	0	81	59	0	318	0	147	406	0	57	486	4
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								6
Actuated Green, G (s)		16.4	24.6		16.4		8.2	19.7		4.5	16.0	16.0
Effective Green, g (s)		16.4	24.6		16.4		8.2	19.7		4.5	16.0	16.0
Actuated g/C Ratio		0.31	0.47		0.31		0.16	0.37		0.09	0.30	0.30
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		540	860		485		535	1305		151	1076	481
v/s Ratio Prot			0.01				0.04	c0.12		c0.03	c0.14	
v/s Ratio Perm		0.05	0.03		c0.20							0.00
v/c Ratio		0.15	0.07		0.66		0.27	0.31		0.38	0.45	0.01
Uniform Delay, d1		13.1	7.7		15.7		19.6	11.6		22.7	14.8	12.8
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.1	0.0		3.2		0.3	0.1		1.6	0.3	0.0
Delay (s)		13.2	7.7		18.8		19.9	11.8		24.3	15.1	12.8
Level of Service		B	A		B		B	B		C	B	B
Approach Delay (s)		9.9			18.8			13.9			16.0	
Approach LOS		A			B			B			B	

#### Intersection Summary

HCM 2000 Control Delay	15.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	52.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

## HCM Signalized Intersection Capacity Analysis

### 9: Highway 1 & Main Street

5/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↗		↗	↕↗	
Volume (vph)	69	86	63	95	48	232	68	504	82	416	1044	138
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	0.98		1.00	0.98	
Flt Protected		0.98	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1822	1583		1803	1583	1770	3465		1770	3477	
Flt Permitted		0.98	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1822	1583		1803	1583	1770	3465		1770	3477	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	75	93	68	103	52	252	74	548	89	452	1135	150
RTOR Reduction (vph)	0	0	53	0	0	143	0	14	0	0	10	0
Lane Group Flow (vph)	0	168	15	0	155	109	74	623	0	452	1275	0
Turn Type	Split	NA	pm+ov	Split	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	4	4	5	8	8	1	5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)		13.0	19.2		12.6	38.9	6.2	22.1		26.3	42.2	
Effective Green, g (s)		13.0	19.2		12.6	38.9	6.2	22.1		26.3	42.2	
Actuated g/C Ratio		0.14	0.21		0.14	0.43	0.07	0.25		0.29	0.47	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		263	337		252	754	121	850		517	1630	
v/s Ratio Prot		c0.09	0.00		c0.09	0.04	0.04	0.18		c0.26	c0.37	
v/s Ratio Perm			0.01			0.03						
v/c Ratio		0.64	0.04		0.62	0.14	0.61	0.73		0.87	0.78	
Uniform Delay, d1		36.3	28.1		36.4	15.5	40.7	31.2		30.3	20.0	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		5.0	0.1		4.4	0.1	8.8	5.6		15.1	3.8	
Delay (s)		41.3	28.2		40.8	15.6	49.6	36.8		45.4	23.9	
Level of Service		D	C		D	B	D	D		D	C	
Approach Delay (s)		37.5			25.2			38.1			29.5	
Approach LOS		D			C			D			C	
























#### Intersection Summary

HCM 2000 Control Delay	31.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

### HCM Signalized Intersection Capacity Analysis

#### 10: Highway 92 & Highway 1

5/30/2014

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Volume (vph)	14	40	58	254	36	81	81	590	463	406	688	6	
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lane Util. Factor		1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	0.97	0.95		
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00		
Flt Protected		0.99	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00		
Satd. Flow (prot)		1839	1583	1681	1705	1583	1770	3539	1583	3433	3534		
Flt Permitted		0.93	1.00	0.58	0.73	1.00	0.28	1.00	1.00	0.95	1.00		
Satd. Flow (perm)		1732	1583	1026	1292	1583	522	3539	1583	3433	3534		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	15	43	63	276	39	88	88	641	503	441	748	7	
RTOR Reduction (vph)	0	0	48	0	0	54	0	0	386	0	1	0	
Lane Group Flow (vph)	0	58	15	157	158	34	88	641	117	441	754	0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA		
Protected Phases		4		3	8		5	2		1	6		
Permitted Phases	4		4	8		8	2		2				
Actuated Green, G (s)		14.0	14.0	23.5	23.5	23.5	24.5	14.0	14.0	10.5	14.0		
Effective Green, g (s)		14.0	14.0	23.5	23.5	23.5	24.5	14.0	14.0	10.5	14.0		
Actuated g/C Ratio		0.23	0.23	0.39	0.39	0.39	0.41	0.23	0.23	0.18	0.23		
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)		404	369	461	543	620	431	825	369	600	824		
v/s Ratio Prot				c0.03	0.03		0.04	0.18		c0.13	c0.21		
v/s Ratio Perm		0.03	0.01	c0.10	0.09	0.02	0.05		0.07				
v/c Ratio		0.14	0.04	0.34	0.29	0.06	0.20	0.78	0.32	0.73	0.92		
Uniform Delay, d1		18.2	17.8	13.1	12.5	11.3	11.1	21.5	19.0	23.4	22.4		
Progression Factor		1.00	1.00	0.63	0.60	0.78	1.00	1.00	1.00	1.00	1.00		
Incremental Delay, d2		0.7	0.2	0.4	0.3	0.2	0.2	4.6	0.5	7.8	16.5		
Delay (s)		19.0	18.0	8.7	7.9	9.0	11.3	26.2	19.5	31.2	38.9		
Level of Service		B	B	A	A	A	B	C	B	C	D		
Approach Delay (s)		18.5			8.4			22.4			36.1		
Approach LOS		B			A			C			D		
<b>Intersection Summary</b>													
HCM 2000 Control Delay			25.9		HCM 2000 Level of Service					C			
HCM 2000 Volume to Capacity ratio			0.64										
Actuated Cycle Length (s)			60.0		Sum of lost time (s)					16.0			
Intersection Capacity Utilization			53.6%		ICU Level of Service					A			
Analysis Period (min)			15										
c Critical Lane Group													

# HCM Signalized Intersection Capacity Analysis

## 11: Highway 92 & Main Street

5/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	79	759	83	108	260	147	62	174	164	239	81	29
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1788	
Flt Permitted	0.41	1.00	1.00	0.29	1.00	1.00	0.46	1.00	1.00	0.64	1.00	
Satd. Flow (perm)	760	3539	1583	548	3539	1583	858	1863	1583	1189	1788	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	86	825	90	117	283	160	67	189	178	260	88	32
RTOR Reduction (vph)	0	0	65	0	0	115	0	0	131	0	20	0
Lane Group Flow (vph)	86	825	25	117	283	45	67	189	47	260	100	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	16.4	16.4	16.4	16.8	16.8	16.8	16.0	16.0	16.0	20.8	20.8	
Effective Green, g (s)	16.4	16.4	16.4	16.8	16.8	16.8	16.0	16.0	16.0	20.8	20.8	
Actuated g/C Ratio	0.27	0.27	0.27	0.28	0.28	0.28	0.27	0.27	0.27	0.35	0.35	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	254	967	432	218	990	443	283	496	422	493	619	
v/s Ratio Prot	0.02	c0.23		c0.03	0.08		0.01	c0.10		c0.07	0.06	
v/s Ratio Perm	0.08		0.02	0.12		0.03	0.05		0.03	c0.11		
v/c Ratio	0.34	0.85	0.06	0.54	0.29	0.10	0.24	0.38	0.11	0.53	0.16	
Uniform Delay, d1	16.8	20.7	16.1	21.4	16.9	16.0	16.9	18.0	16.6	16.4	13.6	
Progression Factor	1.21	1.25	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.7	7.2	0.2	2.5	0.2	0.1	0.4	2.2	0.5	1.0	0.1	
Delay (s)	23.0	33.0	16.3	23.9	17.1	16.1	17.3	20.2	17.2	17.4	13.7	
Level of Service	C	C	B	C	B	B	B	C	B	B	B	
Approach Delay (s)		30.7			18.2			18.5			16.2	
Approach LOS		C			B			B			B	

### Intersection Summary

HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

## HCM Unsignalized Intersection Capacity Analysis

### 1: Prospect & Capistrano (N)

5/30/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	25	189	169	36	32	40
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	27	205	184	39	35	43
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	463	57	78			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	463	57	78			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	94	80	88			
cM capacity (veh/h)	490	1010	1520			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	233	223	78			
Volume Left	27	184	0			
Volume Right	205	0	43			
cSH	898	1520	1700			
Volume to Capacity	0.26	0.12	0.05			
Queue Length 95th (ft)	26	10	0			
Control Delay (s)	10.4	6.5	0.0			
Lane LOS	B	A				
Approach Delay (s)	10.4	6.5	0.0			
Approach LOS	B					
<b>Intersection Summary</b>						
Average Delay			7.3			
Intersection Capacity Utilization			37.6%	ICU Level of Service	A	
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 2: Prospect & Broadway

5/30/2014



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	42	165	2	48	165	2
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	46	179	2	52	179	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	389	28			54	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	389	28			54	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	83			88	
cM capacity (veh/h)	544	1047			1551	

















Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	225	54	182
Volume Left	46	0	179
Volume Right	179	52	0
cSH	881	1700	1551
Volume to Capacity	0.26	0.03	0.12
Queue Length 95th (ft)	25	0	10
Control Delay (s)	10.5	0.0	7.5
Lane LOS	B		A
Approach Delay (s)	10.5	0.0	7.5
Approach LOS	B		

Intersection Summary			
Average Delay		8.1	
Intersection Capacity Utilization		35.1%	ICU Level of Service
Analysis Period (min)		15	A

### HCM Unsignalized Intersection Capacity Analysis

#### 3: Airport & Stannford/Cornell

5/30/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	13	4	3	3	101	1	26	5	46	59	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	14	4	3	3	110	1	28	5	50	64	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	310	202	66	210	201	31	67			34		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	310	202	66	210	201	31	67			34		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	98	100	100	100	89	100			97		
cM capacity (veh/h)	558	672	998	714	673	1043	1534			1578		
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>								
Volume Total	29	116	35	117								
Volume Left	11	3	1	50								
Volume Right	4	110	5	3								
cSH	654	1014	1534	1578								
Volume to Capacity	0.04	0.11	0.00	0.03								
Queue Length 95th (ft)	4	10	0	2								
Control Delay (s)	10.8	9.0	0.2	3.3								
Lane LOS	B	A	A	A								
Approach Delay (s)	10.8	9.0	0.2	3.3								
Approach LOS	B	A										
<b>Intersection Summary</b>												
Average Delay			5.9									
Intersection Capacity Utilization			25.8%		ICU Level of Service				A			
Analysis Period (min)			15									



## HCM Unsignalized Intersection Capacity Analysis

### 4: Airport & La Granada

5/30/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			T	T	
Volume (veh/h)	9	51	74	54	49	39
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	55	80	59	53	42
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	294	74	96			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	294	74	96			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	94	95			
cM capacity (veh/h)	660	987	1498			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	65	139	96			
Volume Left	10	80	0			
Volume Right	55	0	42			
cSH	919	1498	1700			
Volume to Capacity	0.07	0.05	0.06			
Queue Length 95th (ft)	6	4	0			
Control Delay (s)	9.2	4.5	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.2	4.5	0.0			
Approach LOS	A					
<b>Intersection Summary</b>						
Average Delay			4.1			
Intersection Capacity Utilization			23.9%		ICU Level of Service	A
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 5: Airport & Los Banos

5/30/2014





















Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	14	10	7	51	70	20
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	15	11	8	55	76	22
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	158	87	98			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	158	87	98			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	99	99			
cM capacity (veh/h)	829	972	1495			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	26	63	98			
Volume Left	15	8	0			
Volume Right	11	0	22			
cSH	883	1495	1700			
Volume to Capacity	0.03	0.01	0.06			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	9.2	0.9	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.2	0.9	0.0			
Approach LOS	A					
<b>Intersection Summary</b>						
Average Delay			1.6			
Intersection Capacity Utilization			18.6%		ICU Level of Service	A
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 6: Highway 1 & Cypress

5/30/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	48	6	16	4	3	5	37	633	7	9	652	78
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	52	7	17	4	3	5	40	688	8	10	709	85
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1546	1547	751	1521	1585	692	793			696		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1546	1547	751	1521	1585	692	793			696		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	39	94	96	95	97	99	95			99		
cM capacity (veh/h)	86	108	411	85	102	444	828			900		
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>	<b>NB 2</b>	<b>SB 1</b>	<b>SB 2</b>						
Volume Total	76	13	40	696	10	793						
Volume Left	52	4	40	0	10	0						
Volume Right	17	5	0	8	0	85						
cSH	107	136	828	1700	900	1700						
Volume to Capacity	0.71	0.10	0.05	0.41	0.01	0.47						
Queue Length 95th (ft)	94	8	4	0	1	0						
Control Delay (s)	96.1	34.2	9.6	0.0	9.0	0.0						
Lane LOS	F	D	A		A							
Approach Delay (s)	96.1	34.2	0.5		0.1							
Approach LOS	F	D										
<b>Intersection Summary</b>												
Average Delay			5.1									
Intersection Capacity Utilization			53.3%		ICU Level of Service					A		
Analysis Period (min)			15									

## HCM Unsignalized Intersection Capacity Analysis

### 7: Highway 1 & Capistrano (N)

5/30/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↶	↷	↶	↷	↷	↶
Volume (veh/h)	24	12	9	679	670	47
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	26	13	10	738	728	51
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1117	728	728			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1117	728	728			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	87	96	99			
cM capacity (veh/h)	199	366	871			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	26	13	10	369	369	728	51
Volume Left	26	0	10	0	0	0	0
Volume Right	0	13	0	0	0	0	51
cSH	199	366	871	1700	1700	1700	1700
Volume to Capacity	0.13	0.04	0.01	0.22	0.22	0.43	0.03
Queue Length 95th (ft)	11	3	1	0	0	0	0
Control Delay (s)	25.8	15.2	9.2	0.0	0.0	0.0	0.0
Lane LOS	D	C	A				
Approach Delay (s)	22.3		0.1			0.0	
Approach LOS	C						

Intersection Summary			
Average Delay		0.6	
Intersection Capacity Utilization	45.3%		ICU Level of Service A
Analysis Period (min)	15		

### HCM Signalized Intersection Capacity Analysis

#### 8: Capistrano (S) & Highway 1

5/30/2014

























Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕		↗	↕	↗
Volume (vph)	55	75	152	37	65	99	206	598	62	146	478	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00		0.97	0.95		1.00	0.95	1.00
Frt		1.00	0.85		0.93		1.00	0.99		1.00	1.00	0.85
Flt Protected		0.98	1.00		0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1824	1583		1723		3433	3490		1770	3539	1583
Flt Permitted		0.79	1.00		0.92		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1463	1583		1603		3433	3490		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	60	82	165	40	71	108	224	650	67	159	520	24
RTOR Reduction (vph)	0	0	76	0	41	0	0	7	0	0	0	15
Lane Group Flow (vph)	0	142	89	0	178	0	224	710	0	159	520	9
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								6
Actuated Green, G (s)		12.3	22.1		12.3		9.8	21.5		9.0	20.7	20.7
Effective Green, g (s)		12.3	22.1		12.3		9.8	21.5		9.0	20.7	20.7
Actuated g/C Ratio		0.22	0.40		0.22		0.18	0.39		0.16	0.38	0.38
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		328	753		359		613	1369		290	1336	597
v/s Ratio Prot			0.02				0.07	c0.20		c0.09	0.15	
v/s Ratio Perm		0.10	0.03		c0.11							0.01
v/c Ratio		0.43	0.12		0.50		0.37	0.52		0.55	0.39	0.02
Uniform Delay, d1		18.3	10.2		18.5		19.8	12.7		21.0	12.4	10.7
Progression Factor		1.00	1.02		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.9	0.1		1.1		0.4	0.3		2.1	0.2	0.0
Delay (s)		19.2	10.5		19.6		20.1	13.0		23.2	12.6	10.7
Level of Service		B	B		B		C	B		C	B	B
Approach Delay (s)		14.5			19.6			14.7			14.9	
Approach LOS		B			B			B			B	

Intersection Summary		
HCM 2000 Control Delay	15.3	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.52	B
Actuated Cycle Length (s)	54.8	Sum of lost time (s)
Intersection Capacity Utilization	54.8%	12.0
Analysis Period (min)	15	ICU Level of Service
c Critical Lane Group		A

## HCM Signalized Intersection Capacity Analysis

### 9: Highway 1 & Main Street























5/30/2014

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations														
Volume (vph)	174	58	55	50	78	535	75	750	40	282	716	151		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0			
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95			
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	0.97			
Flt Protected		0.96	1.00		0.98	1.00	0.95	1.00		0.95	1.00			
Satd. Flow (prot)		1795	1583		1827	1583	1770	3513		1770	3447			
Flt Permitted		0.96	1.00		0.98	1.00	0.95	1.00		0.95	1.00			
Satd. Flow (perm)		1795	1583		1827	1583	1770	3513		1770	3447			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	189	63	60	54	85	582	82	815	43	307	778	164		
RTOR Reduction (vph)	0	0	46	0	0	85	0	4	0	0	18	0		
Lane Group Flow (vph)	0	252	14	0	139	497	82	854	0	307	924	0		
Turn Type	Split	NA	pm+ov	Split	NA	pm+ov	Prot	NA		Prot	NA			
Protected Phases	4	4	5	8	8	1	5	2		1	6			
Permitted Phases			4			8								
Actuated Green, G (s)		15.2	21.7		12.0	32.8	6.5	26.0		20.8	40.3			
Effective Green, g (s)		15.2	21.7		12.0	32.8	6.5	26.0		20.8	40.3			
Actuated g/C Ratio		0.17	0.24		0.13	0.36	0.07	0.29		0.23	0.45			
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0			
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0			
Lane Grp Cap (vph)		303	381		243	647	127	1014		409	1543			
v/s Ratio Prot		c0.14	0.00		0.08	c0.18	0.05	c0.24		0.17	0.27			
v/s Ratio Perm			0.01			0.14								
v/c Ratio		0.83	0.04		0.57	0.77	0.65	0.84		0.75	0.60			
Uniform Delay, d1		36.2	26.2		36.6	25.2	40.6	30.1		32.2	18.7			
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00			
Incremental Delay, d2		17.4	0.0		3.2	5.5	10.7	8.5		7.6	1.7			
Delay (s)		53.5	26.2		39.8	30.7	51.4	38.6		39.8	20.5			
Level of Service		D	C		D	C	D	D		D	C			
Approach Delay (s)		48.3			32.5			39.7			25.2			
Approach LOS		D			C			D			C			
<b>Intersection Summary</b>														
HCM 2000 Control Delay			33.3									HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio			0.85											
Actuated Cycle Length (s)			90.0								16.0			
Intersection Capacity Utilization			77.8%										ICU Level of Service	D
Analysis Period (min)			15											
c	Critical Lane Group													

### HCM Signalized Intersection Capacity Analysis

#### 10: Highway 92 & Highway 1

5/30/2014

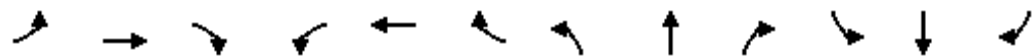
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	43	22	162	536	94	110	130	732	284	192	660	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	0.97	0.95	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.97	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1803	1583	1681	1709	1583	1770	3539	1583	3433	3531	
Flt Permitted		0.93	1.00	0.58	0.73	1.00	0.28	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1732	1583	1026	1292	1583	522	3539	1583	3433	3531	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	47	24	176	583	102	120	141	796	309	209	717	11
RTOR Reduction (vph)	0	0	135	0	0	69	0	0	237	0	1	0
Lane Group Flow (vph)	0	71	41	338	347	51	141	796	72	209	727	0
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2			
Actuated Green, G (s)		14.0	14.0	25.4	25.4	25.4	14.0	14.0	14.0	8.6	20.6	
Effective Green, g (s)		14.0	14.0	25.4	25.4	25.4	14.0	14.0	14.0	8.6	20.6	
Actuated g/C Ratio		0.23	0.23	0.42	0.42	0.42	0.23	0.23	0.23	0.14	0.34	
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		404	369	515	598	670	163	825	369	492	1212	
v/s Ratio Prot				c0.08	0.07		0.03	c0.22		0.06	c0.21	
v/s Ratio Perm		0.04	0.03	c0.20	0.17	0.03	0.17		0.05			
v/c Ratio		0.18	0.11	0.66	0.58	0.08	0.87	0.96	0.20	0.42	0.60	
Uniform Delay, d1		18.4	18.1	14.9	13.2	10.3	22.5	22.8	18.5	23.4	16.3	
Progression Factor		1.00	1.00	0.67	0.62	1.33	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.9	0.6	2.4	1.2	0.2	34.9	22.9	0.3	2.7	2.2	
Delay (s)		19.3	18.7	12.4	9.3	13.8	57.4	45.7	18.7	26.1	18.5	
Level of Service		B	B	B	A	B	E	D	B	C	B	
Approach Delay (s)		18.9			11.3			40.3			20.2	
Approach LOS		B			B			D			C	

Intersection Summary		
HCM 2000 Control Delay	25.6	HCM 2000 Level of Service C
HCM 2000 Volume to Capacity ratio	0.81	
Actuated Cycle Length (s)	60.0	Sum of lost time (s) 16.0
Intersection Capacity Utilization	59.7%	ICU Level of Service B
Analysis Period (min)	15	
c Critical Lane Group		

### HCM Signalized Intersection Capacity Analysis

#### 11: Highway 92 & Main Street

5/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	41	336	108	179	568	440	109	209	118	198	157	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1784	
Flt Permitted	0.33	1.00	1.00	0.53	1.00	1.00	0.36	1.00	1.00	0.62	1.00	
Satd. Flow (perm)	621	3539	1583	995	3539	1583	665	1863	1583	1149	1784	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	45	365	117	195	617	478	118	227	128	215	171	67
RTOR Reduction (vph)	0	0	87	0	0	351	0	0	94	0	23	0
Lane Group Flow (vph)	45	365	30	195	617	127	118	227	34	215	215	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	15.2	15.2	15.2	16.0	16.0	16.0	16.0	16.0	16.0	20.0	20.0	
Effective Green, g (s)	15.2	15.2	15.2	16.0	16.0	16.0	16.0	16.0	16.0	20.0	20.0	
Actuated g/C Ratio	0.25	0.25	0.25	0.27	0.27	0.27	0.27	0.27	0.27	0.33	0.33	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	218	896	401	317	943	422	265	496	422	474	594	
v/s Ratio Prot	0.01	c0.10		0.04	c0.17		0.04	c0.12		c0.07	0.12	
v/s Ratio Perm	0.04		0.02	0.12		0.08	0.08		0.02	0.08		
v/c Ratio	0.21	0.41	0.07	0.62	0.65	0.30	0.45	0.46	0.08	0.45	0.36	
Uniform Delay, d1	17.7	18.7	17.0	20.1	19.5	17.5	17.6	18.4	16.5	16.4	15.2	
Progression Factor	1.14	1.18	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.9	1.2	0.3	3.5	1.6	0.4	1.2	3.0	0.4	0.7	1.7	
Delay (s)	22.1	23.2	17.4	23.6	21.2	18.0	18.8	21.4	16.9	17.1	16.9	
Level of Service	C	C	B	C	C	B	B	C	B	B	B	
Approach Delay (s)		21.8			20.4			19.5			17.0	
Approach LOS		C			C			B			B	

#### Intersection Summary

HCM 2000 Control Delay	19.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



# HCM Unsignalized Intersection Capacity Analysis

## 1: Prospect & Capistrano (N)

6/30/2014












Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	12	174	231	6	9	31
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	189	251	7	10	34
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	535	27	43			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	535	27	43			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	82	84			
cM capacity (veh/h)	425	1049	1565			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	202	258	43			
Volume Left	13	251	0			
Volume Right	189	0	34			
cSH	958	1565	1700			
Volume to Capacity	0.21	0.16	0.03			
Queue Length 95th (ft)	20	14	0			
Control Delay (s)	9.8	7.6	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.8	7.6	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			7.8			
Intersection Capacity Utilization		37.9%		ICU Level of Service		A
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 2: Prospect & Broadway

6/30/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	49	210	0	19	165	1
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	53	228	0	21	179	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	370	10			21	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	370	10			21	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	90	79			89	
cM capacity (veh/h)	559	1071			1595	
<b>Direction, Lane #</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	282	21	180			
Volume Left	53	0	179			
Volume Right	228	21	0			
cSH	913	1700	1595			
Volume to Capacity	0.31	0.01	0.11			
Queue Length 95th (ft)	33	0	9			
Control Delay (s)	10.7	0.0	7.5			
Lane LOS	B		A			
Approach Delay (s)	10.7	0.0	7.5			
Approach LOS	B					
<b>Intersection Summary</b>						
Average Delay			9.0			
Intersection Capacity Utilization			38.2%		ICU Level of Service	A
Analysis Period (min)			15			

### HCM Unsignalized Intersection Capacity Analysis

#### 3: Airport & Stannford/Cornell

6/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	8	5	0	4	5	70	2	67	1	94	81	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	5	0	4	5	76	2	73	1	102	88	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	452	374	91	376	377	73	95			74		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	452	374	91	376	377	73	95			74		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	99	100	99	99	92	100			93		
cM capacity (veh/h)	449	519	966	547	517	988	1499			1526		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	14	86	76	197
Volume Left	9	4	2	102
Volume Right	0	76	1	7
cSH	474	900	1499	1526
Volume to Capacity	0.03	0.10	0.00	0.07
Queue Length 95th (ft)	2	8	0	5
Control Delay (s)	12.8	9.4	0.2	4.2
Lane LOS	B	A	A	A
Approach Delay (s)	12.8	9.4	0.2	4.2
Approach LOS	B	A		

Intersection Summary			
Average Delay		4.9	
Intersection Capacity Utilization	27.9%		ICU Level of Service A
Analysis Period (min)		15	

## HCM Unsignalized Intersection Capacity Analysis

### 4: Airport & La Granada

6/30/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	37	127	45	39	90	11
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	40	138	49	42	98	12
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	244	104	110			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	244	104	110			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	94	85	97			
cM capacity (veh/h)	720	951	1480			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	178	91	110			
Volume Left	40	49	0			
Volume Right	138	0	12			
cSH	887	1480	1700			
Volume to Capacity	0.20	0.03	0.06			
Queue Length 95th (ft)	19	3	0			
Control Delay (s)	10.1	4.1	0.0			
Lane LOS	B	A				
Approach Delay (s)	10.1	4.1	0.0			
Approach LOS	B					
<b>Intersection Summary</b>						
Average Delay			5.7			
Intersection Capacity Utilization			27.8%		ICU Level of Service	A
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 5: Airport & Los Banos

6/30/2014





















Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	22	5	4	65	103	10
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	24	5	4	71	112	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	197	117	123			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	197	117	123			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	99	100			
cM capacity (veh/h)	790	935	1464			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	29	75	123			
Volume Left	24	4	0			
Volume Right	5	0	11			
cSH	813	1464	1700			
Volume to Capacity	0.04	0.00	0.07			
Queue Length 95th (ft)	3	0	0			
Control Delay (s)	9.6	0.5	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.6	0.5	0.0			
Approach LOS	A					
<b>Intersection Summary</b>						
Average Delay			1.4			
Intersection Capacity Utilization			16.7%		ICU Level of Service	A
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 6: Highway 1 & Cypress

6/30/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	77	5	19	15	9	7	16	509	6	5	518	101
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	84	5	21	16	10	8	17	553	7	5	563	110
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1229	1223	618	1189	1275	557	673			560		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1229	1223	618	1189	1275	557	673			560		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	41	97	96	89	94	99	98			99		
cM capacity (veh/h)	143	175	489	151	163	530	918			1011		
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>	<b>NB 2</b>	<b>SB 1</b>	<b>SB 2</b>						
Volume Total	110	34	17	560	5	673						
Volume Left	84	16	17	0	5	0						
Volume Right	21	8	0	7	0	110						
cSH	166	185	918	1700	1011	1700						
Volume to Capacity	0.66	0.18	0.02	0.33	0.01	0.40						
Queue Length 95th (ft)	95	16	1	0	0	0						
Control Delay (s)	60.9	28.7	9.0	0.0	8.6	0.0						
Lane LOS	F	D	A		A							
Approach Delay (s)	60.9	28.7	0.3		0.1							
Approach LOS	F	D										
<b>Intersection Summary</b>												
Average Delay			5.6									
Intersection Capacity Utilization			48.9%		ICU Level of Service					A		
Analysis Period (min)			15									

## HCM Unsignalized Intersection Capacity Analysis

### 7: Highway 1 & Capistrano (N)

6/30/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	7	3	2	526	567	15
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	3	2	572	616	16
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	907	616	616			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	907	616	616			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	99	100			
cM capacity (veh/h)	275	433	960			

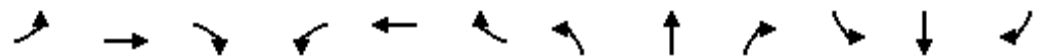
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	8	3	2	286	286	616	16
Volume Left	8	0	2	0	0	0	0
Volume Right	0	3	0	0	0	0	16
cSH	275	433	960	1700	1700	1700	1700
Volume to Capacity	0.03	0.01	0.00	0.17	0.17	0.36	0.01
Queue Length 95th (ft)	2	1	0	0	0	0	0
Control Delay (s)	18.5	13.4	8.8	0.0	0.0	0.0	0.0
Lane LOS	C	B	A				
Approach Delay (s)	16.9		0.0	0.0			
Approach LOS	C						

Intersection Summary			
Average Delay			0.2
Intersection Capacity Utilization	39.8%	ICU Level of Service	A
Analysis Period (min)			15

### HCM Signalized Intersection Capacity Analysis

#### 8: Capistrano (S) & Highway 1

6/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕		↗	↕	↗
Volume (vph)	12	67	132	87	100	152	205	343	38	52	447	12
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00		0.97	0.95		1.00	0.95	1.00
Frt		1.00	0.85		0.94		1.00	0.99		1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1849	1583		1728		3433	3487		1770	3539	1583
Flt Permitted		0.93	1.00		0.90		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1740	1583		1570		3433	3487		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	73	143	95	109	165	223	373	41	57	486	13
RTOR Reduction (vph)	0	0	73	0	30	0	0	7	0	0	0	9
Lane Group Flow (vph)	0	86	70	0	339	0	223	407	0	57	486	4
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								6
Actuated Green, G (s)		17.9	27.6		17.9		9.7	21.7		4.6	16.6	16.6
Effective Green, g (s)		17.9	27.6		17.9		9.7	21.7		4.6	16.6	16.6
Actuated g/C Ratio		0.32	0.49		0.32		0.17	0.39		0.08	0.30	0.30
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		554	890		500		592	1346		144	1045	467
v/s Ratio Prot			0.01				c0.06	0.12		0.03	c0.14	
v/s Ratio Perm		0.05	0.03		c0.22							0.00
v/c Ratio		0.16	0.08		0.68		0.38	0.30		0.40	0.47	0.01
Uniform Delay, d1		13.7	7.6		16.6		20.6	12.0		24.5	16.2	14.0
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.1	0.0		3.6		0.4	0.1		1.8	0.3	0.0
Delay (s)		13.9	7.6		20.3		21.0	12.1		26.3	16.5	14.0
Level of Service		B	A		C		C	B		C	B	B
Approach Delay (s)		10.0			20.3			15.2			17.4	
Approach LOS		A			C			B			B	

#### Intersection Summary























HCM 2000 Control Delay	16.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	56.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



## HCM Signalized Intersection Capacity Analysis

### 9: Highway 1 & Main Street

6/30/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	69	86	63	95	48	248	68	536	82	419	1052	138
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	0.98		1.00	0.98	
Flt Protected		0.98	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1822	1583		1803	1583	1770	3469		1770	3478	
Flt Permitted		0.98	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1822	1583		1803	1583	1770	3469		1770	3478	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	75	93	68	103	52	270	74	583	89	455	1143	150
RTOR Reduction (vph)	0	0	53	0	0	153	0	13	0	0	10	0
Lane Group Flow (vph)	0	168	15	0	155	117	74	659	0	455	1283	0
Turn Type	Split	NA	pm+ov	Split	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	4	4	5	8	8	1	5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)		13.0	19.2		12.6	39.1	6.2	21.9		26.5	42.2	
Effective Green, g (s)		13.0	19.2		12.6	39.1	6.2	21.9		26.5	42.2	
Actuated g/C Ratio		0.14	0.21		0.14	0.43	0.07	0.24		0.29	0.47	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		263	337		252	758	121	844		521	1630	
v/s Ratio Prot		c0.09	0.00		c0.09	0.05	0.04	0.19		c0.26	c0.37	
v/s Ratio Perm			0.01			0.03						
v/c Ratio		0.64	0.04		0.62	0.15	0.61	0.78		0.87	0.79	
Uniform Delay, d1		36.3	28.1		36.4	15.4	40.7	31.8		30.2	20.1	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		5.0	0.1		4.4	0.1	8.8	7.1		14.9	3.9	
Delay (s)		41.3	28.2		40.8	15.5	49.6	38.9		45.1	24.0	
Level of Service		D	C		D	B	D	D		D	C	
Approach Delay (s)		37.5			24.8			40.0			29.5	
Approach LOS		D			C			D			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			31.9				HCM 2000 Level of Service				C	
HCM 2000 Volume to Capacity ratio			0.79									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)			16.0		
Intersection Capacity Utilization			65.7%				ICU Level of Service			C		
Analysis Period (min)			15									
c	Critical Lane Group											

# HCM Signalized Intersection Capacity Analysis

## 10: Highway 92 & Highway 1

6/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗	↖	↕	↗	↖	↕↕	↗	↖↖	↕↖	
Volume (vph)	14	40	58	254	36	97	81	606	463	411	691	6
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	0.97	0.95	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.99	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1839	1583	1681	1705	1583	1770	3539	1583	3433	3534	
Flt Permitted		0.93	1.00	0.58	0.73	1.00	0.28	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1732	1583	1026	1292	1583	522	3539	1583	3433	3534	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	43	63	276	39	105	88	659	503	447	751	7
RTOR Reduction (vph)	0	0	48	0	0	64	0	0	386	0	1	0
Lane Group Flow (vph)	0	58	15	157	158	41	88	659	117	447	757	0
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2			
Actuated Green, G (s)		14.0	14.0	23.5	23.5	23.5	24.5	14.0	14.0	10.5	14.0	
Effective Green, g (s)		14.0	14.0	23.5	23.5	23.5	24.5	14.0	14.0	10.5	14.0	
Actuated g/C Ratio		0.23	0.23	0.39	0.39	0.39	0.41	0.23	0.23	0.18	0.23	
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		404	369	461	543	620	431	825	369	600	824	
v/s Ratio Prot				c0.03	0.03		0.04	0.19		c0.13	c0.21	
v/s Ratio Perm		0.03	0.01	c0.10	0.09	0.03	0.05		0.07			
v/c Ratio		0.14	0.04	0.34	0.29	0.07	0.20	0.80	0.32	0.74	0.92	
Uniform Delay, d1		18.2	17.8	13.1	12.5	11.4	11.1	21.7	19.0	23.5	22.4	
Progression Factor		1.00	1.00	0.62	0.59	0.82	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.7	0.2	0.4	0.3	0.2	0.2	5.4	0.5	8.2	16.9	
Delay (s)		19.0	18.0	8.6	7.7	9.6	11.3	27.1	19.5	31.7	39.4	
Level of Service		B	B	A	A	A	B	C	B	C	D	
Approach Delay (s)		18.5			8.5			23.0			36.5	
Approach LOS		B			A			C			D	

### Intersection Summary

HCM 2000 Control Delay	26.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	53.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

# HCM Signalized Intersection Capacity Analysis

## 11: Highway 92 & Main Street

6/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	79	764	83	108	276	163	62	174	164	242	81	29
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1788	
Flt Permitted	0.40	1.00	1.00	0.29	1.00	1.00	0.46	1.00	1.00	0.64	1.00	
Satd. Flow (perm)	736	3539	1583	548	3539	1583	858	1863	1583	1189	1788	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	86	830	90	117	300	177	67	189	178	263	88	32
RTOR Reduction (vph)	0	0	65	0	0	127	0	0	131	0	20	0
Lane Group Flow (vph)	86	830	25	117	300	50	67	189	47	263	100	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	16.4	16.4	16.4	16.8	16.8	16.8	16.0	16.0	16.0	20.8	20.8	
Effective Green, g (s)	16.4	16.4	16.4	16.8	16.8	16.8	16.0	16.0	16.0	20.8	20.8	
Actuated g/C Ratio	0.27	0.27	0.27	0.28	0.28	0.28	0.27	0.27	0.27	0.35	0.35	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	249	967	432	218	990	443	283	496	422	493	619	
v/s Ratio Prot	0.02	c0.23		c0.03	0.08		0.01	c0.10		c0.07	0.06	
v/s Ratio Perm	0.08		0.02	0.12		0.03	0.05		0.03	c0.11		
v/c Ratio	0.35	0.86	0.06	0.54	0.30	0.11	0.24	0.38	0.11	0.53	0.16	
Uniform Delay, d1	16.8	20.7	16.1	21.4	17.0	16.1	16.9	18.0	16.6	16.4	13.6	
Progression Factor	1.21	1.25	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.8	7.4	0.2	2.5	0.2	0.1	0.4	2.2	0.5	1.1	0.1	
Delay (s)	23.2	33.3	16.3	24.0	17.2	16.2	17.3	20.2	17.2	17.6	13.7	
Level of Service	C	C	B	C	B	B	B	C	B	B	B	
Approach Delay (s)		30.9			18.2			18.5			16.3	
Approach LOS		C			B			B			B	

### Intersection Summary

HCM 2000 Control Delay	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	63.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

## HCM Unsignalized Intersection Capacity Analysis

### 1: Prospect & Capistrano (N)

6/30/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	25	269	192	36	32	40
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	27	292	209	39	35	43
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	513	57	78			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	513	57	78			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	94	71	86			
cM capacity (veh/h)	450	1010	1520			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	320	248	78			
Volume Left	27	209	0			
Volume Right	292	0	43			
cSH	913	1520	1700			
Volume to Capacity	0.35	0.14	0.05			
Queue Length 95th (ft)	40	12	0			
Control Delay (s)	11.0	6.7	0.0			
Lane LOS	B	A				
Approach Delay (s)	11.0	6.7	0.0			
Approach LOS	B					
Intersection Summary						
Average Delay			8.0			
Intersection Capacity Utilization		43.9%		ICU Level of Service		A
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 2: Prospect & Broadway

6/30/2014



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	42	188	2	48	245	2
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	46	204	2	52	266	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	563	28			54	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	563	28			54	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	80			83	
cM capacity (veh/h)	404	1047			1551	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	250	54	268
Volume Left	46	0	266
Volume Right	204	52	0
cSH	811	1700	1551
Volume to Capacity	0.31	0.03	0.17
Queue Length 95th (ft)	33	0	15
Control Delay (s)	11.4	0.0	7.7
Lane LOS	B		A
Approach Delay (s)	11.4	0.0	7.7
Approach LOS	B		

Intersection Summary			
Average Delay		8.6	
Intersection Capacity Utilization	40.9%		ICU Level of Service A
Analysis Period (min)		15	

### HCM Unsignalized Intersection Capacity Analysis

#### 3: Airport & Stannford/Cornell

6/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	10	13	4	3	3	110	1	40	5	76	110	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	14	4	3	3	120	1	43	5	83	120	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	456	338	121	346	336	46	123			49		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	456	338	121	346	336	46	123			49		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	97	100	99	99	88	100			95		
cM capacity (veh/h)	434	552	930	569	553	1023	1464			1558		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	29	126	50	205
Volume Left	11	3	1	83
Volume Right	4	120	5	3
cSH	531	981	1464	1558
Volume to Capacity	0.06	0.13	0.00	0.05
Queue Length 95th (ft)	4	11	0	4
Control Delay (s)	12.2	9.2	0.2	3.2
Lane LOS	B	A	A	A
Approach Delay (s)	12.2	9.2	0.2	3.2
Approach LOS	B	A		

Intersection Summary			
Average Delay		5.3	
Intersection Capacity Utilization	30.7%		ICU Level of Service A
Analysis Period (min)		15	

## HCM Unsignalized Intersection Capacity Analysis

### 4: Airport & La Granada

6/30/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	9	51	75	122	68	39
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	55	82	133	74	42
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	391	95	116			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	391	95	116			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	94	94			
cM capacity (veh/h)	579	962	1472			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	65	214	116			
Volume Left	10	82	0			
Volume Right	55	0	42			
cSH	875	1472	1700			
Volume to Capacity	0.07	0.06	0.07			
Queue Length 95th (ft)	6	4	0			
Control Delay (s)	9.4	3.2	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.4	3.2	0.0			
Approach LOS	A					
<b>Intersection Summary</b>						
Average Delay			3.3			
Intersection Capacity Utilization			27.5%	ICU Level of Service	A	
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 5: Airport & Los Banos

6/30/2014






















Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	14	11	9	117	88	20
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	15	12	10	127	96	22
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	253	107	117			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	253	107	117			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	99	99			
cM capacity (veh/h)	730	948	1471			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	27	137	117			
Volume Left	15	10	0			
Volume Right	12	0	22			
cSH	812	1471	1700			
Volume to Capacity	0.03	0.01	0.07			
Queue Length 95th (ft)	3	1	0			
Control Delay (s)	9.6	0.6	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.6	0.6	0.0			
Approach LOS	A					
<b>Intersection Summary</b>						
Average Delay			1.2			
Intersection Capacity Utilization			23.3%		ICU Level of Service	A
Analysis Period (min)			15			



## HCM Unsignalized Intersection Capacity Analysis

### 6: Highway 1 & Cypress

6/30/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	107	13	16	4	6	5	37	633	7	9	652	93
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	116	14	17	4	7	5	40	688	8	10	709	101
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1556	1555	759	1525	1602	692	810			696		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1556	1555	759	1525	1602	692	810			696		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	87	96	95	93	99	95			99		
cM capacity (veh/h)	82	106	406	79	99	444	816			900		
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>	<b>NB 2</b>	<b>SB 1</b>	<b>SB 2</b>						
Volume Total	148	16	40	696	10	810						
Volume Left	116	4	40	0	10	0						
Volume Right	17	5	0	8	0	101						
cSH	93	123	816	1700	900	1700						
Volume to Capacity	1.59	0.13	0.05	0.41	0.01	0.48						
Queue Length 95th (ft)	291	11	4	0	1	0						
Control Delay (s)	389.6	38.7	9.6	0.0	9.0	0.0						
Lane LOS	F	E	A		A							
Approach Delay (s)	389.6	38.7	0.5		0.1							
Approach LOS	F	E										
<b>Intersection Summary</b>												
Average Delay			34.1									
Intersection Capacity Utilization			60.9%		ICU Level of Service					B		
Analysis Period (min)			15									

## HCM Unsignalized Intersection Capacity Analysis

### 7: Highway 1 & Capistrano (N)

6/30/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	24	12	9	679	670	47
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	26	13	10	738	728	51
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1117	728	728			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1117	728	728			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	87	96	99			
cM capacity (veh/h)	199	366	871			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	26	13	10	369	369	728	51
Volume Left	26	0	10	0	0	0	0
Volume Right	0	13	0	0	0	0	51
cSH	199	366	871	1700	1700	1700	1700
Volume to Capacity	0.13	0.04	0.01	0.22	0.22	0.43	0.03
Queue Length 95th (ft)	11	3	1	0	0	0	0
Control Delay (s)	25.8	15.2	9.2	0.0	0.0	0.0	0.0
Lane LOS	D	C	A				
Approach Delay (s)	22.3		0.1	0.0			
Approach LOS	C						

Intersection Summary			
Average Delay			0.6
Intersection Capacity Utilization	45.3%		ICU Level of Service
Analysis Period (min)	15		A

### HCM Signalized Intersection Capacity Analysis

#### 8: Capistrano (S) & Highway 1

6/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕		↗	↕	↗
Volume (vph)	55	90	217	37	69	99	225	598	62	146	478	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00		0.97	0.95		1.00	0.95	1.00
Frt		1.00	0.85		0.93		1.00	0.99		1.00	1.00	0.85
Flt Protected		0.98	1.00		0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1828	1583		1725		3433	3490		1770	3539	1583
Flt Permitted		0.80	1.00		0.92		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1491	1583		1602		3433	3490		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	60	98	236	40	75	108	245	650	67	159	520	24
RTOR Reduction (vph)	0	0	75	0	39	0	0	7	0	0	0	15
Lane Group Flow (vph)	0	158	161	0	184	0	245	710	0	159	520	9
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								6
Actuated Green, G (s)		12.5	22.8		12.5		10.3	21.6		9.0	20.3	20.3
Effective Green, g (s)		12.5	22.8		12.5		10.3	21.6		9.0	20.3	20.3
Actuated g/C Ratio		0.23	0.41		0.23		0.19	0.39		0.16	0.37	0.37
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		338	769		363		641	1368		289	1303	583
v/s Ratio Prot			0.04				0.07	c0.20		c0.09	0.15	
v/s Ratio Perm		0.11	0.06		c0.11							0.01
v/c Ratio		0.47	0.21		0.51		0.38	0.52		0.55	0.40	0.02
Uniform Delay, d1		18.4	10.4		18.6		19.6	12.8		21.2	12.9	11.1
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		1.0	0.1		1.1		0.4	0.3		2.3	0.2	0.0
Delay (s)		19.4	10.5		19.7		20.0	13.1		23.4	13.1	11.1
Level of Service		B	B		B		B	B		C	B	B
Approach Delay (s)		14.1			19.7			14.9			15.4	
Approach LOS		B			B			B			B	























#### Intersection Summary

HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	55.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	55.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

## HCM Signalized Intersection Capacity Analysis

### 9: Highway 1 & Main Street
























6/30/2014

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations														
Volume (vph)	174	58	55	50	78	538	75	759	40	296	747	151		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0			
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95			
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	0.97			
Flt Protected		0.96	1.00		0.98	1.00	0.95	1.00		0.95	1.00			
Satd. Flow (prot)		1795	1583		1827	1583	1770	3513		1770	3450			
Flt Permitted		0.96	1.00		0.98	1.00	0.95	1.00		0.95	1.00			
Satd. Flow (perm)		1795	1583		1827	1583	1770	3513		1770	3450			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	189	63	60	54	85	585	82	825	43	322	812	164		
RTOR Reduction (vph)	0	0	46	0	0	84	0	4	0	0	17	0		
Lane Group Flow (vph)	0	252	14	0	139	501	82	864	0	322	959	0		
Turn Type	Split	NA	pm+ov	Split	NA	pm+ov	Prot	NA		Prot	NA			
Protected Phases	4	4	5	8	8	1	5	2		1	6			
Permitted Phases			4			8								
Actuated Green, G (s)		15.2	21.7		12.0	33.3	6.5	25.5		21.3	40.3			
Effective Green, g (s)		15.2	21.7		12.0	33.3	6.5	25.5		21.3	40.3			
Actuated g/C Ratio		0.17	0.24		0.13	0.37	0.07	0.28		0.24	0.45			
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0			
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0			
Lane Grp Cap (vph)		303	381		243	656	127	995		418	1544			
v/s Ratio Prot		c0.14	0.00		0.08	c0.18	0.05	c0.25		c0.18	0.28			
v/s Ratio Perm			0.01			0.14								
v/c Ratio		0.83	0.04		0.57	0.76	0.65	0.87		0.77	0.62			
Uniform Delay, d1		36.2	26.2		36.6	24.9	40.6	30.7		32.1	19.0			
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00			
Incremental Delay, d2		17.4	0.0		3.2	5.3	10.7	10.2		8.5	1.9			
Delay (s)		53.5	26.2		39.8	30.1	51.4	40.9		40.6	20.9			
Level of Service		D	C		D	C	D	D		D	C			
Approach Delay (s)		48.3			32.0			41.8			25.8			
Approach LOS		D			C			D			C			
<b>Intersection Summary</b>														
HCM 2000 Control Delay			33.9									HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio			0.86											
Actuated Cycle Length (s)			90.0								16.0			
Intersection Capacity Utilization			78.3%										ICU Level of Service	D
Analysis Period (min)			15											
c	Critical Lane Group													

### HCM Signalized Intersection Capacity Analysis

#### 10: Highway 92 & Highway 1

6/30/2014

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Volume (vph)	43	22	162	536	94	116	130	735	284	208	675	10	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lane Util. Factor		1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	0.97	0.95		
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00		
Flt Protected		0.97	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00		
Satd. Flow (prot)		1803	1583	1681	1709	1583	1770	3539	1583	3433	3531		
Flt Permitted		0.93	1.00	0.58	0.73	1.00	0.28	1.00	1.00	0.95	1.00		
Satd. Flow (perm)		1732	1583	1026	1292	1583	522	3539	1583	3433	3531		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	47	24	176	583	102	126	141	799	309	226	734	11	
RTOR Reduction (vph)	0	0	135	0	0	73	0	0	237	0	1	0	
Lane Group Flow (vph)	0	71	41	338	347	53	141	799	72	226	744	0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA		
Protected Phases		4		3	8		5	2		1	6		
Permitted Phases	4		4	8		8	2		2				
Actuated Green, G (s)		14.0	14.0	25.4	25.4	25.4	14.0	14.0	14.0	8.6	20.6		
Effective Green, g (s)		14.0	14.0	25.4	25.4	25.4	14.0	14.0	14.0	8.6	20.6		
Actuated g/C Ratio		0.23	0.23	0.42	0.42	0.42	0.23	0.23	0.23	0.14	0.34		
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)		404	369	515	598	670	163	825	369	492	1212		
v/s Ratio Prot				c0.08	0.07		0.03	c0.23		0.07	c0.21		
v/s Ratio Perm		0.04	0.03	c0.20	0.17	0.03	0.17		0.05				
v/c Ratio		0.18	0.11	0.66	0.58	0.08	0.87	0.97	0.20	0.46	0.61		
Uniform Delay, d1		18.4	18.1	14.9	13.2	10.3	22.5	22.8	18.5	23.6	16.4		
Progression Factor		1.00	1.00	0.67	0.62	1.14	1.00	1.00	1.00	1.00	1.00		
Incremental Delay, d2		0.9	0.6	2.4	1.2	0.2	34.9	23.6	0.3	3.1	2.3		
Delay (s)		19.3	18.7	12.3	9.3	12.0	57.4	46.4	18.7	26.6	18.7		
Level of Service		B	B	B	A	B	E	D	B	C	B		
Approach Delay (s)		18.9			11.0			40.8			20.6		
Approach LOS		B			B			D			C		
<b>Intersection Summary</b>													
HCM 2000 Control Delay			25.8		HCM 2000 Level of Service					C			
HCM 2000 Volume to Capacity ratio			0.81										
Actuated Cycle Length (s)			60.0		Sum of lost time (s)					16.0			
Intersection Capacity Utilization			60.2%		ICU Level of Service					B			
Analysis Period (min)			15										
c	Critical Lane Group												

# HCM Signalized Intersection Capacity Analysis

## 11: Highway 92 & Main Street

6/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	41	352	108	179	574	443	109	209	118	212	157	62
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1784	
Flt Permitted	0.33	1.00	1.00	0.52	1.00	1.00	0.36	1.00	1.00	0.62	1.00	
Satd. Flow (perm)	621	3539	1583	978	3539	1583	665	1863	1583	1149	1784	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	45	383	117	195	624	482	118	227	128	230	171	67
RTOR Reduction (vph)	0	0	87	0	0	353	0	0	94	0	23	0
Lane Group Flow (vph)	45	383	30	195	624	129	118	227	34	230	215	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	15.2	15.2	15.2	16.0	16.0	16.0	16.0	16.0	16.0	20.0	20.0	
Effective Green, g (s)	15.2	15.2	15.2	16.0	16.0	16.0	16.0	16.0	16.0	20.0	20.0	
Actuated g/C Ratio	0.25	0.25	0.25	0.27	0.27	0.27	0.27	0.27	0.27	0.33	0.33	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	218	896	401	313	943	422	265	496	422	474	594	
v/s Ratio Prot	0.01	c0.11		0.04	c0.18		0.04	c0.12		c0.07	0.12	
v/s Ratio Perm	0.04		0.02	0.12		0.08	0.08		0.02	0.09		
v/c Ratio	0.21	0.43	0.07	0.62	0.66	0.30	0.45	0.46	0.08	0.49	0.36	
Uniform Delay, d1	17.7	18.8	17.0	20.2	19.6	17.6	17.6	18.4	16.5	16.7	15.2	
Progression Factor	1.15	1.19	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.9	1.3	0.3	3.8	1.8	0.4	1.2	3.0	0.4	0.8	1.7	
Delay (s)	22.3	23.6	17.4	24.0	21.3	18.0	18.8	21.4	16.9	17.5	16.9	
Level of Service	C	C	B	C	C	B	B	C	B	B	B	
Approach Delay (s)		22.2			20.5			19.5			17.2	
Approach LOS		C			C			B			B	

### Intersection Summary

HCM 2000 Control Delay	20.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

# HCM Unsignalized Intersection Capacity Analysis

## 1: Prospect & Capistrano (N)

7/16/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	12	152	188	8	9	31
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	165	204	9	10	34
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type						
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	444	27	43			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	444	27	43			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	84	87			
cM capacity (veh/h)	497	1049	1565			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	178	213	43			
Volume Left	13	204	0			
Volume Right	165	0	34			
cSH	970	1565	1700			
Volume to Capacity	0.18	0.13	0.03			
Queue Length 95th (ft)	17	11	0			
Control Delay (s)	9.5	7.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.5	7.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			7.5			
Intersection Capacity Utilization		34.2%		ICU Level of Service		A
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis 2: Prospect & Broadway

7/16/2014



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	60	158	0	18	144	1
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	65	172	0	20	157	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	324	10			20	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	324	10			20	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	84			90	
cM capacity (veh/h)	604	1072			1597	

















Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	237	20	158
Volume Left	65	0	157
Volume Right	172	20	0
cSH	884	1700	1597
Volume to Capacity	0.27	0.01	0.10
Queue Length 95th (ft)	27	0	8
Control Delay (s)	10.6	0.0	7.5
Lane LOS	B		A
Approach Delay (s)	10.6	0.0	7.5
Approach LOS	B		

Intersection Summary			
Average Delay		8.9	
Intersection Capacity Utilization		34.4%	ICU Level of Service A
Analysis Period (min)		15	



### HCM Unsignalized Intersection Capacity Analysis 3: Airport & Stannford/Cornell

7/16/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	8	5	0	8	10	75	2	11	1	111	89	8
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	5	0	9	11	82	2	12	1	121	97	9
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	446	360	101	362	364	12	105			13		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	446	360	101	362	364	12	105			13		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	99	100	98	98	92	100			92		
cM capacity (veh/h)	447	524	954	555	521	1068	1486			1605		
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>								
Volume Total	14	101	15	226								
Volume Left	9	9	2	121								
Volume Right	0	82	1	9								
cSH	474	896	1486	1605								
Volume to Capacity	0.03	0.11	0.00	0.08								
Queue Length 95th (ft)	2	10	0	6								
Control Delay (s)	12.8	9.5	1.1	4.2								
Lane LOS	B	A	A	A								
Approach Delay (s)	12.8	9.5	1.1	4.2								
Approach LOS	B	A										
<b>Intersection Summary</b>												
Average Delay			5.9									
Intersection Capacity Utilization			30.2%		ICU Level of Service					A		
Analysis Period (min)			15									

# HCM Unsignalized Intersection Capacity Analysis

## 4: Airport & La Granada

7/16/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	37	124	78	38	40	28
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	40	135	85	41	43	30
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	270	59	74			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	270	59	74			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	94	87	94			
cM capacity (veh/h)	680	1007	1526			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	175	126	74			
Volume Left	40	85	0			
Volume Right	135	0	30			
cSH	907	1526	1700			
Volume to Capacity	0.19	0.06	0.04			
Queue Length 95th (ft)	18	4	0			
Control Delay (s)	9.9	5.2	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.9	5.2	0.0			
Approach LOS	A					
<b>Intersection Summary</b>						
Average Delay			6.4			
Intersection Capacity Utilization			29.3%	ICU Level of Service	A	
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 5: Airport & Los Banos

7/16/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	22	4	8	93	61	20
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	24	4	9	101	66	22
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type						
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	196	77	88			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	196	77	88			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	100	99			
cM capacity (veh/h)	789	984	1508			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	28	110	88			
Volume Left	24	9	0			
Volume Right	4	0	22			
cSH	813	1508	1700			
Volume to Capacity	0.03	0.01	0.05			
Queue Length 95th (ft)	3	0	0			
Control Delay (s)	9.6	0.6	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.6	0.6	0.0			
Approach LOS	A					
<b>Intersection Summary</b>						
Average Delay			1.5			
Intersection Capacity Utilization		21.5%		ICU Level of Service		A
Analysis Period (min)			15			

### HCM Unsignalized Intersection Capacity Analysis

#### 6: Highway 1 & Cypress

7/16/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Volume (veh/h)	101	2	30	15	1	7	21	674	8	7	931	67
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	110	2	33	16	1	8	23	733	9	8	1012	73
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1850	1851	1048	1843	1883	737	1085			741		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1850	1851	1048	1843	1883	737	1085			741		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	97	88	66	98	98	96			99		
cM capacity (veh/h)	53	71	277	48	68	418	643			866		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	145	25	23	741	8	1085
Volume Left	110	16	23	0	8	0
Volume Right	33	8	0	9	0	73
cSH	66	67	643	1700	866	1700
Volume to Capacity	2.20	0.37	0.04	0.44	0.01	0.64
Queue Length 95th (ft)	345	35	3	0	1	0
Control Delay (s)	687.9	88.0	10.8	0.0	9.2	0.0
Lane LOS	F	F	B		A	
Approach Delay (s)	687.9	88.0	0.3		0.1	
Approach LOS	F	F				

Intersection Summary		
Average Delay		50.3
Intersection Capacity Utilization	69.1%	ICU Level of Service C
Analysis Period (min)		15

# HCM Unsignalized Intersection Capacity Analysis

## 7: Highway 1 & Capistrano (N)

7/16/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	7	3	3	649	961	25
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	3	3	705	1045	27
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1404	1045	1045			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1404	1045	1045			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	94	99	100			
cM capacity (veh/h)	130	226	662			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	8	3	3	353	353	1045	27
Volume Left	8	0	3	0	0	0	0
Volume Right	0	3	0	0	0	0	27
cSH	130	226	662	1700	1700	1700	1700
Volume to Capacity	0.06	0.01	0.00	0.21	0.21	0.61	0.02
Queue Length 95th (ft)	5	1	0	0	0	0	0
Control Delay (s)	34.4	21.2	10.5	0.0	0.0	0.0	0.0
Lane LOS	D	C	B				
Approach Delay (s)	30.5	0.0		0.0			
Approach LOS	D						

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	60.6%	ICU Level of Service	B
Analysis Period (min)	15		

### HCM Signalized Intersection Capacity Analysis

#### 8: Capistrano (S) & Highway 1

7/16/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↔		↖	↗		↖	↗	↗
Volume (vph)	15	79	144	104	99	181	162	415	47	93	803	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00		0.97	0.95		1.00	0.95	1.00
Frt		1.00	0.85		0.94		1.00	0.98		1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1848	1583		1721		3433	3485		1770	3539	1583
Flt Permitted		0.93	1.00		0.88		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1734	1583		1540		3433	3485		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	16	86	157	113	108	197	176	451	51	101	873	24
RTOR Reduction (vph)	0	0	14	0	33	0	0	8	0	0	0	15
Lane Group Flow (vph)	0	102	143	0	385	0	176	494	0	101	873	9
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								6
Actuated Green, G (s)		23.8	33.4		23.8		9.6	28.2		8.1	26.7	26.7
Effective Green, g (s)		23.8	33.4		23.8		9.6	28.2		8.1	26.7	26.7
Actuated g/C Ratio		0.33	0.46		0.33		0.13	0.39		0.11	0.37	0.37
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		572	821		508		457	1363		198	1310	586
v/s Ratio Prot			0.02				0.05	0.14		c0.06	c0.25	
v/s Ratio Perm		0.06	0.07		c0.25							0.01
v/c Ratio		0.18	0.17		0.76		0.39	0.36		0.51	0.67	0.02
Uniform Delay, d1		17.2	11.3		21.6		28.6	15.6		30.1	19.0	14.4
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.2	0.1		6.4		0.5	0.2		2.2	1.3	0.0
Delay (s)		17.3	11.4		28.0		29.1	15.7		32.3	20.3	14.4
Level of Service		B	B		C		C	B		C	C	B
Approach Delay (s)		13.7			28.0			19.2			21.4	
Approach LOS		B			C			B			C	

#### Intersection Summary

HCM 2000 Control Delay	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	72.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

### HCM Signalized Intersection Capacity Analysis

#### 9: Highway 1 & Main Street

7/16/2014


























Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↗		↗	↕↗	
Volume (vph)	69	86	63	100	51	244	71	533	87	494	1241	164
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	0.98		1.00	0.98	
Flt Protected		0.98	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1822	1583		1803	1583	1770	3464		1770	3477	
Flt Permitted		0.98	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1822	1583		1803	1583	1770	3464		1770	3477	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	75	93	68	109	55	265	77	579	95	537	1349	178
RTOR Reduction (vph)	0	0	53	0	0	135	0	15	0	0	10	0
Lane Group Flow (vph)	0	168	15	0	164	130	77	659	0	537	1517	0
Turn Type	Split	NA	pm+ov	Split	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	4	4	5	8	8	1	5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)		13.0	19.2		12.9	44.0	6.2	17.0		31.1	41.9	
Effective Green, g (s)		13.0	19.2		12.9	44.0	6.2	17.0		31.1	41.9	
Actuated g/C Ratio		0.14	0.21		0.14	0.49	0.07	0.19		0.35	0.47	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		263	337		258	844	121	654		611	1618	
v/s Ratio Prot		c0.09	0.00		c0.09	0.05	0.04	0.19		c0.30	c0.44	
v/s Ratio Perm			0.01			0.03						
v/c Ratio		0.64	0.04		0.64	0.15	0.64	1.01		0.88	0.94	
Uniform Delay, d1		36.3	28.1		36.3	12.7	40.8	36.5		27.7	22.8	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		5.0	0.1		5.1	0.1	10.5	37.2		13.6	11.8	
Delay (s)		41.3	28.2		41.4	12.8	51.3	73.7		41.2	34.6	
Level of Service		D	C		D	B	D	E		D	C	
Approach Delay (s)		37.5			23.7			71.4			36.3	
Approach LOS		D			C			E			D	

Intersection Summary		
HCM 2000 Control Delay	42.4	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.84	D
Actuated Cycle Length (s)	90.0	Sum of lost time (s)
Intersection Capacity Utilization	69.9%	16.0
Analysis Period (min)	15	ICU Level of Service
c Critical Lane Group		C

### HCM Signalized Intersection Capacity Analysis

#### 10: Highway 92 & Highway 1

7/16/2014

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Volume (vph)	13	38	56	342	49	109	82	599	470	452	767	7	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lane Util. Factor		1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	0.97	0.95		
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00		
Flt Protected		0.99	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00		
Satd. Flow (prot)		1839	1583	1681	1706	1583	1770	3539	1583	3433	3534		
Flt Permitted		0.93	1.00	0.58	0.73	1.00	0.28	1.00	1.00	0.95	1.00		
Satd. Flow (perm)		1732	1583	1026	1292	1583	522	3539	1583	3433	3534		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	14	41	61	372	53	118	89	651	511	491	834	8	
RTOR Reduction (vph)	0	0	47	0	0	72	0	0	392	0	1	0	
Lane Group Flow (vph)	0	55	14	212	213	46	89	651	119	491	841	0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA		
Protected Phases		4		3	8		5	2		1	6		
Permitted Phases	4		4	8		8	2		2				
Actuated Green, G (s)		14.0	14.0	23.6	23.6	23.6	24.4	14.0	14.0	10.4	14.0		
Effective Green, g (s)		14.0	14.0	23.6	23.6	23.6	24.4	14.0	14.0	10.4	14.0		
Actuated g/C Ratio		0.23	0.23	0.39	0.39	0.39	0.41	0.23	0.23	0.17	0.23		
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)		404	369	464	546	622	428	825	369	595	824		
v/s Ratio Prot				c0.04	0.04		0.04	0.18		c0.14	c0.24		
v/s Ratio Perm		0.03	0.01	c0.14	0.12	0.03	0.05		0.08				
v/c Ratio		0.14	0.04	0.46	0.39	0.07	0.21	0.79	0.32	0.83	1.02		
Uniform Delay, d1		18.2	17.8	13.9	13.0	11.4	11.1	21.6	19.1	23.9	23.0		
Progression Factor		1.00	1.00	0.64	0.60	0.74	1.00	1.00	1.00	1.00	1.00		
Incremental Delay, d2		0.7	0.2	0.7	0.4	0.2	0.2	5.1	0.5	12.3	36.7		
Delay (s)		18.9	18.0	9.5	8.2	8.7	11.4	26.7	19.6	36.3	59.7		
Level of Service		B	B	A	A	A	B	C	B	D	E		
Approach Delay (s)		18.4			8.8			22.7			51.1		
Approach LOS		B			A			C			D		
<b>Intersection Summary</b>													
HCM 2000 Control Delay			31.9		HCM 2000 Level of Service					C			
HCM 2000 Volume to Capacity ratio			0.75										
Actuated Cycle Length (s)			60.0		Sum of lost time (s)					16.0			
Intersection Capacity Utilization			56.9%		ICU Level of Service					B			
Analysis Period (min)			15										
c Critical Lane Group													



### HCM Signalized Intersection Capacity Analysis

#### 11: Highway 92 & Main Street

7/16/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	58	555	61	165	396	224	86	242	228	372	126	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1789	
Flt Permitted	0.33	1.00	1.00	0.42	1.00	1.00	0.38	1.00	1.00	0.60	1.00	
Satd. Flow (perm)	621	3539	1583	790	3539	1583	702	1863	1583	1112	1789	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	63	603	66	179	430	243	93	263	248	404	137	49
RTOR Reduction (vph)	0	0	49	0	0	178	0	0	181	0	21	0
Lane Group Flow (vph)	63	603	17	179	430	65	93	263	67	404	165	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	15.2	15.2	15.2	16.0	16.0	16.0	16.0	16.0	16.0	20.0	20.0	
Effective Green, g (s)	15.2	15.2	15.2	16.0	16.0	16.0	16.0	16.0	16.0	20.0	20.0	
Actuated g/C Ratio	0.25	0.25	0.25	0.27	0.27	0.27	0.27	0.27	0.27	0.33	0.33	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	218	896	401	276	943	422	272	496	422	467	596	
v/s Ratio Prot	0.02	c0.17		c0.04	0.12		0.03	c0.14		c0.13	0.09	
v/s Ratio Perm	0.06		0.01	0.13		0.04	0.06		0.04	c0.16		
v/c Ratio	0.29	0.67	0.04	0.65	0.46	0.15	0.34	0.53	0.16	0.87	0.28	
Uniform Delay, d1	17.7	20.2	16.9	20.6	18.4	16.8	17.2	18.8	16.8	18.2	14.7	
Progression Factor	1.22	1.23	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.2	2.7	0.1	5.2	0.4	0.2	0.8	4.0	0.8	15.3	0.3	
Delay (s)	23.8	27.6	17.0	25.8	18.7	17.0	18.0	22.8	17.6	33.5	14.9	
Level of Service	C	C	B	C	B	B	B	C	B	C	B	
Approach Delay (s)		26.3			19.7			19.9			27.7	
Approach LOS		C			B			B			C	

#### Intersection Summary

HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

# HCM Unsignalized Intersection Capacity Analysis

## 1: Prospect & Capistrano (N)

7/16/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	29	217	206	44	32	40
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	32	236	224	48	35	43
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type						
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	552	57	78			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	552	57	78			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	93	77	85			
cM capacity (veh/h)	422	1010	1520			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	267	272	78			
Volume Left	32	224	0			
Volume Right	236	0	43			
cSH	867	1520	1700			
Volume to Capacity	0.31	0.15	0.05			
Queue Length 95th (ft)	33	13	0			
Control Delay (s)	11.0	6.6	0.0			
Lane LOS	B	A				
Approach Delay (s)	11.0	6.6	0.0			
Approach LOS	B					
<b>Intersection Summary</b>						
Average Delay			7.7			
Intersection Capacity Utilization			42.1%	ICU Level of Service	A	
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis 2: Prospect & Broadway

7/16/2014



















Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	50	202	2	47	198	2
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	54	220	2	51	215	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	460	28			53	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	460	28			53	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	79			86	
cM capacity (veh/h)	482	1048			1552	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	274	53	217
Volume Left	54	0	215
Volume Right	220	51	0
cSH	849	1700	1552
Volume to Capacity	0.32	0.03	0.14
Queue Length 95th (ft)	35	0	12
Control Delay (s)	11.2	0.0	7.6
Lane LOS	B		A
Approach Delay (s)	11.2	0.0	7.6
Approach LOS	B		

Intersection Summary			
Average Delay		8.7	
Intersection Capacity Utilization		39.6%	ICU Level of Service A
Analysis Period (min)		15	

### HCM Unsignalized Intersection Capacity Analysis 3: Airport & Stannford/Cornell

7/16/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	13	4	4	4	144	1	24	4	47	60	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	14	4	4	4	157	1	26	4	51	65	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	358	202	67	211	201	28	68			30		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	358	202	67	211	201	28	68			30		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	98	100	99	99	85	100			97		
cM capacity (veh/h)	493	672	997	713	672	1047	1533			1582		
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>								
Volume Total	29	165	32	120								
Volume Left	11	4	1	51								
Volume Right	4	157	4	3								
cSH	618	1019	1533	1582								
Volume to Capacity	0.05	0.16	0.00	0.03								
Queue Length 95th (ft)	4	14	0	3								
Control Delay (s)	11.1	9.2	0.3	3.3								
Lane LOS	B	A	A	A								
Approach Delay (s)	11.1	9.2	0.3	3.3								
Approach LOS	B	A										
<b>Intersection Summary</b>												
Average Delay			6.5									
Intersection Capacity Utilization			28.7%		ICU Level of Service				A			
Analysis Period (min)			15									

# HCM Unsignalized Intersection Capacity Analysis

## 4: Airport & La Granada

7/16/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	9	50	73	53	50	40
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	54	79	58	54	43
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type						
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	292	76	98			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	292	76	98			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	94	95			
cM capacity (veh/h)	661	985	1495			
<b>Direction, Lane #</b>						
	EB 1	NB 1	SB 1			
Volume Total	64	137	98			
Volume Left	10	79	0			
Volume Right	54	0	43			
cSH	917	1495	1700			
Volume to Capacity	0.07	0.05	0.06			
Queue Length 95th (ft)	6	4	0			
Control Delay (s)	9.2	4.5	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.2	4.5	0.0			
Approach LOS	A					
<b>Intersection Summary</b>						
Average Delay			4.1			
Intersection Capacity Utilization		23.7%		ICU Level of Service		A
Analysis Period (min)			15			

## HCM Unsignalized Intersection Capacity Analysis

### 5: Airport & Los Banos

7/16/2014






















Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	14	10	6	50	72	20
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	15	11	7	54	78	22
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type						
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	157	89	100			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	157	89	100			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	99	100			
cM capacity (veh/h)	831	969	1493			
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	26	61	100			
Volume Left	15	7	0			
Volume Right	11	0	22			
cSH	883	1493	1700			
Volume to Capacity	0.03	0.00	0.06			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	9.2	0.8	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.2	0.8	0.0			
Approach LOS	A					
<b>Intersection Summary</b>						
Average Delay			1.6			
Intersection Capacity Utilization			17.7%	ICU Level of Service		A
Analysis Period (min)			15			

# HCM Unsignalized Intersection Capacity Analysis

## 6: Highway 1 & Cypress

7/16/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	156	16	52	5	4	7	51	870	10	12	847	101
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	170	17	57	5	4	8	55	946	11	13	921	110
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2068	2069	976	2074	2118	951	1030			957		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2068	2069	976	2074	2118	951	1030			957		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	64	81	75	90	98	92			98		
cM capacity (veh/h)	33	49	305	22	45	315	674			719		
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>	<b>NB 2</b>	<b>SB 1</b>	<b>SB 2</b>						
Volume Total	243	17	55	957	13	1030						
Volume Left	170	5	55	0	13	0						
Volume Right	57	8	0	11	0	110						
cSH	43	47	674	1700	719	1700						
Volume to Capacity	5.62	0.37	0.08	0.56	0.02	0.61						
Queue Length 95th (ft)	Err	33	7	0	1	0						
Control Delay (s)	Err	121.6	10.8	0.0	10.1	0.0						
Lane LOS	F	F	B		B							
Approach Delay (s)	Err	121.6	0.6		0.1							
Approach LOS	F	F										
<b>Intersection Summary</b>												
Average Delay			1052.3									
Intersection Capacity Utilization			76.7%		ICU Level of Service					D		
Analysis Period (min)			15									

# HCM Unsignalized Intersection Capacity Analysis

## 7: Highway 1 & Capistrano (N)

7/16/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations							
Volume (veh/h)	24	12	14	1018	835	58	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	26	13	15	1107	908	63	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume	1491	908	908				
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1491	908	908				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2				
p0 queue free %	77	95	98				
cM capacity (veh/h)	112	278	746				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	26	13	15	553	553	908	63
Volume Left	26	0	15	0	0	0	0
Volume Right	0	13	0	0	0	0	63
cSH	112	278	746	1700	1700	1700	1700
Volume to Capacity	0.23	0.05	0.02	0.33	0.33	0.53	0.04
Queue Length 95th (ft)	21	4	2	0	0	0	0
Control Delay (s)	46.7	18.6	9.9	0.0	0.0	0.0	0.0
Lane LOS	E	C	A				
Approach Delay (s)	37.3		0.1	0.0			
Approach LOS	E						
Intersection Summary							
Average Delay			0.8				
Intersection Capacity Utilization			53.9%	ICU Level of Service	A		
Analysis Period (min)			15				



### HCM Signalized Intersection Capacity Analysis

#### 8: Capistrano (S) & Highway 1

7/16/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕		↗	↕	↗
Volume (vph)	62	85	169	47	82	126	287	838	87	186	611	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00		0.97	0.95		1.00	0.95	1.00
Frt		1.00	0.85		0.93		1.00	0.99		1.00	1.00	0.85
Flt Protected		0.98	1.00		0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1824	1583		1723		3433	3489		1770	3539	1583
Flt Permitted		0.68	1.00		0.91		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1268	1583		1590		3433	3489		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	67	92	184	51	89	137	312	911	95	202	664	30
RTOR Reduction (vph)	0	0	40	0	41	0	0	7	0	0	0	17
Lane Group Flow (vph)	0	159	144	0	236	0	312	999	0	202	664	13
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								6
Actuated Green, G (s)		16.1	28.5		16.1		12.4	27.8		13.8	29.2	29.2
Effective Green, g (s)		16.1	28.5		16.1		12.4	27.8		13.8	29.2	29.2
Actuated g/C Ratio		0.23	0.41		0.23		0.18	0.40		0.20	0.42	0.42
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		292	738		367		610	1391		350	1482	663
v/s Ratio Prot			0.03				0.09	c0.29		c0.11	0.19	
v/s Ratio Perm		0.13	0.06		c0.15							0.01
v/c Ratio		0.54	0.19		0.64		0.51	0.72		0.58	0.45	0.02
Uniform Delay, d1		23.6	13.2		24.2		25.9	17.6		25.3	14.5	11.9
Progression Factor		1.01	1.02		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		2.1	0.1		3.8		0.7	1.8		2.3	0.2	0.0
Delay (s)		25.9	13.6		28.1		26.6	19.4		27.6	14.7	11.9
Level of Service		C	B		C		C	B		C	B	B
Approach Delay (s)		19.3			28.1			21.2			17.5	
Approach LOS		B			C			C			B	

Intersection Summary		
HCM 2000 Control Delay	20.4	HCM 2000 Level of Service C
HCM 2000 Volume to Capacity ratio	0.66	
Actuated Cycle Length (s)	69.7	Sum of lost time (s) 12.0
Intersection Capacity Utilization	67.5%	ICU Level of Service C
Analysis Period (min)	15	
c Critical Lane Group		

### HCM Signalized Intersection Capacity Analysis

#### 9: Highway 1 & Main Street

7/16/2014


























Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗	↖	↗		↖	↗	
Volume (vph)	174	58	55	65	102	699	83	834	44	308	781	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	0.97	
Flt Protected		0.96	1.00		0.98	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1795	1583		1827	1583	1770	3513		1770	3447	
Flt Permitted		0.96	1.00		0.98	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1795	1583		1827	1583	1770	3513		1770	3447	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	189	63	60	71	111	760	90	907	48	335	849	179
RTOR Reduction (vph)	0	0	45	0	0	75	0	4	0	0	19	0
Lane Group Flow (vph)	0	252	15	0	182	685	90	951	0	335	1009	0
Turn Type	Split	NA	pm+ov	Split	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	4	4	5	8	8	1	5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)		15.2	22.4		13.4	39.4	7.2	19.4		26.0	38.2	
Effective Green, g (s)		15.2	22.4		13.4	39.4	7.2	19.4		26.0	38.2	
Actuated g/C Ratio		0.17	0.25		0.15	0.44	0.08	0.22		0.29	0.42	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		303	393		272	763	141	757		511	1463	
v/s Ratio Prot		c0.14	0.00		0.10	c0.26	0.05	c0.27		0.19	0.29	
v/s Ratio Perm			0.01			0.17						
v/c Ratio		0.83	0.04		0.67	0.90	0.64	1.26		0.66	0.69	
Uniform Delay, d1		36.2	25.6		36.2	23.4	40.1	35.3		28.1	21.1	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		17.4	0.0		6.1	13.3	9.1	126.0		3.0	2.7	
Delay (s)		53.5	25.7		42.3	36.7	49.3	161.3		31.1	23.8	
Level of Service		D	C		D	D	D	F		C	C	
Approach Delay (s)		48.2			37.8			151.7			25.6	
Approach LOS		D			D			F			C	

Intersection Summary		
HCM 2000 Control Delay	66.6	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	1.03	E
Actuated Cycle Length (s)	90.0	Sum of lost time (s)
Intersection Capacity Utilization	90.4%	16.0
Analysis Period (min)	15	ICU Level of Service
c Critical Lane Group		E

### HCM Signalized Intersection Capacity Analysis

#### 10: Highway 92 & Highway 1

7/16/2014

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations														
Volume (vph)	41	21	156	476	83	98	160	902	350	192	659	10		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor		1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	0.97	0.95			
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00			
Flt Protected		0.97	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00			
Satd. Flow (prot)		1803	1583	1681	1709	1583	1770	3539	1583	3433	3531			
Flt Permitted		0.93	1.00	0.58	0.73	1.00	0.28	1.00	1.00	0.95	1.00			
Satd. Flow (perm)		1732	1583	1026	1292	1583	522	3539	1583	3433	3531			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	45	23	170	517	90	107	174	980	380	209	716	11		
RTOR Reduction (vph)	0	0	130	0	0	63	0	0	291	0	1	0		
Lane Group Flow (vph)	0	68	40	300	307	44	174	980	89	209	726	0		
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA			
Protected Phases		4		3	8		5	2		1	6			
Permitted Phases	4		4	8		8	2		2					
Actuated Green, G (s)		14.0	14.0	24.7	24.7	24.7	14.0	14.0	14.0	9.3	21.3			
Effective Green, g (s)		14.0	14.0	24.7	24.7	24.7	14.0	14.0	14.0	9.3	21.3			
Actuated g/C Ratio		0.23	0.23	0.41	0.41	0.41	0.23	0.23	0.23	0.16	0.36			
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)		404	369	495	578	651	163	825	369	532	1253			
v/s Ratio Prot				c0.07	0.06		0.04	c0.28		0.06	c0.21			
v/s Ratio Perm		0.04	0.03	c0.18	0.16	0.03	0.21		0.06					
v/c Ratio		0.17	0.11	0.61	0.53	0.07	1.07	1.19	0.24	0.39	0.58			
Uniform Delay, d1		18.4	18.1	14.7	13.3	10.7	22.7	23.0	18.7	22.8	15.7			
Progression Factor		1.00	1.00	0.59	0.55	0.96	1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2		0.9	0.6	1.4	0.6	0.1	89.6	96.6	0.3	2.2	2.0			
Delay (s)		19.3	18.7	10.1	7.9	10.4	112.2	119.6	19.0	25.0	17.7			
Level of Service		B	B	B	A	B	F	F	B	C	B			
Approach Delay (s)		18.8			9.2			93.9			19.3			
Approach LOS		B			A			F			B			
<b>Intersection Summary</b>														
HCM 2000 Control Delay			50.6									HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio			0.85											
Actuated Cycle Length (s)			60.0								16.0		Sum of lost time (s)	
Intersection Capacity Utilization			62.4%										ICU Level of Service	B
Analysis Period (min)			15											
c Critical Lane Group														

### HCM Signalized Intersection Capacity Analysis

#### 11: Highway 92 & Main Street

7/16/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	48	399	129	213	675	523	174	333	188	255	202	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1784	
Flt Permitted	0.33	1.00	1.00	0.50	1.00	1.00	0.40	1.00	1.00	0.55	1.00	
Satd. Flow (perm)	621	3539	1583	931	3539	1583	745	1863	1583	1016	1784	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	52	434	140	232	734	568	189	362	204	277	220	87
RTOR Reduction (vph)	0	0	103	0	0	416	0	0	150	0	24	0
Lane Group Flow (vph)	52	434	37	232	734	152	189	362	54	277	283	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	18.0	18.0	
Effective Green, g (s)	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	18.0	18.0	
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.30	0.30	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	242	943	422	304	943	422	301	496	422	405	535	
v/s Ratio Prot	0.01	c0.12		0.05	c0.21		0.06	c0.19		c0.09	0.16	
v/s Ratio Perm	0.04		0.02	0.15		0.10	0.10		0.03	0.11		
v/c Ratio	0.21	0.46	0.09	0.76	0.78	0.36	0.63	0.73	0.13	0.68	0.53	
Uniform Delay, d1	17.2	18.4	16.5	20.7	20.4	17.9	18.4	20.0	16.7	18.6	17.5	
Progression Factor	1.13	1.17	9.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.8	1.4	0.4	10.8	4.1	0.5	4.1	9.1	0.6	4.7	3.7	
Delay (s)	21.3	22.9	163.8	31.5	24.5	18.4	22.5	29.2	17.3	23.4	21.2	
Level of Service	C	C	F	C	C	B	C	C	B	C	C	
Approach Delay (s)		54.2			23.3			24.3			22.2	
Approach LOS		D			C			C			C	

#### Intersection Summary

HCM 2000 Control Delay	28.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	67.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

## HCM 2010 Roundabout 6: Highway 1 & Cypress

7/1/2014

Intersection						
Intersection Delay, s/veh	8.9					
Intersection LOS	A					
Approach	EB	WB	NB	SB		
Entry Lanes	1	1	1	1		
Conflicting Circle Lanes	1	1	1	1		
Adj Approach Flow, veh/h	109	34	555	654		
Demand Flow Rate, veh/h	111	34	566	667		
Vehicles Circulating, veh/h	572	645	94	42		
Vehicles Exiting, veh/h	26	8	589	637		
Follow-Up Headway, s	3.186	3.186	3.186	3.186		
Ped Vol Crossing Leg, #/h	0	0	0	0		
Ped Cap Adj	1.000	1.000	1.000	1.000		
Approach Delay, s/veh	7.8	6.8	10.3	7.9		
Approach LOS	A	A	B	A		
Lane	Left	Left	Left	Bypass	Left	Bypass
Designated Moves	LTR	LTR	LT	R	LT	R
Assumed Moves	LTR	LTR	LT	R	LT	R
RT Channelized				Free		Free
Lane Util	1.000	1.000	1.000		1.000	
Critical Headway, s	5.193	5.193	5.193		5.193	
Entry Flow, veh/h	111	34	559	7	556	111
Cap Entry Lane, veh/h	638	593	1029	1938	1083	1938
Entry HV Adj Factor	0.981	0.994	0.981	0.980	0.981	0.980
Flow Entry, veh/h	109	34	548	7	545	109
Cap Entry, veh/h	626	589	1009	1900	1062	1900
V/C Ratio	0.174	0.057	0.543	0.004	0.513	0.057
Control Delay, s/veh	7.8	6.8	10.4	0.0	9.5	0.0
LOS	A	A	B	A	A	A
95th %tile Queue, veh	1	0	3	0	3	0

## HCM 2010 Roundabout 6: Highway 1 & Cypress

7/1/2014

Intersection				
Intersection Delay, s/veh	16.2			
Intersection LOS	C			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	146	16	709	790
Demand Flow Rate, veh/h	148	16	723	806
Vehicles Circulating, veh/h	710	833	141	51
Vehicles Exiting, veh/h	147	31	717	798
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	10.3	7.8	17.1	16.7
Approach LOS	B	A	C	C
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	148	16	723	806
Cap Entry Lane, veh/h	556	491	981	1074
Entry HV Adj Factor	0.985	0.991	0.980	0.981
Flow Entry, veh/h	146	16	709	790
Cap Entry, veh/h	547	487	962	1053
V/C Ratio	0.266	0.033	0.737	0.751
Control Delay, s/veh	10.3	7.8	17.1	16.7
LOS	B	A	C	C
95th %tile Queue, veh	1	0	7	7

## HCM 2010 Roundabout 6: Highway 1 & Cypress

6/4/2014

Intersection					
Intersection Delay, s/veh	20.5				
Intersection LOS	C				
Approach	EB	WB	NB	SB	
Entry Lanes	1	1	1	1	
Conflicting Circle Lanes	1	1	1	1	
Adj Approach Flow, veh/h	93	22	797	995	
Demand Flow Rate, veh/h	95	22	813	1015	
Vehicles Circulating, veh/h	944	861	60	58	
Vehicles Exiting, veh/h	47	12	979	825	
Follow-Up Headway, s	3.186	3.186	3.186	3.186	
Ped Vol Crossing Leg, #/h	0	0	0	0	
Ped Cap Adj	1.000	1.000	1.000	1.000	
Approach Delay, s/veh	11.7	8.2	17.5	23.9	
Approach LOS	B	A	C	C	
Lane	Left	Left	Left	Left	Bypass
Designated Moves	LTR	LTR	LTR	LT	R
Assumed Moves	LTR	LTR	LTR	LT	R
RT Channelized					Free
Lane Util	1.000	1.000	1.000	1.000	
Critical Headway, s	5.193	5.193	5.193	5.193	
Entry Flow, veh/h	95	22	813	933	82
Cap Entry Lane, veh/h	440	478	1064	1066	1938
Entry HV Adj Factor	0.978	0.994	0.980	0.980	0.980
Flow Entry, veh/h	93	22	797	915	80
Cap Entry, veh/h	430	475	1043	1045	1900
V/C Ratio	0.216	0.046	0.764	0.875	0.042
Control Delay, s/veh	11.7	8.2	17.5	26.0	0.0
LOS	B	A	C	D	A
95th %tile Queue, veh	1	0	8	12	0

## HCM 2010 Roundabout 6: Highway 1 & Cypress

7/1/2014

Intersection				
Intersection Delay, s/veh	11.4			
Intersection LOS	B			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	110	34	577	678
Demand Flow Rate, veh/h	112	34	588	691
Vehicles Circulating, veh/h	595	667	96	43
Vehicles Exiting, veh/h	139	17	611	658
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	8.1	6.9	11.1	12.4
Approach LOS	A	A	B	B
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	112	34	588	691
Cap Entry Lane, veh/h	623	580	1027	1082
Entry HV Adj Factor	0.981	0.994	0.981	0.981
Flow Entry, veh/h	110	34	577	678
Cap Entry, veh/h	612	577	1007	1062
V/C Ratio	0.180	0.059	0.573	0.638
Control Delay, s/veh	8.1	6.9	11.1	12.4
LOS	A	A	B	B
95th %tile Queue, veh	1	0	4	5



## HCM 2010 Roundabout 6: Highway 1 & Cypress

7/1/2014

Intersection				
Intersection Delay, s/veh	17.7			
Intersection LOS	C			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	147	16	736	820
Demand Flow Rate, veh/h	149	16	751	836
Vehicles Circulating, veh/h	737	861	142	52
Vehicles Exiting, veh/h	151	32	744	825
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	10.7	8.0	18.7	18.2
Approach LOS	B	A	C	C
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	149	16	751	836
Cap Entry Lane, veh/h	541	478	980	1073
Entry HV Adj Factor	0.985	0.991	0.980	0.981
Flow Entry, veh/h	147	16	736	820
Cap Entry, veh/h	532	474	961	1052
V/C Ratio	0.276	0.033	0.766	0.779
Control Delay, s/veh	10.7	8.0	18.7	18.2
LOS	B	A	C	C
95th %tile Queue, veh	1	0	8	8

## HCM 2010 Roundabout 6: Highway 1 & Cypress

7/16/2014

Intersection				
Intersection Delay, s/veh	37.8			
Intersection LOS	E			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	145	25	765	1093
Demand Flow Rate, veh/h	148	25	780	1114
Vehicles Circulating, veh/h	1056	883	122	40
Vehicles Exiting, veh/h	98	19	1082	868
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	16.8	8.4	19.2	54.2
Approach LOS	C	A	C	F
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	148	25	780	1114
Cap Entry Lane, veh/h	393	467	1000	1086
Entry HV Adj Factor	0.979	0.999	0.981	0.981
Flow Entry, veh/h	145	25	765	1093
Cap Entry, veh/h	385	467	981	1065
V/C Ratio	0.377	0.054	0.780	1.026
Control Delay, s/veh	16.8	8.4	19.2	54.2
LOS	C	A	C	F
95th %tile Queue, veh	2	0	8	22

## HCM 2010 Roundabout 6: Highway 1 & Cypress

7/16/2014

Intersection				
Intersection Delay, s/veh	62.9			
Intersection LOS	F			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	244	17	1012	1044
Demand Flow Rate, veh/h	248	17	1032	1064
Vehicles Circulating, veh/h	957	1194	203	65
Vehicles Exiting, veh/h	172	41	1002	1146
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	22.0	11.4	87.9	49.2
Approach LOS	C	B	F	E
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	248	17	1032	1064
Cap Entry Lane, veh/h	434	342	922	1059
Entry HV Adj Factor	0.983	0.995	0.981	0.981
Flow Entry, veh/h	244	17	1012	1044
Cap Entry, veh/h	426	341	905	1039
V/C Ratio	0.571	0.050	1.119	1.005
Control Delay, s/veh	22.0	11.4	87.9	49.2
LOS	C	B	F	F
95th %tile Queue, veh	3	0	27	20

## HCM Signalized Intersection Capacity Analysis 6: Highway 1 & Cypress

7/2/2014





















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↘		↗	↘	
Volume (vph)	77	4	19	15	9	7	15	489	6	4	498	100
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.97			0.97		1.00	1.00		1.00	0.97	
Flt Protected		0.96			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1747			1762		1770	1859		1770	1816	
Flt Permitted		0.96			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1747			1762		1770	1859		1770	1816	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	84	4	21	16	10	8	16	532	7	4	541	109
RTOR Reduction (vph)	0	11	0	0	7	0	0	1	0	0	8	0
Lane Group Flow (vph)	0	98	0	0	27	0	16	538	0	4	642	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		8.8			6.5		4.0	28.1		4.0	28.1	
Effective Green, g (s)		8.8			6.5		4.0	28.1		4.0	28.1	
Actuated g/C Ratio		0.14			0.10		0.06	0.44		0.06	0.44	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		242			180		111	823		111	804	
v/s Ratio Prot		c0.06			c0.02		c0.01	0.29		0.00	c0.35	
v/s Ratio Perm												
v/c Ratio		0.40			0.15		0.14	0.65		0.04	0.80	
Uniform Delay, d1		24.9			25.9		28.1	13.8		27.9	15.2	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.1			0.4		0.6	1.9		0.1	5.6	
Delay (s)		26.0			26.3		28.7	15.7		28.0	20.8	
Level of Service		C			C		C	B		C	C	
Approach Delay (s)		26.0			26.3			16.1			20.8	
Approach LOS		C			C			B			C	

### Intersection Summary

HCM 2000 Control Delay	19.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	63.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	47.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



















## HCM Signalized Intersection Capacity Analysis 6: Highway 1 & Cypress

7/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	107	12	16	4	6	5	36	609	7	9	627	90
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.96		1.00	1.00		1.00	0.98	
Flt Protected		0.96			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1763			1762		1770	1859		1770	1828	
Flt Permitted		0.96			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1763			1762		1770	1859		1770	1828	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	116	13	17	4	7	5	39	662	8	10	682	98
RTOR Reduction (vph)	0	5	0	0	5	0	0	0	0	0	5	0
Lane Group Flow (vph)	0	141	0	0	11	0	39	670	0	10	775	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		11.2			6.1		4.0	38.1		4.0	38.1	
Effective Green, g (s)		11.2			6.1		4.0	38.1		4.0	38.1	
Actuated g/C Ratio		0.15			0.08		0.05	0.51		0.05	0.51	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		261			142		93	939		93	923	
v/s Ratio Prot		c0.08			c0.01		c0.02	0.36		0.01	c0.42	
v/s Ratio Perm												
v/c Ratio		0.54			0.08		0.42	0.71		0.11	0.84	
Uniform Delay, d1		29.7			32.1		34.6	14.4		34.0	16.0	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.1			0.2		3.0	2.6		0.5	6.8	
Delay (s)		31.9			32.3		37.6	17.0		34.5	22.8	
Level of Service		C			C		D	B		C	C	
Approach Delay (s)		31.9			32.3			18.1			23.0	
Approach LOS		C			C			B			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			21.8				HCM 2000 Level of Service				C	
HCM 2000 Volume to Capacity ratio			0.68									
Actuated Cycle Length (s)			75.4				Sum of lost time (s)			16.0		
Intersection Capacity Utilization			59.3%				ICU Level of Service			B		
Analysis Period (min)			15									
c	Critical Lane Group											

## HCM Signalized Intersection Capacity Analysis 6: Highway 1 & Cypress



















6/5/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	5	34	10	6	4	36	694	4	3	839	74
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.95			0.98		1.00	1.00		1.00	0.99	
Flt Protected		0.97			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1716			1773		1770	1861		1770	1840	
Flt Permitted		0.97			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1716			1773		1770	1861		1770	1840	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	51	5	37	11	7	4	39	754	4	3	912	80
RTOR Reduction (vph)	0	23	0	0	4	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	70	0	0	18	0	39	758	0	3	990	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		9.2			6.6		4.0	58.1		4.0	58.1	
Effective Green, g (s)		9.2			6.6		4.0	58.1		4.0	58.1	
Actuated g/C Ratio		0.10			0.07		0.04	0.62		0.04	0.62	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		168			124		75	1151		75	1138	
v/s Ratio Prot		c0.04			c0.01		0.02	c0.41		0.00	c0.54	
v/s Ratio Perm												
v/c Ratio		0.42			0.15		0.52	0.66		0.04	0.87	
Uniform Delay, d1		39.8			41.0		44.0	11.5		43.1	14.8	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.7			0.6		6.4	1.4		0.2	7.3	
Delay (s)		41.5			41.6		50.4	12.9		43.3	22.1	
Level of Service		D			D		D	B		D	C	
Approach Delay (s)		41.5			41.6		14.7			22.1		
Approach LOS		D			D		B			C		
<b>Intersection Summary</b>												
HCM 2000 Control Delay			20.2				HCM 2000 Level of Service			C		
HCM 2000 Volume to Capacity ratio			0.77									
Actuated Cycle Length (s)			93.9				Sum of lost time (s)		16.0			
Intersection Capacity Utilization			61.7%				ICU Level of Service			B		
Analysis Period (min)			15									
c	Critical Lane Group											

## HCM Signalized Intersection Capacity Analysis

### 6: Highway 1 & Cypress

7/2/2014

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Volume (vph)	77	5	19	15	9	7	16	509	6	5	518	101	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0		
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00		
Frt		0.97			0.97		1.00	1.00		1.00	0.98		
Flt Protected		0.96			0.98		0.95	1.00		0.95	1.00		
Satd. Flow (prot)		1748			1762		1770	1859		1770	1817		
Flt Permitted		0.96			0.98		0.95	1.00		0.95	1.00		
Satd. Flow (perm)		1748			1762		1770	1859		1770	1817		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	84	5	21	16	10	8	17	553	7	5	563	110	
RTOR Reduction (vph)	0	9	0	0	7	0	0	1	0	0	8	0	
Lane Group Flow (vph)	0	101	0	0	27	0	17	559	0	5	665	0	
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA		
Protected Phases	4	4		8	8		5	2		1	6		
Permitted Phases													
Actuated Green, G (s)		9.4			6.8		4.1	30.2		4.1	30.2		
Effective Green, g (s)		9.4			6.8		4.1	30.2		4.1	30.2		
Actuated g/C Ratio		0.14			0.10		0.06	0.45		0.06	0.45		
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0		
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0		
Lane Grp Cap (vph)		247			180		109	844		109	825		
v/s Ratio Prot		c0.06			c0.02		c0.01	0.30		0.00	c0.37		
v/s Ratio Perm													
v/c Ratio		0.41			0.15		0.16	0.66		0.05	0.81		
Uniform Delay, d1		26.0			27.2		29.6	14.2		29.4	15.6		
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00		
Incremental Delay, d2		1.1			0.4		0.7	2.0		0.2	5.8		
Delay (s)		27.1			27.6		30.2	16.1		29.5	21.4		
Level of Service		C			C		C	B		C	C		
Approach Delay (s)		27.1			27.6			16.6			21.5		
Approach LOS		C			C			B			C		
<b>Intersection Summary</b>													
HCM 2000 Control Delay			20.0									HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.59										
Actuated Cycle Length (s)			66.5									Sum of lost time (s)	16.0
Intersection Capacity Utilization			48.9%									ICU Level of Service	A
Analysis Period (min)			15										
c	Critical Lane Group												

# HCM Signalized Intersection Capacity Analysis

## 6: Highway 1 & Cypress

7/2/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↗	↘		↗	↘	
Volume (vph)	107	13	16	4	6	5	37	633	7	9	652	93
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.96		1.00	1.00		1.00	0.98	
Flt Protected		0.96			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1764			1762		1770	1860		1770	1828	
Flt Permitted		0.96			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1764			1762		1770	1860		1770	1828	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	116	14	17	4	7	5	40	688	8	10	709	101
RTOR Reduction (vph)	0	5	0	0	5	0	0	0	0	0	5	0
Lane Group Flow (vph)	0	142	0	0	11	0	40	696	0	10	805	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		11.3			6.1		4.0	38.1		4.0	38.1	
Effective Green, g (s)		11.3			6.1		4.0	38.1		4.0	38.1	
Actuated g/C Ratio		0.15			0.08		0.05	0.50		0.05	0.50	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		264			142		93	938		93	922	
v/s Ratio Prot		c0.08			c0.01		c0.02	0.37		0.01	c0.44	
v/s Ratio Perm												
v/c Ratio		0.54			0.08		0.43	0.74		0.11	0.87	
Uniform Delay, d1		29.7			32.1		34.6	14.8		34.0	16.6	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.1			0.2		3.2	3.2		0.5	9.2	
Delay (s)		31.8			32.3		37.8	18.0		34.6	25.7	
Level of Service		C			C		D	B		C	C	
Approach Delay (s)		31.8			32.3			19.1			25.8	
Approach LOS		C			C			B			C	

### Intersection Summary

HCM 2000 Control Delay	23.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	75.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	60.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



## HCM Signalized Intersection Capacity Analysis

### 6: Highway 1 & Cypress

7/17/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Volume (vph)	101	2	30	15	1	7	21	674	8	7	931	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.97			0.96		1.00	1.00		1.00	0.99	
Flt Protected		0.96			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1740			1727		1770	1859		1770	1844	
Flt Permitted		0.96			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1740			1727		1770	1859		1770	1844	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	110	2	33	16	1	8	23	733	9	8	1012	73
RTOR Reduction (vph)	0	10	0	0	7	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	135	0	0	18	0	23	742	0	8	1083	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		12.0			6.6		4.0	53.1		4.0	53.1	
Effective Green, g (s)		12.0			6.6		4.0	53.1		4.0	53.1	
Actuated g/C Ratio		0.13			0.07		0.04	0.58		0.04	0.58	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		227			124		77	1076		77	1067	
v/s Ratio Prot		c0.08			c0.01		c0.01	0.40		0.00	c0.59	
v/s Ratio Perm												
v/c Ratio		0.59			0.14		0.30	0.69		0.10	1.01	
Uniform Delay, d1		37.5			39.9		42.5	13.5		42.1	19.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		4.1			0.5		2.2	1.9		0.6	31.3	
Delay (s)		41.7			40.4		44.7	15.4		42.7	50.6	
Level of Service		D			D		D	B		D	D	
Approach Delay (s)		41.7			40.4			16.3			50.6	
Approach LOS		D			D			B			D	

#### Intersection Summary

HCM 2000 Control Delay	36.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	91.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

### HCM Signalized Intersection Capacity Analysis

#### 6: Highway 1 & Cypress

7/17/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Volume (vph)	156	16	52	5	4	7	51	870	10	12	847	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.97			0.94		1.00	1.00		1.00	0.98	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1743			1719		1770	1860		1770	1833	
Flt Permitted		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1743			1719		1770	1860		1770	1833	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	170	17	57	5	4	8	55	946	11	13	921	110
RTOR Reduction (vph)	0	10	0	0	7	0	0	0	0	0	3	0
Lane Group Flow (vph)	0	234	0	0	10	0	55	957	0	13	1028	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		15.9			6.3		4.0	58.0		4.0	58.0	
Effective Green, g (s)		15.9			6.3		4.0	58.0		4.0	58.0	
Actuated g/C Ratio		0.16			0.06		0.04	0.58		0.04	0.58	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		276			108		70	1076		70	1061	
v/s Ratio Prot		c0.13			c0.01		c0.03	0.51		0.01	c0.56	
v/s Ratio Perm												
v/c Ratio		0.85			0.09		0.79	0.89		0.19	0.97	
Uniform Delay, d1		41.0			44.2		47.7	18.3		46.5	20.2	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		20.7			0.4		42.6	9.2		1.3	20.2	
Delay (s)		61.7			44.6		90.3	27.5		47.8	40.4	
Level of Service		E			D		F	C		D	D	
Approach Delay (s)		61.7			44.6			30.9			40.5	
Approach LOS		E			D			C			D	

#### Intersection Summary

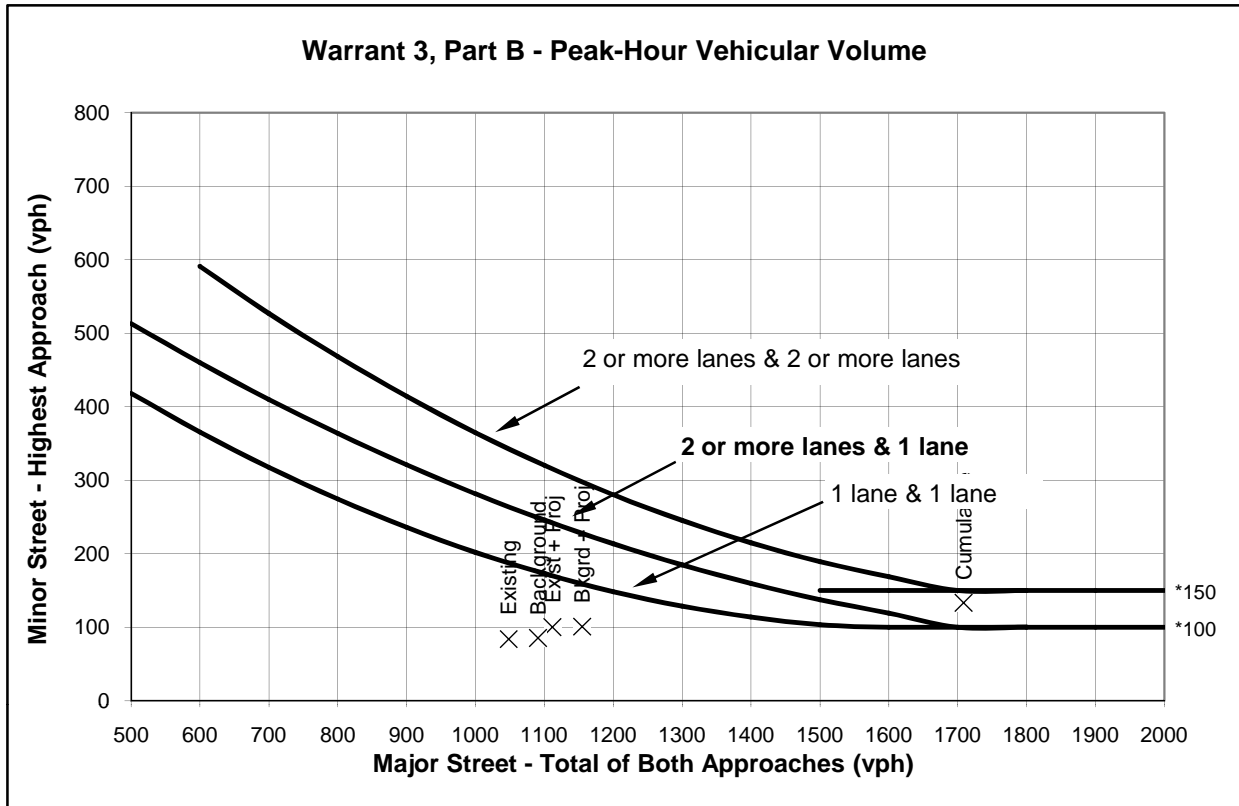
HCM 2000 Control Delay	38.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	100.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	76.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

7/17/2014

Big Wave North Parcel Alternative

**Highway 1 and Cypress Avenue**

**AM PEAK PERIOD**



Source: Figure 4C-3 California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2010 Edition, as amended for use in California).

\* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

**Warrant 3, Part B - Peak-Hour Vehicular Volume**

		Approach Lanes		AM PEAK PERIOD							
		2 or One	More	Existing	Exist + Proj	Background	Bkgrd + Proj	Cumulative			
Major Street - Both Approaches	Highway 1	X		1048	1112	1091	1155	1709			
Minor Street - Highest Approach	Cypress Ave	X		84	100	85	101	133			
<b>Signal Warranted Based on Part B - Peak-Hour Volumes?</b>				<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>Yes</b>			

\*Warrant is satisfied if plotted points fall above the appropriate curve in graph above.

Note 1: Right turn volumes were not removed from minor approaches.

7/17/2014

Big Wave North Parcel Alternative

**TRAFFIC SIGNAL WARRANTS WORKSHEET**

Major Street: Highway 1  
Minor Street: Cypress Ave

Analyst: LJ date: 6/5/14

Critical Approach Speed\* (mph) 50  
Critical Approach Speed\* (mph) 25

\*Posted Speed.

Critical speed of major street traffic > 50 mph (64 km/h).....  }  
In built up area of isolated community of < 10,000 population.....  } **Rural (R)**  
 **Urban (U)**

**AM PEAK PERIOD**

**Warrant 3 - Peak Hour**

**PART A**

(All parts 1, 2, and 3 below must be satisfied)

AM PEAK PERIOD

	Existing	Exist + Proj	Background	Bkgrd + Proj	Cumulative			
Minor Street Approach Direction w/ Highest Delay	EB	EB	EB	EB	EB			
Highest Minor Street Average Delay (sec/veh)	36.5	51.6	41.3	60.9	687.9			
Corresponding Minor Street Approach Volume (veh/hr)	84	100	85	101	133			
Minor Street Total Delay (veh-hrs)	0.9	1.4	1.0	1.7	25.4			
1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds 4 vehicle-hours for a 1-lane approach and 5 vehicle-hours for a 2-lane approach; <u>AND</u>	No	No	No	No	Yes			
2. The volume on the same minor street approach equals or exceeds 100 vph for 1 moving lane of traffic or 150 vph for 2 moving lanes; <u>AND</u>	No	Yes	No	Yes	Yes			
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with 4 or more approaches or 650 vph for intersections with 3 approaches.	Yes	Yes	Yes	Yes	Yes			
<b>Signal Warranted based on Part A?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>Yes</b>			

**PART B**

AM PEAK PERIOD

	Approach Lanes			Existing	Exist + Proj	Background	Bkgrd + Proj	Cumulative			
		One	2 or More								
Major Street - Both Approaches	Highway 1	X		1048	1112	1091	1155	1709			
Minor Street - Highest Approach	Cypress Ave	X		84	100	85	101	133			
<b>Signal Warranted based on Part B?</b>				<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>Yes</b>			

The Warrant is satisfied if the plotted point for vehicles per hour on the major street (both approaches) and the corresponding per hour higher vehicle volume minor street approach (one direction only) for one hour (any four consecutive 15-minute periods) fall above the applicable curves in California MUTCD Figure 4C-3 or 4C-4.

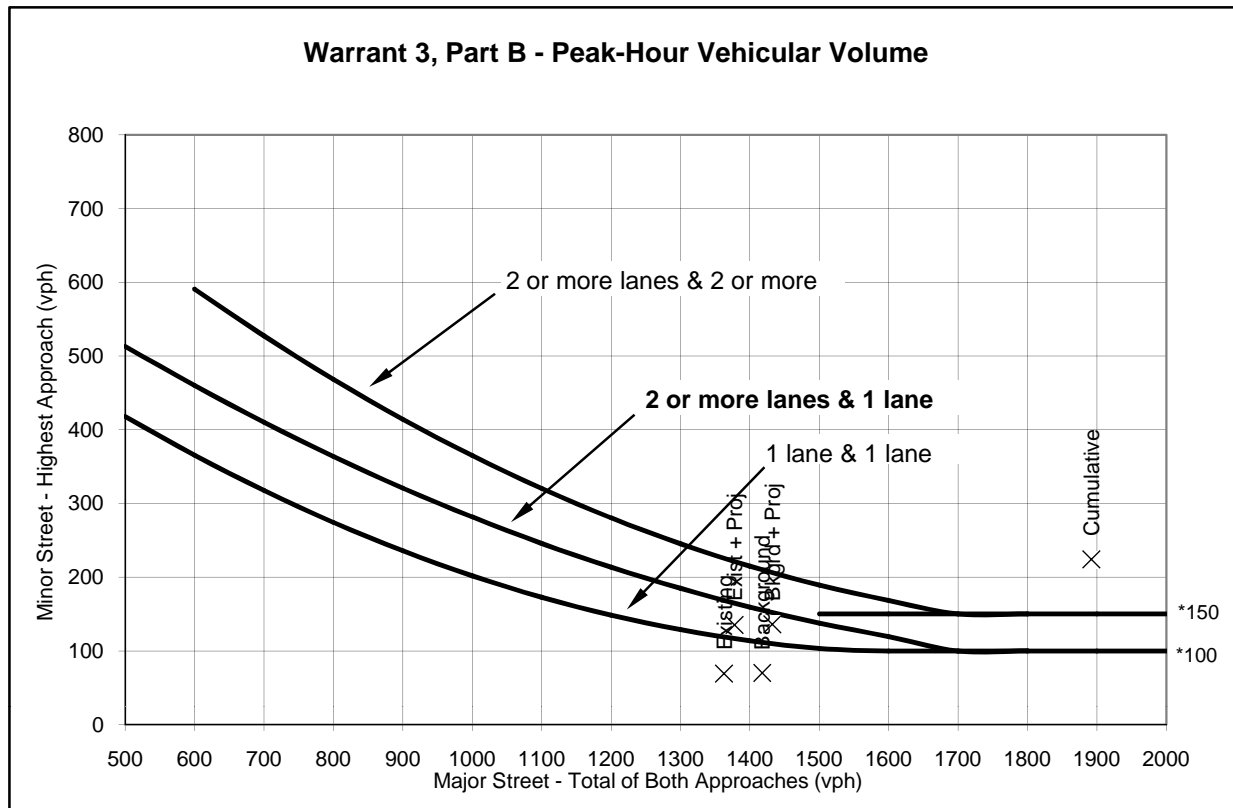
Source: California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2003 Edition, as amended for use in California).

7/17/2014

Big Wave North Parcel Alternative

**Highway 1 and Cypress Avenue**

**PM PEAK HOUR**



Source: Figure 4C-3 California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2010 Edition, as amended for use in California).

\* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

**Warrant 3, Part B - Peak-Hour Vehicular Volume**

		Approach Lanes		PM PEAK HOUR							
		One	2 or More	Existing	Exist + Proj	Background	Bkgrd + Proj	Cumulative			
Major Street - Both Approaches	Highway 1	X		1363	1378	1418	1433	1892			
Minor Street - Highest Approach	Cypress Ave	X		69	135	70	136	224			
<b>Signal Warranted Based on Part B - Peak-Hour Volumes?</b>				<b>No</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>			

\*Warrant is satisfied if plotted points fall above the appropriate curve in graph above.

Note 1: Right turn volumes were not removed from minor approaches.

7/17/2014

Big Wave North Parcel Alternative

**TRAFFIC SIGNAL WARRANTS WORKSHEET**

Major Street: Highway 1  
Minor Street: Cypress Ave

Analyst: LJ date: 6/5/14  
Critical Approach Speed\* (mph) 50  
Critical Approach Speed\* (mph) 25  
\*Posted Speed.

Critical speed of major street traffic > 50 mph (64 km/h).....  }  
In built up area of isolated community of < 10,000 population.....  or } **Rural (R)**  
 **Urban (U)**

**PM PEAK HOUR**

**Warrant 3 - Peak Hour**

**PART A**

(All parts 1, 2, and 3 below must be satisfied)

	PM PEAK HOUR							
	Existing	Exist + Proj	Background	Bkgrd + Proj	Cumulative			
Minor Street Approach Direction w/ Highest Delay	EB	EB	EB	EB	EB			
Highest Minor Street Average Delay (sec/veh)	78.8	318.4	96.1	389.6	1000.0			
Corresponding Minor Street Approach Volume (veh/hr)	69	135	70	136	224			
Minor Street Total Delay (veh-hrs)	1.5	11.9	1.9	14.7	62.2			
1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds 4 vehicle-hours for a 1-lane approach and 5 vehicle-hours for a 2-lane approach; <u>AND</u>	No	Yes	No	Yes	Yes			
2. The volume on the same minor street approach equals or exceeds 100 vph for 1 moving lane of traffic or 150 vph for 2 moving lanes; <u>AND</u>	No	Yes	No	Yes	Yes			
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with 4 or more approaches or 650 vph for intersections with 3 approaches.	Yes	Yes	Yes	Yes	Yes			
<b>Signal Warranted based on Part A?</b>	<b>No</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>			

**PART B**

				PM PEAK HOUR							
		Approach Lanes		Existing	Exist + Proj	Background	Bkgrd + Proj	Cumulative			
		One	2 or More								
Major Street - Both Approaches	Highway 1	X		1363	1378	1418	1433	1892			
Minor Street - Highest Approach	Cypress Ave	X		69	135	70	136	224			
<b>Signal Warranted based on Part B?</b>				<b>No</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>			

The Warrant is satisfied if the plotted point for vehicles per hour on the major street (both approaches) and the corresponding per hour higher vehicle volume minor street approach (one direction only) for one hour (any four consecutive 15-minute periods) fall above the applicable curves in California MUTCD Figure 4C-3 or 4C-4.

Source: California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2003 Edition, as amended for use in California).  
Notes: